GASTRONOMY HERITAGE

HEALTH ORIENTATIONS,
AND EVOLVING FOOD CULTURES

PERSPECTIVES IN
GASTRONOMY RESEARCH

E D I T O R
Asst. Prof. Dr. Gül Damla KILIÇ

GASTRONOMY HERITAGE, HEALTH ORIENTATIONS, AND EVOLVING FOOD CULTURES: PERSPECTIVES IN GASTRONOMY RESEARCH-2025

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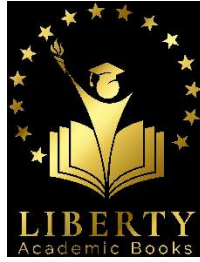**Asst. Prof. Dr. Gül Damla KILIÇ**

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GASTRONOMY HERITAGE, HEALTH ORIENTATIONS, AND EVOLVING FOOD CULTURES: PERSPECTIVES IN GASTRONOMY RESEARCH

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PREFACE

The discipline of gastronomy has transcended its traditional confines of being exclusively focused on culinary practices or dietary habits and has progressed into a multifaceted domain of scholarly investigation that facilitates the analysis of the preservation of cultural heritage, health-related orientations, and dietary behaviors within evolving social frameworks. This evolution demands a multidisciplinary methodology in gastronomy research, promoting robust interactions with disciplines such as cultural studies, tourism, health science, sociology, and the behavioral sciences.

This scholarly volume, "Gastronomy Heritage, Health Orientations, and Evolving Food Cultures: Perspectives in Gastronomy Research", seeks to consolidate academic inquiries that examine gastronomy via the frameworks of cultural heritage, health-centric paradigms, and the dynamics of evolving food cultures. Influenced by contributions from scholars from diverse nations and academic heritages, this compilation is predicated on the premise that gastronomic phenomena ought to be assessed not through discrete instances, but rather through contextual, structural, and relational frameworks.

The chapters contained within the volume initiate with investigations that scrutinize the significance of gastronomic experiences in enhancing destination competitiveness and fostering tourism development, subsequently delving into themes such as culinary tourism, sustainable destination advancement, and the role of culinary heritage in the context of destination branding. Furthermore, the social and behavioral aspects associated with gastronomy are examined through discourses on the value systems that influence eating behaviors, the quest for equilibrium between health and flavor, the processes involved in menu design, and the eating practices that occur within familial settings.

The compendium additionally encompasses chapters that emphasize ethnobotanical methodologies and indigenous food systems, underscoring the significance of traditional knowledge within the realm of gastronomy research. Through the examination of local culinary practices and foundational ingredients, it addresses matters concerning cultural continuity and the diversity of food.

In this context, the volume provides a conceptual framework that reconceptualizes gastronomy not solely as a domain predicated on experiential or consumption-based paradigms, but rather as a significant field of knowledge, culture, and the production of value.

From a methodological standpoint, the investigations delineated within this volume utilize qualitative, quantitative, and mixed-method research frameworks, thereby illustrating the methodological heterogeneity and scholarly advancement inherent in contemporary gastronomy research. These investigations, anchored in a variety of theoretical frameworks, aspire to enhance the gastronomy literature at both empirical and theoretical dimensions.

As the editor, my principal aim in organizing this compilation has been to establish an academic resource of superior intellectual caliber and global perspective for researchers, postgraduate scholars, and practitioners engaged in the domain of gastronomy. It is my fundamental aspiration that this volume will stimulate novel dialogues within gastronomy research and facilitate the expansion of understanding in the discipline.

I would also like to express my profound gratitude to my distinguished colleague Eyüp UYANIK, whose academic and intellectual contributions significantly enhanced the editorial process. His constructive assessments and critical analyses were instrumental in fortifying the conceptual unity of the work, organizing the editorial sequence, and elucidating the scholarly framework of the book.

Finally, I wish to convey my sincere appreciation to my esteemed mentor Dr. Mustafa Latif EMEK, who has served not merely as an academic educator but also as an unwavering advisor throughout every phase of my existence. His assistance and contributions have proven to be indispensable, and his impact has been significant in molding the trajectory that has brought me to my current position.

Editor
Asst. Prof. Dr. Gül Damla KILIÇ
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CHAPTER 1
GASTRONOMIC EXPERIENCES AND CULINARY HERITAGE IN ENHANCING DESTINATION COMPETITIVENESS: A STUDY OF HERITAGE FOOD TOURISM IN INDONESIA

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INTRODUCTION

Indonesia presents a culinary richness that is not just food, but an interweaving of history, cultural identity, and sensory experiences that attracts tourists (Surur et al., 2025). As tourism destinations compete globally, local cuisine is emerging as a unique attraction, allowing destinations to discover a niche. Authentic culinary experiences, from heritage spices to traditional varieties, define an immersive travel experience. Empirical evidence shows that domestic and international travellers increasingly seek authentic culinary experiences as an essential part of their trip (Adinugraha et al., 2025). In Indonesia, cuisines such as rendang, gudeg, papeda, or Soto Betawi represent a culinary heritage that conveys cultural stories, strengthens community ties, and enhances the destination's image (Maulina & Sofyan Fauzi, 2022). This phenomenon highlights the strategic value of culinary heritage as a competitive advantage for tourism destinations.

This research is fundamental because it integrates the reinforcing dimensions of economics, culture, and society. Culinary heritage is a strategic economic asset that enhances the value of tourist destinations, creates local jobs, and supports the growth of food-based small and medium enterprises (MSMEs). Traditional foods embody stories of identity, history, and philosophy, safeguarding against global homogenization. This study shows that cuisine is not just about consumption but also a medium for cultural preservation and intergenerational knowledge transfer. Culinary heritage generates measurable economic value through increased tourist visits, job creation, culinary product exports, and strengthening of regional brands. Culturally, cuisine reinforces local identity and gastronomic diplomacy, while socially it encourages community participation, intergenerational knowledge transfer, and empowerment of MSMEs. This economic, cultural, and social integration makes cuisine a strategic asset for sustainable development and the competitiveness of Indonesian tourist destinations (Hakim & Hamidah, 2022).

Culinary heritage is not only an economic and cultural asset that enriches the identity of a region, but also a culinary experience that can be directly enjoyed through its flavours, aromas, and serving traditions. When communities and tourists enjoy traditional cuisine, they revive cultural values passed down across generations.

This experience drives the growth of the creative economy sector and creates a space for social interaction that strengthens relationships between individuals. Shared activities such as cooking, serving, and enjoying food become a medium of communication that reinforces solidarity, a sense of togetherness, and community identity. Thus, culinary heritage transforms from a mere material asset into a means of shaping social welfare, enriching life experiences, and maintaining harmony in community life. Gastronomic experiences promote direct interaction between tourists and local communities, build pride, strengthen social ties, and improve community well-being. Culinary heritage contributes to social welfare and collective identity through mechanisms that can be explained by Social Capital Theory (Reddy & van Dam, 2020) and the Cultural Economy Framework (Septyani et al., 2025). Culinary interactions build bonding and bridging social capital, strengthen social cohesion, and enhance cultural pride. Economically, culinary heritage promotes social inclusion and community participation in the creative economy. Through authentic gastronomic experiences, cultural values are passed down and reinterpreted, strengthening collective identity and sustainable social welfare (Pugra et al., 2025).

Gastronomic experiences and culinary heritage play a strategic role in enhancing the competitiveness of destinations in Indonesia because they offer authentic and sustainable added value. Tourists are not only looking for tourist attractions, but also for in-depth experiences that reflect local identity through culinary flavours and traditions. Global trends show that gastronomic experiences are one of the primary motivations for travel, making heritage foods an essential asset in strengthening the narrative of a destination (Dexter et al., 2024). The diversity of traditional cuisine in Indonesia, rooted in history, culture, and local wisdom, opens up great opportunities to integrate culinary experiences into tourism strategies (culinary-heritage.com, 2025). Indonesia can build coherence between cultural attractions, tourist satisfaction, and creative economic sustainability, while positioning itself in line with international trends in developing highly competitive destinations by packaging culinary heritage as part of a holistic experience (Santoso et al., 2025).

Culinary heritage enhances Indonesia's competitive advantage in concrete terms: strengthening the attractiveness of destinations and increasing tourist spending; encouraging exports, international promotion, and MSME incubation; and protecting cultural identity, which reinforces branding and market loyalty (Bulkaini & Wijaya, 2024).

This topic is important because the global tourism industry is shifting towards an experiential approach, where heritage cuisine is not just a matter of taste but also encompasses narratives of identity, history, and community values (Surur et al., 2024). Observing how heritage food experiences influence travel perceptions and motivations, and contribute to strengthening a destination's image and competitiveness, provides significant benefits for academics, policymakers, and destination managers. The study of Indonesia is particularly relevant due to its extraordinary ethnic and culinary diversity and the need to map out optimal ways to integrate culinary heritage into sustainable tourism development strategies (Niedbala et al., 2020). Such studies enrich the discourses of gastronomy, cultural anthropology, and culture-based tourism development, while incorporating the voices of local communities in the framework of economic growth and artistic preservation (Woyesa & Kumar, 2022).

Literature on culinary tourism and gastronomy has grown rapidly, but there is still a clear gap in research on the dimension of culinary heritage-based gastronomic experiences in Indonesia. Most previous studies have only highlighted the quantity of visits, tourist satisfaction, or economic potential, without exploring how culinary experiences are not just food products managed as competitive assets. In particular, the role of cultural narratives, local community involvement, and traditional practices in shaping tourists' emotional attachment has not been explored in depth. The literature also lacks ethnographic studies describing the interaction process between culinary actors, tourists, and local communities as producers of destination added value.

The discussion in this chapter draws on the experience economy theory developed by Amaro et al. (2025), which posits that consumers seek not only goods or services, but also memorable and meaningful experiences. This theory is relevant to explaining how culinary heritage experiences can add value to destinations.

Cultural heritage theory also provides a foundation for understanding how tangible and intangible cultural components, in this case, culinary, are preserved and stimulated in tourism studies (Yingqing et al., 2024). The culinary diaspora theory and destination branding theory approaches are also integrated to examine how culinary heritage images shape destination identity and tourist perceptions. The study adopts a combined theoretical framework focusing on sensory experience, cultural narrative, and destination image construction in shaping competitiveness.

Several previous studies have shown that culinary heritage can increase tourism visitation. A study in Chiang Mai, Thailand, highlighted the role of local cuisine in enriching the destination's cultural narrative and motivating culinary tourist visits (Agyeiwaah et al., 2019). A study in Italy found that traditional food festivals not only strengthen local identity but also provide economic benefits to communities (Fontefrancesco & Zocchi, 2020). In Indonesia, several case studies, such as rendang in Padang or gudeg in Yogyakarta, have highlighted the potential of culinary icons to make cities famous; however, most of these studies have been based on quantitative surveys or partial designs (Adnan et al., 2023). In-depth ethnographic studies, which capture the process of communities maintaining handed-down recipes, forming culinary narratives, and interacting with visitors and local actors, are rare. This study will enrich the literature with a more contextualized, holistic perspective rooted in community practice.

The conceptual framework to be developed positions the gastronomic experience as a mediator between culinary heritage and destination competitiveness, with tourist emotional attachment as the key mechanism linking cultural preservation with economic success.

Conducting this research is essential because, besides generating theoretical understanding, such studies make practical contributions to destination managers, local governments, and culinary actors. Studies help identify best practices in creating authentic culinary experiences that are culturally and economically sustainable. Policymakers can formulate culinary heritage management strategies that strengthen destination brands without isolating or commodifying cultures.

It also reinforces the narrative of heritage preservation through dialogue between culinary actors and communities, while offering a critical view of cultural commodification. The ethnographic approach gives voice to communities, enabling recognition of their contribution to culinary tourism development, while creating a more ethical and sustainable basis for cultural and economic growth (Gozali & Wijoyo, 2022).

This chapter explores how culinary heritage experiences shape tourists' emotional attachment and the image of a destination. It seeks to identify management strategies that balance cultural preservation, marketing innovation, and community empowerment. Finally, it develops a conceptual model linking culinary experiences, emotional engagement, destination branding, and competitiveness, providing a clear framework for sustainable and competitive gastronomic tourism development in Indonesia. How do gastronomic experiences and culinary heritage collectively enhance the competitiveness of heritage food tourism destinations in Indonesia?

The method in this chapter was designed as a qualitative ethnography that links the framework of experiential economics, cultural heritage tourism, destination branding, and sustainable gastronomy into a single analytical model. The chapter was conducted in four culinary heritage cities, namely Yogyakarta, Padang, Bali, and Makassar, with selection criteria based on culinary reputation, sustainability of traditional practices, and community involvement. Data was collected through participatory observation, in-depth interviews with culinary actors (chefs, local producers, destination managers), and domestic and foreign tourists. Gastronomic experience, authenticity, and competitiveness were operationalized through measurable indicators such as the level of tourist-producer interaction, ingredient sustainability, cultural narratives, and destination image on social media. The analysis uses layered thematic coding, inter-researcher reliability testing, and source triangulation to maintain credibility. This approach allows for exploring cultural meaning and measuring factors that influence the competitiveness of Indonesian gastronomic destinations.

1. THE ROLE OF CULINARY HERITAGE AS THE CORE ATTRACTION OF INDONESIAN GASTRONOMIC TOURISM

The results of the ethnographic subchapters conducted in various Indonesian gastronomic destinations, such as Yogyakarta, Padang, Bali, and Makassar, reveal that culinary heritage is central to gastronomic tourism attraction. For example, in the case of Yogyakarta's gudeg, historical narratives linking gudeg to royal traditions and the city's development reinforce its appeal as a culinary tourist attraction. Field studies and reviews of gudeg show that the duration of boiling and traditional production practices are integral to the authenticity of its taste and cultural significance (Nugroho & HD, 2020). Padang rendang is understood not only as a complex flavour but also as a symbol of patience and wisdom in managing natural ingredients; a comparative study of rendang explains the organoleptic characteristics of the long process (caramelization, long cooking) that are inherent in the cultural meaning of rendang (Nazir et al., 2018). In Bali, dishes such as lawar and babi guling are connected to local ceremonial practices and cosmology, making the tasting experience a religio-cultural one; ethnographic literature on communal eating practices (megibung/lawar) confirms the relationship between ritual, symbolism, and collective identity (Sulistyawati, 2023). Research on the expectations of gastronomic tourists in Indonesia confirms that travellers value understanding the historical narrative, philosophy, and practices behind dishes as highly as the sensory aspects of taste; quantitative and qualitative research shows that these narratives enhance the memory of the experience and the value of the destination (Park & Widyanta, 2022). Traditional cooking practices, such as slow cooking in gudeg and rendang, smoking/se'i with firewood, and local fermentation, technically produce specific flavour characteristics and simultaneously serve as markers of authenticity. Ethnic food technology literature and food culture studies confirm that these techniques produce sensory attributes and serve as material evidence of the continuity of traditions that tourists interpret as authenticity. Therefore, explicitly linking traditional techniques to discussions of authenticity reinforces the claim that authentic gastronomic experiences are formed from a combination of cultural narratives and food production processes (Mora et al., 2021).

Empirical data show that tourists consider culinary experiences more meaningful when accompanied by direct interaction with local people through traditional market tours, cooking demonstrations, and storytelling sessions. In-depth interviews with tourists in Yogyakarta, Padang, and Bali reveal that narrative elements and traditional practices are the main attractions compared to other regional destinations. Tourists respond positively when first-hand explanations from local actors complement culinary interactions. Activities such as conventional market tours, cooking demonstrations, or storytelling sessions by the older generation add depth to the experience. This direct involvement makes tourists feel part of the culinary story, not just consumers. The in-depth interviews reveal that for most Travellers, the storytelling elements and traditional processes are the main attractions that differentiate Indonesian destinations from their competitors in the Southeast Asian region (Iskandar et al., 2023).

Interpretation of these findings suggests that the intrinsic value of culinary heritage lies in its ability to convey an authentic cultural narrative. Taste is the entry point, but the stories and philosophies that accompany the dishes are the elements that create a deep emotional experience. These experiences create a psychological bond between travellers and the destination, ultimately contributing to a sense of loyalty towards the destination.

Culinary experiences without cultural narratives tend to be easily replaced by other culinary experiences in different destinations, as seen in the study of global competition (Jokom et al., 2025). Conversely, culinary experiences enriched with historical stories and traditional practices create differentiation that is difficult to replicate. This is the competitive advantage of Indonesian destinations. For example, while other countries also offer coconut milk- and spice-based dishes, the narrative of rendang as a symbol of Minangkabau culinary diplomacy adds unique value (Mardatillah, 2020).

Field observations show that foreign tourists associate slow cooking techniques using wood-fired stoves with an authentic experience that is rarely found in the modern food industry (Zsarnoczky et al., 2019). One respondent in Bali emphasized that these traditional practices made him feel closer to the local culture and encouraged him to recommend the destination to other tourists.

Based on this data, it is clear that preserving traditional practices is an element that strengthens tourism appeal. International tourists often view traditional food processing techniques as a form of authenticity that is rare in the modern food industry (Verner et al., 2023). Traditional practices are not only about cultural preservation, but also serve as a destination marketing strategy (Kennedy et al., 2023).

The findings of this subchapter can be explained through the Experience Economy framework proposed by Stone et al. (2018), where the value generated by a product or service is no longer based solely on function or quality, but on the experience it creates. In the study of gastronomy tourism, the experience involves tourists' senses, emotions, and cognition. Dishes accompanied by cultural narratives and traditional processing techniques create multisensory and multi-narrative experiences that fulfil the dimensions of entertainment, education, aesthetics, and escapist engagement, as outlined in Pine and Gilmore's model. The theory of Cultural Heritage Tourism asserts that cultural assets, including culinary, are essential resources that can be sustainably utilized to enhance destination attractiveness (Zhang et al., 2020). In this case, culinary heritage is not just a consumption commodity, but also a medium for transferring cultural knowledge and values. Each recipe, technique, and story behind the dish serves as cultural capital that enriches the destination's identity.

Culinary heritage, combined with cultural narratives, serves as an essential element of brand identity that can differentiate destinations from competitors in the study of Destination Branding (Mihardja et al., 2023). Authentic and meaningful culinary experiences form positive perceptions and strong images in the minds of tourists. This has implications for revisit intention and spreading positive information through word of mouth (Kaushal & Yadav, 2021).

The results of this subchapter align with the findings of Pérez-Priego et al. (2023), who identified that gastronomy tourists seek not just taste, but rather the stories, processes, and cultural aspects of the food they consume. A study by Wijaya et al. (2023) also showed that culinary experiences enriched with historical narratives increase traveller satisfaction and strengthen destination image.

A survey by Ika Nurrosikhah Putri Sandy et al. (2023) on Soto Lamongan found that narratives about the origin, philosophy, and traditional cooking techniques were determinants of tourist satisfaction. Another study by Desak Gede Chandra Widayanthi et al. (2024) on the influence of culinary festivals in Bali confirmed that conventional cooking demonstrations and cultural explanations directly increased tourist engagement and perceptions of authenticity.

The support of this previous research strengthens the argument that culinary heritage has dual power: as a medium for cultural preservation and a tool for destination marketing. Combining flavours, stories, and traditional practices becomes a holistic attraction that provides a long-term competitive advantage.

The findings of this subchapter provide essential implications for gastronomy tourism development strategies in Indonesia. First, destination actors need to integrate cultural narratives into every culinary experience, not just focus on the presentation of flavours. Second, the preservation of traditional practices in food processing should be viewed as a strategic investment, not just a cultural endeavour. Third, collaboration among culinary actors, local governments, and the education sector is necessary to ensure that cultural narratives and traditional techniques are well-documented, allowing them to be passed on and accessed by future generations.

This implication also relates to the concept of sustainable tourism, where cultural preservation is closely tied to local economic development. By preserving and promoting culinary heritage, destinations attract tourists and strengthen local people's sense of pride in their cultural identity. This, in turn, strengthens the destination's competitiveness in an increasingly competitive global market.

Culinary heritage has a strategic role as the core attraction of Indonesia's gastronomy tourism (Yubianto, 2023). The historical elements, stories behind the food, and traditional practices of processing not only create unique flavours but also present a cultural narrative that differentiates the destination from competitors. Approaches that combine sensory experiences with cultural narratives have been shown to strengthen Travellers' emotional bonds, enhance destination image, and drive visitation loyalty.

With the support of theory and previous research, this study demonstrates that planned and sustainable culinary heritage management can be a key strategy for competing in the global gastronomy tourism industry.

2. GASTRONOMIC EXPERIENCES IN BUILDING EMOTIONAL ENGAGEMENT AND LOYALTY AMONG TOURISTS

The empirical basis for this subchapter was obtained through participatory observation and in-depth interviews with tourists who participated in traditional cooking classes in Bali, night culinary tours in Yogyakarta, and visits to local food producers in Toraja and Cirebon. The data shows that tourists emphasize the importance of direct interaction, cultural narratives, and sensory experiences in forming emotional attachments. Consciously designed gastronomic experiences can build significant emotional engagement between tourists and destinations. Field findings indicate that this engagement is not only formed through food consumption, but also through a series of activities that combine sensory stimulation, social interaction, and the transfer of cultural knowledge (Sala et al., 2017).

Participating in traditional cooking classes is one of the most impactful experiences for Travellers (Hardin-Fanning & Ricks, 2017). For example, in Ubud, Bali, Travellers are invited to visit the morning market with a local chef to select fresh ingredients, while receiving an explanation of the uses and symbolic meanings of each ingredient. This is followed by cooking using traditional techniques, where Travellers interact intensely with local actors. In-depth interviews show that these interactions make tourists feel "close" to the local culture and give them a sense of ownership over the dishes they make.

Culinary tours are also a critical moment in shaping emotional engagement. In Yogyakarta, tourists on the "wedang ronde" and "angkringan" night tours reported having an experience that combined flavours, aromas, social atmosphere, and nostalgia (Setyani et al., 2022). They not only enjoyed the food, but also felt the atmosphere of togetherness created by spontaneous interactions with local vendors and customers.

Something similar is found in Padang, where culinary tours to traditional restaurants are often accompanied by stories of the family history that has run the business for generations (Wirda et al., 2022).

Direct interaction with local food producers, such as coffee farmers in Toraja or traditional soy sauce makers in Cirebon, fosters a deeper emotional connection between tourists and the destination. Through observations and interviews, it was found that the production process, which involves hand skills, patience, and community values, gives the final product a deeper meaning. For tourists, buying and consuming such products becomes a symbolic act that connects them to local stories and identity (Paganini et al., 2020).

Interpretations of the findings suggest that a practical gastronomic experience integrates three key dimensions: sensory, emotional, and social engagement. Sensory engagement is created by tourists' exposure to the taste, aroma, texture, and visual appearance of food. Emotional engagement is formed through personal narratives, cultural stories, and direct experiences that trigger a sense of awe, emotion, or nostalgia. Social engagement comes through interactions with local people, whether formally on a tour or in a class, or spontaneously in a culinary public space.

The emotional engagement resulting from a gastronomic experience is a trigger for traveller loyalty. Many respondents stated that after experiencing direct interactions with local food actors, they felt compelled to return to the destination or recommend it to friends and family. The factors that influence this loyalty are the quality of the food and the emotional connection established through the shared experience.

This unique gastronomic experience is a differentiator that is difficult to replicate in competitive destination studies. Dishes or culinary products may be reproduced elsewhere, but the atmosphere, personal interactions, and local narratives can only be authentically experienced in the destination of origin (Lin et al., 2022). Therefore, managing gastronomic experiences that focus on direct interaction and creating emotional moments has strategic value in building destination loyalty.

The findings of this sub-chapter can be explained through the Experience Economy Theory proposed by Joseph Pine & Gilmore (2016), where experiences become the main commodity offered by destinations.

In this framework, gastronomic experiences that involve active participation of tourists fall into the category of transformational experiences, where tourists are not only observers or consumers, but also actors in the value creation process. From the perspective of Service-Dominant Logic (Vargo & Lusch, 2017), participatory designed gastronomy experiences create co-creation of value. Travellers, along with local actors, create new value through interaction, sharing knowledge, and shaping shared meaning. This value is emotional and symbolic, making it difficult to be replaced by other products or services.

Attachment Theory in tourism is also relevant, as it shows that emotional engagement with a destination can form psychological bonds that encourage repeat visit intentions (Loesche & Torre, 2020). Gastronomic experiences that touch on personal and emotional aspects-for example, cooking traditional dishes with a local family-create a strong sense of place attachment. This bond is not only based on location, but also on the memories and personal connections made during the visit. Destination Branding Theory explains that authentic emotional experiences can strengthen a destination's image in the minds of tourists (Zhao et al., 2022). When Travellers bring home personal stories about their interactions in the destination, these stories become part of the brand narrative that is spread through word of mouth and social media. The integration of theoretical frameworks enriches the understanding of these findings. The Experience Economy Theory explains that the active involvement of tourists makes culinary experiences transformational (Pine & Gilmore, 2013). The Dominant Service Logic asserts that value is created jointly through collaboration between tourists and local actors (Vargo & Lusch, 2017). Attachment Theory reinforces the argument that emotional attachment drives revisit intentions (Hosany et al., 2006), while Destination Branding shows that authentic experiences strengthen destination image (Zhao et al., 2022).

The results of this subchapter align with Stone et al.'s (2022) study, which asserts that culinary experiences in tourism provide not only functional value (satisfying hunger) but also experiential value (evoking emotions and creating memories). A study by Wibowo et al. (2023) found that tourists' active involvement in local culinary activities increases perceptions of authenticity and strengthens emotional connections with the destination.

A study in Vietnam by Jelínek et al. (2021) revealed that traditional cooking classes have a lasting effect on Traveller loyalty, as the experience creates a sense of personal attachment to the local culture. A study in Thailand by Suwannasri & Promphakping (2022) also demonstrated that direct interaction with local food producers enhances Traveller satisfaction and reinforces the destination's image as authentic and welcoming. Krisnabel & Handayani's (2022) research on culinary tours in Semarang found that tourists who received cultural narratives and interacted directly with vendors were more likely to make repeat visits. This finding is consistent with Hendriyani et al.'s (2020) study in Bali, which demonstrated that culinary experiences involving educational activities, such as learning about the history and philosophy of dishes, increased tourists' intention to recommend the destination to their social networks. Previous academic evidence supports a direct relationship between emotional engagement and tourist loyalty. The unique contribution of this chapter lies in its conceptual synthesis and field data from Indonesia, which confirms that gastronomic experiences are not merely about food consumption but are a sustainable strategy for building emotional bonds, loyalty, and destination competitiveness.

The management of gastronomic experiences that emphasize active participation, social interaction, and cultural narrative enrichment has excellent potential to build emotional engagement and tourist loyalty (Park & Widyanta, 2022). On the practical side, destination managers and industry players need to design gastronomy programs that go beyond food consumption. Activities such as traditional cooking classes, thematic culinary tours, and visits to local producers should be packaged as integrated experiences that engage all the senses and emotions of tourists. Tourism policies also need to encourage partnerships between culinary actors, local communities, and tourism service providers to ensure that cultural narratives are accurate and representative (Koerner et al., 2024). This approach not only strengthens the destination's image but also provides social and economic sustainability for local communities.

Gastronomic experiences in Indonesia play a strategic role in building emotional engagement and Traveller loyalty.

Activities that involve direct participation, social interaction with local actors, and strong cultural narratives create experiences that are hard to forget (Turgarini et al., 2021). The emotional bonds formed through these experiences become a key driver for Travellers to return and recommend the destination. With the support of theory and previous research, the results of this sub-section underline the importance of managing gastronomy not just as a consumption product, but as a holistic and sustainable cultural experience.

3. THE DYNAMICS OF MARKETING AND BRANDING HERITAGE FOOD DESTINATIONS IN ENHANCING COMPETITIVENESS

The empirical basis for this research was obtained through field observations at various destinations in Indonesia, such as the Rendang Festival in Padang, the promotion of gudeg in Yogyakarta through official government social media, and culinary tour packages in Bali and Makassar. Interview data with tourism stakeholders showed that tourists consider the authenticity of flavours, cultural narratives, and interactions with local communities as factors that strengthen their emotional attachment to a destination. Heritage food plays a strategic role as the core narrative of destination marketing and branding (Surya & Tedjakusuma, 2022). Some regions, such as Padang, Yogyakarta, Bali, and Makassar, have positioned heritage foods as promotional icons that highlight the uniqueness and authenticity of their destinations. For example, Padang City has elevated rendang as a culinary speciality that is not only featured in official local government marketing campaigns but also in international events, such as the "Rendang Festival," which involves the Minangkabau diaspora abroad.

In Yogyakarta, the branding strategy positioned gudeg as the "culinary identity of the city" through social media campaigns and consistent visual placement in the city center, airport, and tourist areas (Sgroi, 2023). Bali utilizes lawar, sate lilit, and roast pig in culinary tour packages promoted by travel agents and top hotels. Makassar, meanwhile, promotes coto Makassar and pallubasa as part of its South Sulawesi culinary brand, packaged with narratives of Bugis-Makassar history and culture.

Promoting culinary heritage is increasingly relying on social media as the primary channel. Platforms such as Instagram, TikTok, and YouTube showcase food visuals with aesthetically pleasing angles, emotionally resonant narratives, and stories that emphasize tradition and cultural heritage. Collaborating with food influencers and renowned chefs is an effective strategy for expanding audience reach, particularly among the younger generation and international travellers (Suwandojo et al., 2023). Digital visibility through social media is strengthened when complemented by formal recognition and cross-sector collaboration. Institutional validation and partnership support make promotions more credible, so that heritage food branding strategies not only attract public attention but also build long-term trust at the national and global levels.

Cross-sector collaboration-between local governments, culinary businesses, and creative communities-plays a significant role in strengthening heritage food-based branding. Some destinations also leverage UNESCO heritage certification or national recognition as part of their branding strategy to build trust and an image of authenticity. Rendang, for example, leverages its status as one of CNN Travel's World's 50 Best Foods to enhance its global promotion (UNESCO, 2025).

The interpretation of the sub-chapter findings leads to the conclusion that heritage food-based destination branding is effective when the marketing strategy not only highlights the food product, but also the cultural narrative and historical value attached to it. Culinary uniqueness and authenticity become unique selling points that distinguish Indonesian destinations from their competitors in the global market (Yudawisastra et al., 2023). This strategy enables the creation of a strong and consistent destination identity, making it easier for tourists to recognize and remember the destination. Although cultural narratives form the strategic foundation for building heritage food-based destination branding, social media serves as a contemporary medium that expands its reach. Through visual power and digital interactivity, cultural and historical values can be disseminated more widely, effectively and sustainably reaching global audiences.

Social media has changed the way heritage food is promoted. Its visually appealing nature, ability to tell stories through concise content, and viral potential make social media an ideal platform for expanding the exposure of culinary brands. When combined with storytelling strategies that connect Travellers to cultural values, this marketing can create deeper emotional engagement. For example, a video upload showing the process of making rendang from start to finish not only showcases the recipe but also displays the philosophy of patience and togetherness embodied in Minangkabau culture (Zulfa et al., 2022). Based on an academic perspective, this study confirms the role of social media as a primary channel in shaping tourist perceptions through aesthetic visualizations and viral short storytelling (Reynolds et al., 2022). Collaboration with chefs and food influencers adds to external credibility, as gastronomic authority reinforces perceptions of the quality and exclusivity of heritage foods (S. Wijaya, 2019).

Collaboration with chefs or food influencers provides an added advantage, as they can offer external validation of the quality and value of heritage cuisine. When public figures with gastronomic credibility promote heritage food, the perception of authenticity and exclusivity of the destination is enhanced. This strategy extends the reach of promotion to a global audience that may not have previously had direct exposure to Indonesian cuisine (S. Wijaya, 2019).

The findings of this subchapter can be analyzed through the lens of Destination Branding Theory, which emphasizes the importance of message consistency, differentiation, and stakeholder engagement in building a destination brand (Reynolds et al., 2022). Heritage culinary branding is successful because it combines elements of differentiation (unique flavours and cultural narratives), authenticity (traditional culinary practices), and consistency of visuals and messages across multiple communication channels.

The Experience Economy theory is also relevant, as heritage food marketing involves selling a physical product and an overall experience that engages the senses, emotions, and cultural understanding (Gilmore & Pine, 2002; Lai et al., 2021). Marketing strategies that highlight the food-making process, interaction with local actors, or involvement in culinary festivals turn food into an experience of high emotional value for tourists.

Authenticity Theory explains why authenticity is key in heritage food marketing. Travellers seek experiences that are considered authentic, whether in terms of taste, presentation, or the stories that accompany them. Overly commercial branding that fails to maintain authenticity is likely to fail in creating an emotional attachment (Moore et al., 2021). Therefore, a strategy that combines marketing modernization with preservation of traditional elements can maintain a balance between commercial appeal and cultural legitimacy. The integration of Destination Branding, Experience Economy, and Authenticity theories into a coherent explanatory model shows that heritage food serves as a means of differentiating destination identity, providing emotionally valuable experiences, and symbolizing cultural authenticity.

The findings of this subchapter align with the study by Cappelli et al. (2022), who found that local food can be at the core of a destination branding strategy when integrated with a strong cultural narrative. A study in Thailand by Horng & (Simon) Tsai (2010)demonstrates that traditional culinary promotions utilizing social media and collaboration with influencers can increase tourist visit intentions. Trihartono et al.'s (2020) study on Bali branding through culinary festivals found that the combination of visual promotion on social media and direct experience in the field strengthened tourists' positive perceptions of the brand. Tari & Yudianto's (2023) study in Yogyakarta confirmed that a storytelling strategy highlighting the history and philosophy of gudeg increases the value of the city's image and encourages tourists to buy the product as a cultural souvenir. Research by Enthoven & Van den Broeck (2021) in Europe is also relevant, where local food is used as an effective destination brand marker due to its ability to evoke memories and positive emotions in tourists. This principle is proven to apply in Indonesia, where heritage food can emotionally bond tourists and increase positive word of mouth.

Heritage food-based destination marketing and branding have great potential to improve Indonesia's tourism competitiveness. This strategy is effective because it combines product differentiation, the power of cultural narratives, and visual appeal optimized through social media (Mohamed et al., 2024).

The following is a conceptual model that illustrates the flow of relationships between heritage food marketing, destination branding, tourist emotional attachment, and increased destination competitiveness to clarify the interrelationships between variables in this subchapter.
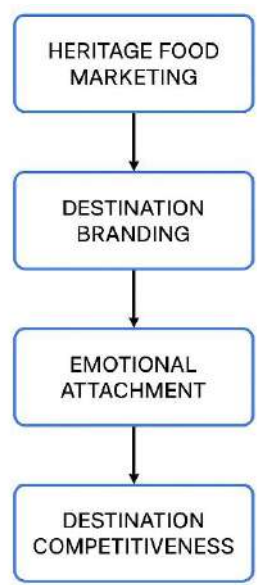
Figure 1. Conceptual model of the relationship between heritage food marketing, destination branding, emotional attachment, and destination competitiveness

The figure shows that heritage food marketing is defined as a promotional strategy that emphasizes cultural values, history, and the uniqueness of local cuisine. Effective marketing then encourages the formation of destination branding, which is a consistent destination identity that is easily recognized by tourists (Gorlevskaya, 2016; Font et al., 2023). Strong branding results in emotional attachment, which is the emotional bond between tourists and the destination that is built through authentic experiences and cultural narratives (Kartika & Riana, 2020; Hosany et al., 2006). This attachment, in turn, increases destination competitiveness, as tourists are more likely to recommend, revisit, and consider the destination superior to its competitors (Cronjé & du Plessis, 2020; Ahn & Bessiere, 2023).

The sequence of arrows in the model is conceptual, but it has been widely supported by empirical findings in the literature on the experience economy and service-dominant logic, thereby strengthening the argument about the role of heritage food in building the competitive advantage of tourist destinations.

Practically speaking, destinations that want to utilize heritage food for branding must ensure consistency of messages, maintain the authenticity of flavours and processes, and foster cross-sector collaboration. Local governments can facilitate culinary festivals, support digital promotion, and offer incentives for culinary businesses to maintain the quality and authenticity of their products. Collaboration with renowned chefs or food influencers needs to be directed not only for short-term promotion, but also to build a sustainable destination image (Zakiah et al., 2023).

This approach is also in line with the concept of sustainable cultural tourism, where promoting culinary heritage not only attracts tourists but also empowers local communities, preserves cultural heritage, and strengthens destination identity. With a planned and participatory strategy, heritage food can become a strategic asset that strengthens Indonesia's position in the global tourism market.

The dynamics of heritage food-based destination marketing and branding in Indonesia show success when culinary uniqueness is combined with cultural narratives, authenticity, and modern promotional strategies. Social media and collaboration with influential figures expand promotional reach, while engagement with local communities ensures cultural sustainability and legitimacy. Heritage food is not only a culinary icon but also an effective medium of artistic communication, capable of enhancing a destination's image, creating emotional attachment among tourists, and ultimately strengthening Indonesia's competitiveness in the global tourism market (Almansouri et al., 2021).

The unique contribution of this chapter lies in its synthesis of Indonesian field evidence and global theoretical frameworks, which shows that culinary heritage is not merely a product, but a strategic instrument for creating the competitiveness of destinations based on sustainable cultural identity.

4. CHALLENGES AND OPPORTUNITIES IN MAINTAINING AUTHENTICITY AND SUSTAINABILITY OF CULINARY HERITAGE IN THE TOURISM INDUSTRY

The development of culinary heritage-based gastronomy tourism in Indonesia faces complex challenges. The main challenges identified include the risk of commodification of traditional cuisines, which can erode their authenticity; pressure to adjust flavours and presentation to meet global market tastes; and threats to the sustainability of natural resources due to increased demand for raw materials. In some destinations, such as Yogyakarta, Bali, and Minangkabau, food producers tend to adapt traditional recipes by reducing the original ingredients or replacing them with cheaper alternatives for cost efficiency. This has led to negative perceptions from tourists seeking authentic experiences (Sukenti, 2014).

There is also the issue of human resource regeneration, where traditional cooking skills are no longer consistently passed on to the younger generation. This has led to a reduction in the number of culinary artisans who master original techniques. From an environmental perspective, increasing food production for tourism purposes raises concerns about waste and the overexploitation of local raw materials, such as spices and seafood. However, the study also reveals several opportunities that can be capitalized on. One is the growing trend of experiential tourism, which encourages tourists to interact directly with local cultures, including through cooking classes, traditional market tours, and visits to culinary production facilities. Adopting sustainable tourism principles that integrate environmental, economic, and social sustainability provides room for multi-stakeholder collaboration. Local governments, tourism industry players, culinary communities, and academics can collaborate to develop quality standards, authenticity certification, and integrated promotions, elevating the value of culinary heritage while maintaining its sustainability (Akbar Dimas Satria et al., 2022).

There is a paradox between the need for commercialisation in gastronomy tourism and the commitment to maintain traditional culinary authenticity. Excessive commodification can transform a culinary identity into a generic product, stripping it of its cultural significance.

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The unique flavours, cooking techniques, and cultural stories behind food are the primary attractions for tourists seeking a distinct experience from everyday consumption (Istanto & Djamhur, 2020).

High market demand can be a strategic opportunity if managed with sustainability. Integrating digital technologies, such as social media marketing and culinary storytelling platforms, enables the delivery of authentic narratives that educate travellers about the cultural values behind each dish. Collaboration with local chefs and food influencers who have a reputation for authenticity can expand promotional reach without compromising culinary quality and identity. The problem of regenerating traditional skills can be addressed by creating community-based training programs that involve the younger generation as the inheritors of culinary culture. This approach not only preserves cooking techniques but also creates new economic opportunities. This strategy aligns with the concept of creative tourism, which emphasizes the active participation of tourists and local communities in creating shared experiences (Basile et al., 2021).

The results of this subchapter can be explained through the framework of Authenticity Theory in cultural tourism, where tourists seek staged authenticity or authenticity maintained even in commercial settings. The risk of loss of authenticity arises when original elements are excessively modified for efficiency or market appeal. The concept of Sustainable Gastronomy is relevant in explaining that culinary sustainability encompasses not only food ingredients but also the preservation of local wisdom, traditions, and social relationships associated with food. This principle demands the integration of environmental (sustainable utilization of local raw materials), economic (empowerment of local producers), and socio-cultural (preservation of culinary recipes and stories) dimensions (Nyberg et al., 2022).

Empirical evidence shows that modifications to traditional recipes, such as replacing original ingredients with cheaper alternatives in Yogyakarta and Bali, have disappointed tourists who want an authentic experience (Sukenti, 2014; Istanto & Djamhur, 2020). Research by Sala et al. (2017) confirms that increasing demand for local ingredients, such as spices and seafood, can lead to overexploitation and have a negative impact on the ecosystem. Modifying recipes often reduces tourists' perception of authenticity and satisfaction.

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A case study of Surabi Bandung and gastronomy research found that tourists appreciate the original version more (Wachyuni et al., 2023). Rising demand for culinary delights has led to large amounts of food waste and pressure on land (supply chain: agriculture, palm oil), increased deforestation, and pollution from cheap production practices (Bappenas, 2024).

The Triple Bottom Line approach also corroborates these findings, suggesting that the success of gastronomy tourism should be measured based on economic, environmental, and cultural sustainability (Moshood et al., 2022). Applying this concept encourages the creation of synergies between stakeholders to develop a profitable business model without damaging the resources that are the main attraction. The application of the Triple Bottom Line theory requires measuring success through three indicators, namely increased local income (economy), waste management and sustainable use of materials (environment), and preservation of recipes and culinary traditions (sociocultural) (Sargani et al., 2020). Meanwhile, the Authenticity Theory can be applied by assessing the level of tourist satisfaction with the taste, cooking techniques, and cultural narratives that accompany the dishes (Moore et al., 2021). Gastronomic tourism practices can maintain a balance between commercial appeal and the preservation of cultural values with this mechanism. The application of the Triple Bottom Line (TBL) Theory in gastronomic tourism emphasizes a balance between economic (support for MSMEs, local income), social (preservation of culinary culture), and environmental (environmentally friendly practices, reduction of food waste) aspects (Hastjarjo, 2024). Meanwhile, Authenticity Theory highlights the importance of preserving recipes, techniques, and cultural context so that tourists can enjoy an authentic experience, which increases satisfaction and destination loyalty. The application of both theories strengthens the sustainability and selling points of Indonesian culinary tourism (Ulwan et al., 2025).

The following is a conceptual model that shows how the challenges and opportunities in developing heritage-based culinary destinations can be managed to formulate sustainable strategies to clarify the dynamics discussed in the previous subsection.

Figure 2. Conceptual model of the relationship between challenges-opportunities,
sustainability strategies, and culinary heritage preservation in Indonesian tourism

The figure shows that the development of heritage gastronomy has its
challenges. The risk of commodification threatens cultural value when food is
treated solely as a market product, while the loss of authenticity can weaken the
appeal that distinguishes a destination. The environmental impact of food
production and consumption has the potential to cause long-term sustainability
issues (Sala et al., 2017). Opportunities arise through experience-based tourism
that emphasizes tourist engagement, digital marketing that expands the reach
of promotion, and community involvement that strengthens local legitimacy
and participation (Conti & Lexhagen, 2020). The interaction between these
challenges and opportunities provides essential input for developing sustainable
strategies, namely strategies that are oriented towards economic growth,
cultural preservation, reduction of ecological impacts, and improvement of
community welfare (Hutnaleontina et al., 2022). Thus, this model synthesizes
previous arguments regarding authenticity, marketing, and social engagement,
and affirms that sustainability is the primary framework for positioning heritage
cuisine as a competitive destination attraction.

This subchapter aligns with the findings of Desy Dwi Jayanti & Bambang Panca Syahputrara (2023), who assert that integrating culinary heritage into tourism strategies requires a balance between product innovation and the preservation of cultural values. The study by Kalenjuk Pivarski et al. (2023) also demonstrates that traditional food plays a central role in shaping destination identity and serves as an effective medium for differentiating destinations in the global market.

A study in Thailand by Chaigasem & Kumboon (2024) suggests that gastronomy tourism, which features authentic narratives and direct interaction with food producers, effectively increases tourist satisfaction and loyalty. This finding is consistent with data from a study in Indonesia, which shows that tourists are more likely to return or recommend a destination when they have an authentic and meaningful culinary experience. Prasongthan & Silpsrikul's (2022) study emphasizes the significance of local community involvement in developing culinary tourism. This participation ensures the preservation of culinary knowledge and creates a sense of belonging and collective responsibility for resource sustainability. Thus, the challenges faced in maintaining the authenticity and sustainability of culinary heritage can be transformed into strategic opportunities through collaborative and innovative approaches.

CONCLUSION

This chapter contributes to the literature by integrating empirical findings from Indonesian culinary destinations with a cross-disciplinary theoretical framework, including the Experience Economy, Destination Branding, Authenticity Theory, and Service-Dominant Logic. Its main contribution is to demonstrate that heritage-based gastronomic experiences generate consumption value and emotional bonds that enhance tourist loyalty and destination competitiveness.

The study addresses a gap in prior research, which often examined promotional strategies or taste uniqueness in isolation, without systematically linking culinary marketing, branding, emotional attachment, and competitiveness. The proposed conceptual model advances the literature by presenting a coherent, data-driven relational framework.

Findings are consistent with international studies highlighting the role of authenticity and cultural narratives. Still, they diverge in their focus on Indonesia's culinary diversity and the sustainability challenges unique to this context. More broadly, the results enrich academic debates on sustainable tourism and the creative economy, while offering practical insights for destination development strategies that balance market appeal with cultural preservation.

This chapter confirms that gastronomic experiences rooted in culinary heritage play a strategic role in strengthening the competitiveness of tourism destinations in Indonesia. The authenticity of recipes, cultural narratives, and traditional culinary practices can create unique experiences, increase tourist engagement, and strengthen the image of destinations. This addresses the research question of how gastronomy can be a sustainable differentiating factor in the competition among cultural heritage destinations. The main contribution of this study to the literature is the integration of the concepts of experience economy, sustainable gastronomy, and destination branding in the previously unexplored studies of Indonesia.

Practically, the results of this chapter have guided tourism practitioners, local stakeholders, and policymakers to design community-based culinary tourism packages, improve the quality of cultural narratives, and strengthen cross-sector partnerships to maintain authenticity and market appeal. Scientifically, this chapter's study has enriched the theoretical understanding of the relationship between gastronomy and destination competitiveness, while offering a conceptual model that can be further tested.

For future researchers, quantitative exploration is recommended to measure the impact of gastronomic experiences on repeat visit intentions or tourist spending, as well as comparative studies between regions or countries to test the generalization of findings. Strategic implications for policymakers include the importance of culinary heritage protection policies, support for local producers, and integrating gastronomy into national tourism development plans. This chapter has limitations in terms of the scope of the research area and the limited duration of data collection, so the results cannot be fully generalized.

Nevertheless, this chapter makes an original contribution by emphasizing gastronomy as a competitive strength of Indonesian destinations and opening up opportunities for broader and more in-depth further research.

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CHAPTER 2
GASTRONOMY TOURISM: CULINARY HERITAGE, TOURISM EXPERIENCES, AND SUSTAINABLE DESTINATION DEVELOPMENT

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GASTRONOMY HERITAGE, HEALTH ORIENTATIONS, AND EVOLVING
FOOD CULTURES: PERSPECTIVES IN GASTRONOMY RESEARCH

INTRODUCTION

Gastronomy tourism, also known as food or culinary tourism, is a type of tourism that involves experiencing a place through the taste of its local dishes and flavours, thereby gaining insight into a place's cultural and culinary identity (Kampl, 2023). Unlike eating while on a journey, gastronomy tourism is an intentional travel where travellers seek to connect with a place through its flavours, cooking traditions, and food-related heritage. Gastronomy tourism is strongly connected to rural tourism (agro-tourism), local tourism and responsible tourism (Corvo & Matacena, 2018). According to Mulcahy (2019), Gastronomic tourism has its roots in influential forces that transcend cultural boundaries and carry food across the globe which are war, famine, imperialism, colonization, migration, and exile. While Gastronomic tourism remains grounded in authenticity and supported by economic, social, cultural, and culinary capital; in today's economy, the sharing of insights, and the ability to distinguish between travelers who encounter local cuisine as part of their journey and those who deliberately select destinations and shape their experiences around a deep interest in food.

According to Ganem & Kennedy, (2024), the origins of gastronomic tourism can be traced to the early 1800s when chefs began to open restaurants in Paris and the first food critic—Grimod de la Reynière—inaugurated an annual guide devoted to reviewing the quality of the dishes, artisanal products, and culinary skills found throughout the capital city. Gastronomic tourism slowly emerged alongside food writing, eventually leading to motorcar touring through the provinces of France beginning in the 1920s. During the 19th century, French cooking would initiate and infiltrate U.S. fine-dining, while the Boston Cooking School published a series of magazines and cookbooks that helped formulate a large set of recipes that came to represent American home cooking. So, as national culinary identities developed over the 19th and 20th centuries, they began to create distinctive food cultures that were popularized by food writers and critics. The Michelin brothers promoted, with the goal of promoting the sale of their tires, car travel through restaurant reviews, yoking mobility and travel with gastronomy, leading the way for what would eventually become officially recognized in the 1990s as gastronomic tourism.

The rise of gastronomy tourism is closely linked to global trends in experience-based travel, where tourists prioritize immersive, authentic, and sensory-rich encounters over conventional sightseeing. This shift has been driven by a combination of factors, including increased cultural curiosity, the influence of food media, and the growing appeal of farm-to-table, organic, and sustainable food movements. Gastronomy tourism offers multiple benefits for host communities. Economically, it stimulates local agriculture, hospitality, and artisanal food production. Culturally, it serves as a platform for preserving culinary heritage, showcasing regional identities, and strengthening community pride. Environmentally, it presents opportunities for sustainable development through local sourcing, food waste reduction, and eco-conscious culinary practices.

Although gastronomy tourism has gained recognition as a vital aspect of cultural and sustainable tourism, most existing studies remain descriptive, emphasizing culinary inventories or destination promotion rather than analytical frameworks. This chapter addresses that gap by examining how UNESCO's Intangible Cultural Heritage (ICH) framework shapes the governance, authenticity, and identity of gastronomy tourism. Drawing on Push–Pull Motivation Theory, Authenticity Theory, and Bourdieu's concept of Cultural Capital, this study explores how heritage recognition influences both tourist motivation and local participation. By linking gastronomy tourism to broader debates on sustainability and experience design, the chapter contributes to a more integrated understanding of food heritage as a dynamic agent of destination development.

1. THEORETICAL AND CONCEPTUAL FRAMEWORK

To understand gastronomy tourism, there is a need to anchor it in established tourism theories and concepts that explain why and how travellers engage with food as a core element of their journeys. Three key frameworks are particularly relevant: Push and Pull Motivation Theory, Authenticity Theory, Cultural Capital and UNESCO Intangible Cultural Heritage.

1.1 Push and Pull Motivation Theory

The push–pull framework (Dann, 1977; Crompton, 1979) posits that tourists are motivated by two complementary forces:

Push factors or internal drivers that create a desire to travel, such as curiosity, the need for novelty, or the pursuit of memorable experiences. In gastronomy tourism, push factors may include the personal desire to taste exotic flavours, learn new cooking techniques, or reconnect with cultural roots through food.

Pull factors or external attributes of a destination that attract visitors, such as renowned culinary traditions, food festivals, Michelin-starred restaurants, or unique agricultural landscapes. Examples include the allure of France's wine regions, Morocco's spice markets, or Nigeria's suya and palm wine culture.

In gastronomy tourism, these factors often intertwine; a tourist's intrinsic desire for culinary adventure (push) is matched with the external draw of a well-marketed and culturally rich food destination (pull).

Utama, Sari, Helmi, and Sembada (2025) examined how perceived risks and motivations influence tourist behavior and satisfaction in Indonesia's street food tourism. Drawing on the Push and Pull Motivation Theory, the study used a quantitative design with Structural Equation Modeling (SEM) and stratified random sampling among urban street food tourists. Findings showed that perceived risk did not directly reduce behavioral intention but significantly influenced both push and pull motivations, suggesting that risks can simultaneously discourage and enhance tourism experiences. Push motivation (internal factors such as curiosity and novelty-seeking) strongly affected behavioral intention, pull motivation, and satisfaction, while pull motivation (external factors like ambiance and authenticity) influenced satisfaction but not behavioral intention. A strong link between satisfaction and behavioral intention was also observed. The study underscores the interactive roles of push and pull factors in shaping tourist satisfaction and future behavior, highlighting satisfaction as a key predictor of repeat visitation within street food tourism contexts.

Smith, Costello, and Muenchen (2010) examined culinary tourist behavior through the lens of the Push and Pull Motivation Theory.

Using multiple regression analysis on data from an international culinary event, the study assessed how motivations affect satisfaction and post-visit behaviors. Findings showed that food event novelty and socialization acted as push motivations, while food products, support services, and essential services were key pull motivations that significantly predicted overall satisfaction. In turn, satisfaction strongly influenced expenditure, word-of-mouth behavior, and repeat patronage intentions. The study emphasizes the mediating role of satisfaction between motivational factors and behavioral outcomes, underscoring how both internal and external motivations jointly shape culinary tourism experiences.

1.2 Authenticity Theory

Authenticity is a core concept in cultural tourism, and it plays a critical role in gastronomy experiences. MacCannell (1973) distinguished between "staged authenticity", where experiences are tailored to meet tourists' expectations, and "objective authenticity", where cultural elements remain true to their origins.

In gastronomy tourism, authenticity can manifest in:

- Traditional recipes handed down through generations.
- Locally sourced ingredients that reflect the terroir of a place.
- Cooking techniques that are preserved despite modernization.

While tourists often seek authentic food experiences, the challenge lies in balancing authenticity with commercial viability. Over time, some cuisines risk being altered to fit tourist palates, potentially diluting cultural heritage.

Jain (2014) investigated the role of public relations in shaping tourists' perceptions of authenticity and fostering lasting relationships within a cultural and eco-archaeological theme park in Mexico. Using focus groups and interviews with public relations practitioners, alongside a survey of 545 tourists, the study explored how destination image and communication influence visitors' experiences and attitudes. Findings indicated that a destination's image is a key pull factor that significantly predicts perceived authenticity, which positively affects tourist trust, satisfaction, and commitment. Differences in perceived authenticity were also observed across demographics, visit characteristics, and information sources.

The study underscores the importance of external, image-related pull motivations in enhancing authenticity perceptions and sustaining tourist satisfaction, thereby reinforcing the linkage between destination image, authenticity, and behavioral loyalty.

1.3 Cultural Capital

Pierre Bourdieu's (1984) concept of cultural capital refers to the knowledge, skills, and cultural awareness that individuals acquire, which can enhance their social status and shape consumption preferences. In the context of gastronomy tourism, cultural capital is reflected in the ability to appreciate complex flavour profiles, knowledge of regional culinary traditions, and skills acquired through cooking classes, wine-tasting workshops, or market tours. Beyond its theoretical relevance, cultural capital has been empirically operationalized in studies examining food-related behavior. For instance, Kamphuis et al. (2015) identified measurable indicators of cultural capital through a systematic review and survey of 2,953 adults in the Netherlands. They conceptualized cultural capital in three forms: institutionalized (e.g., educational attainment and parental education), objectivized (e.g., possession of cultural goods such as books or artworks), and incorporated (e.g., participation in cooking activities, culinary knowledge, and health-related food values). Their findings revealed that higher socioeconomic position correlated positively with cultural capital, which in turn predicted healthier and more informed food choices.

This evidence demonstrates that cultural capital operates through both acquired competencies and symbolic distinction. Applied to gastronomy tourism, it serves as a dual construct: a motivational driver that encourages travelers to seek learning-oriented culinary encounters, and an experiential outcome whereby tourists accumulate new forms of knowledge, taste, and social prestige through engagement with local food cultures. Hence, gastronomy tourism functions as a medium through which cultural capital is both expressed and expanded.

1.4 UNESCO Intangible Cultural Heritage (ICH) Framework

UNESCO defines Intangible Cultural Heritage (ICH) as the practices, representations, expressions, knowledge, and skills that communities, groups, and individuals recognize as part of their cultural heritage. Culinary traditions, such as preparation techniques, festive rituals, and foodways, fall squarely within this category. In gastronomy tourism, the ICH framework functions not only as a cultural safeguard but also as a policy and governance instrument that legitimizes particular dishes and practices, influences funding priorities, and shapes the narratives destinations use to market themselves.

Artese and Gagliardi (2014) demonstrate how the 2003 Convention has been operationalized through digital and institutional infrastructures that document, catalogue, and disseminate living traditions. Their framework for the *Archivio di Etnografia e Storia Sociale* (AESS) in Lombardy illustrates how ICH inventories transform intangible expressions, like: fairs, popular songs, or culinary rituals, into structured cultural data. This process of digitization and public accessibility enhances visibility and intergenerational transmission, while simultaneously turning heritage into an asset that can be mobilized for tourism and regional development.

In gastronomy tourism, such systems blur the boundary between safeguarding and commodification. When local recipes, production methods, and festivals are archived and globally circulated under the ICH label, they acquire symbolic capital that attracts visitors seeking authenticity and cultural meaning. Integrating the ICH framework with Push–Pull Motivation Theory, Authenticity Theory, and Cultural Capital reveals how global recognition affects both tourist motivation and local power dynamics: tourists are *pushed* by the desire for authentic encounters, destinations are *pulled* by the prestige of ICH designation, and communities negotiate authority over how their food heritage is represented and consumed. In this way, UNESCO's ICH framework operates as both a preservation mechanism and a driver of cultural and economic transformation within gastronomy tourism.

2. GASTRONOMY TOURISM AND CULTURAL HERITAGE

Food is more than sustenance; it is a cultural artifact, a living archive of traditions, values, and collective memory. In the context of tourism, gastronomy serves as a powerful medium through which travellers encounter and appreciate a destination's identity.

2.1 Culinary Heritage as Intangible Cultural Heritage

Culinary heritage represents a living expression of cultural identity and community memory. According to UNESCO (2025), food-related practices have become increasingly prominent within the ICH framework, encompassing techniques, rituals, and knowledge associated with food production and consumption. However, the process of defining and nominating culinary traditions as heritage is often complex and politically charged.

As Demgenski (2020) demonstrates in the case of China, attempts to inscribe elements of Chinese cuisine on UNESCO's Representative List have revealed deep tensions between commercialization, cultural governance, and authenticity. Food-related ICH initiatives in China have largely been driven by private businesses, local governments, and trade associations seeking prestige and economic opportunity, while national heritage experts have struggled to reconcile these market-driven agendas with UNESCO's emphasis on community participation and safeguarding. This contestation underscores how global heritage frameworks are localized and reinterpreted, producing multiple and sometimes conflicting understandings of what constitutes "authentic" culinary heritage.

Within gastronomy tourism, such dynamics highlight the dual role of culinary heritage: as a tool for destination branding and economic development, and as a medium for cultural continuity and identity negotiation. Applying the lenses of Authenticity and Cultural Capital, it becomes clear that heritage inscription processes both reflect and reproduce social hierarchies of taste and legitimacy. Culinary traditions that gain official recognition are endowed with symbolic capital, attracting tourists in search of authenticity, while those excluded risk marginalization.

Thus, the heritage-making process itself becomes an arena where authenticity is negotiated, capital is accumulated, and gastronomy tourism acquires both cultural and political meaning.

2.2 Cultural Heritage Value

Cultural heritage embodies a dynamic social model that evolves across time and space in response to changing social, economic, and cultural processes. As Ginzarly and Srour (2022) note, heritage value lies in its capacity to maintain continuity while adapting to new contexts and meanings. Sustainable management and preservation of heritage (whether tangible structures or intangible practices) require long-term negotiation among social, economic, and environmental priorities (Lingfors et al., 2019).

The cultural values model provides a conceptual framework for understanding the diverse benefits that heritage generates for society. This model categorizes value not only in economic terms but also through social, aesthetic, spiritual, and educational dimensions (Reher, 2020). Such multidimensional valuation highlights that heritage significance cannot be reduced to market worth; it also encompasses emotional, symbolic, and experiential meanings that contribute to community identity and cohesion.

According to Chaigasem and Kumboon (2024), cultural heritage value rests on ancient values and authenticity, the extent to which a heritage asset reflects the culture of a specific period and context. They, along with Vecco (2018), identify several interrelated categories of value:

- **Aesthetic value** – the sensory and emotional pleasure derived from the beauty and craftsmanship of heritage expressions, including the artistry of architecture, performance, or cuisine.
- **Spiritual and educational value** – the religious or symbolic meanings attached to heritage, alongside its potential to transmit knowledge, moral lessons, and historical awareness to future generations.
- **Economic value** – the potential of heritage to generate financial returns through tourism, creative industries, or the commercial use of cultural resources.

- **Use value** – the tangible benefits obtained from actively engaging with heritage assets or experiences, such as tourism services, festivals, or traditional food production.
- **Non-use or option value** – the intrinsic worth of heritage that is not currently utilized but remains valued for its existence and the possibility of future appreciation or consumption.

Recognizing these categories illustrates how cultural heritage functions as both a social and economic resource. In the context of gastronomy tourism, these values intersect: traditional cuisines embody aesthetic and sensory pleasure, reinforce spiritual and communal identities, generate local income, and preserve cultural memory even when not directly commercialized. These overlapping values allow policymakers and destination managers to design tourism strategies that balance authenticity, sustainability, and economic viability, which will ensure that culinary heritage remains a living and evolving cultural asset.

Understanding the diverse values embedded in cultural heritage provides a foundation for exploring how those values are communicated, interpreted, and experienced within tourism contexts. In gastronomy tourism, the meanings attached to food, its aesthetic, spiritual, and social significance, are not merely preserved but also performed and narrated through storytelling. These narratives translate heritage value into lived experience, allowing tourists to connect emotionally with local culture while communities articulate identity and continuity through their cuisine. As cultural heritage becomes increasingly mediated by digital technologies, storytelling evolves into a critical mechanism for transmitting authenticity, shaping perception, and engaging global audiences. This shift sets the stage for the discussion of culinary storytelling, where tradition, creativity, and technology converge to sustain and promote food heritage in contemporary tourism.

2.3 Culinary Storytelling and its Importance in Gastronomy Tourism

Culinary storytelling is the purposeful narration of people, place, heritage, and technique through food, transforming a meal into a cultural encounter that motivates travel and differentiates destinations.

In tourism, such narratives help visitors anticipate experiences that feel authentic and memorable, aligning with experience-economy thinking where meaning, engagement, and novelty drive value creation. Through storytelling, gastronomy becomes more than sustenance; it becomes a form of cultural expression and identity communication.

Traditional storytelling in gastronomy often relies on oral history, symbolic rituals, and communal sharing, which transmit collective memory and local pride. As Jongsuksomsakul (2024) observes, the extensive array of traditional dishes and local ingredients demands informed and persuasive media that can raise awareness among local people about the potential of their food heritage to support cultural tourism in their villages and towns. In the present age, this communicative power is amplified through digital storytelling (the creative use of multimedia tools to present genuine and engaging narratives about traditional foods).

Digital storytelling involves the creation and dissemination of stories through visual and interactive platforms, combining text, sound, and imagery to convey authenticity and emotion. According to Collste et al. (2017) and UNESCO (2008), digital storytelling can preserve food cultures that have been handed down across generations, even as they evolve into contemporary or fusion forms. Platforms such as YouTube, TikTok, and Instagram have thus become digital archives where chefs, communities, and travelers document local cuisine, often showcasing dishes popularly termed "street foods." These digital narratives democratize representation by allowing community members and visitors alike to share their interpretations of culinary heritage.

Expanding on this, Kasemsarn and Nickpour (2025) propose an integrated framework for digital storytelling in cultural and heritage tourism, identifying four dimensions that extend traditional storytelling: social media platform integration, multimedia engagement, community participation, and cultural authenticity. Within gastronomy tourism, these dimensions emphasize how digital media transform culinary heritage into interactive cultural experiences. They allow destinations to promote local identity, engage younger audiences, and reinforce the authenticity of traditional foods within a global digital ecosystem.

Ultimately, culinary storytelling, whether traditional or digital) functions as both a cultural preservation mechanism and a strategic communication tool. It conveys the social, aesthetic, and spiritual values embedded in food while creating emotional and symbolic connections between hosts and visitors. Through the interplay of heritage, creativity, and technology, culinary storytelling sustains living traditions, enhances destination branding, and ensures that gastronomy tourism remains a powerful medium of cultural dialogue in an interconnected world.

How storytelling attracts and persuades?

1. **Signals authenticity and place identity.** Narratives about a place (tourist destination), producers, seasons, and rituals function as authenticity cues that help travelers' gastronomic experience, satisfying the common tourist search for the real and the local. Also, online advertising of a place (tourist destination, restaurant) is effective because it describes the importance of traditional agriculture and animal production (Niemchai et al., 2019)

2. **Creates Memorable Travel Experiences (MTEs).** Story-rich food encounters score high on the known MTE dimensions, which includes local culture, knowledge, involvement, novelty, meaningfulness, this makes a destination more likely to be remembered and recommended. Stone, Soulard, Migacz, & Wolf (2017) found five general elements leading to memorable food travel experiences, they are food or drink consumed, location/setting, companions, the occasion, and touristic elements (e.g., novelty, authenticity).

3. **Builds destination brands.** Storytelling provides a managerial tool for crafting coherent destination narratives (e.g., chef biographies, origin myths, community foodways) that elevate gastronomy from a supporting amenity to a primary travel motive. In tourism management research, storytelling is recommended to design extraordinary experiences and strengthen destination marketing.

4. **Bridges producers and visitors.** Studies of regional food tourism show that telling the stories of farmers, fishers, and artisans not only differentiates products but also sustains regional identity and rural

regeneration which are the key benefits that many travelers value and are willing to support.

3. UNESCO CREATIVE CITIES OF GASTRONOMY: A COMPARATIVE PERSPECTIVE

According to Food and Road (2025), UNESCO has designated 246 cities worldwide as part of its Creative Cities Network, among which 36 cities are specifically recognized for their contributions to gastronomy. For the purpose of this study, these gastronomic cities have been grouped and analyzed based on their respective countries.

Table 1 illustrates the geographical and thematic distribution of UNESCO Creative Cities of Gastronomy. These cities exemplify diverse governance strategies for linking culinary heritage to urban development. Patterns reveal a dominance of European and Asian cities, reflecting institutional maturity and policy commitment to heritage branding. African and Latin American inclusions highlight emerging recognition of food as a catalyst for inclusive growth and identity formation.

Table 1: Case Examples of Countries and Regions Famous for Cultural Gastronomy according to UNESCO

S/N	Countries	Creative cites	Year recognised
1	Turkey	Afyonkarahisar Gaziantep Hatay	2019 2015 2017
2	Italy	Alba Bergamo Parma	2014 2019 2015
3	Peru	Arequipa	2019
4	Brazil	Belém: Belo Horizonte Florianópolis Paraty	2015 2019 2014 2017
5	Australia	Bendigo	2019

6	Norway	Bergen	2015
7	Columbia	Buenaventura Popayan:	2017 2005
8	Spain	Burgos Dénia	2015 2015
9	China.	Chengdu. Macao Shunde. Yangzhou	2010 2017 2014 2019
10	Panama	Panama City	2017
11	Bolivia	Cochabamba	2017
12	Mexico	Ensenada Mérida	2015 2017
13	India	Hyderabad	2019
14	South Korea	Jeonju	2012
15	Sweden	Östersund	2010.
16	South Africa	Overstrand Hermanus	2019
17	Thailand	Phuket	2015
18	Iran	Rasht	2015
19	Ecuador	Portoviejo	2019
20	United States of America	San Antonio, Texas: Tucson, Arizona:	2017. 2015.
21	Japan	Tsuruoka:	2014.
22	Lebanon	Zahlé:	2013.

This section groups representative cases into three thematic clusters that illustrate distinct pathways for leveraging gastronomy as intangible cultural heritage (ICH). Each cluster is analysed through the lenses of Push–Pull motivation, Authenticity, Cultural Capital, and UNESCO's ICH framework.

3.1 Thematic Clusters of Cities

To analyze global patterns of gastronomy governance, cities were grouped thematically using three guiding criteria: (1) economic history, (2) policy orientation toward heritage, and (3) cultural hybridity. This typology reflects how local contexts shape the use of gastronomy as a tool for urban regeneration, identity formation, and sustainable development. By aligning with the frameworks of Push–Pull Motivation, Authenticity, Cultural Capital, and UNESCO's Intangible Cultural Heritage (ICH), the classification moves beyond description to reveal distinct pathways through which cities integrate food heritage into tourism and policy.

Post-Industrial European Cities

Examples: Parma (Italy), Bergen (Norway), Östersund (Sweden)

These cities have transitioned from manufacturing or resource-based economies to cultural and creative economies, repositioning gastronomy as a vehicle for regional renewal.

- Motivation (Push–Pull): Visitors are drawn by seasonal festivals, farm-to-table experiences, and the allure of pristine Nordic landscapes that promise authenticity and sustainability.
- Authenticity: Culinary heritage is carefully curated through Protected Designation of Origin (PDO) schemes (e.g., Parma's cheese and cured meats), which institutionalize *objective authenticity* through legal frameworks.
- Cultural Capital: Wine-tasting courses, artisan workshops, and culinary museums allow tourists to accumulate symbolic and experiential capital.
- UNESCO ICH Role: Recognition of traditional dairying and sustainable fishing practices provides political leverage for integrating heritage into local development strategies.

Emerging Global South Hubs

Examples: Chengdu (China), Belo Horizonte (Brazil), Jeonju (South Korea), San Antonio (USA's minority-majority city)

These destinations leverage gastronomy to represent *living traditions* and promote inclusive, community-driven development.

- Motivation (Push–Pull): Tourists are drawn to vibrant street-food scenes and everyday foodways that communicate cultural resilience and creativity.
- Authenticity: Here, authenticity is negotiated, balancing commercial tourism pressures with community ownership—for instance, Chengdu's safeguarding of Sichuan pepper cultivation.
- Cultural Capital: Visitors gain cross-cultural culinary competencies (e.g., Sichuan cooking, Brazilian artisanal cheese-making), while locals accumulate both economic and symbolic capital through expanded food markets.
- UNESCO ICH Role: ICH designation strengthens local policy on food security and rural livelihoods, aligning tourism growth with heritage protection.

Fusion Heritage Cities

Examples: Macao (China), Dénia (Spain), Jeonju (Korea as a hybrid of court and peasant cuisines)

These cities exemplify culinary hybridity arising from migration, colonial exchange, and cultural fusion.

- Motivation (Push–Pull): Tourists seek cosmopolitan flavours embedded in historical narratives, where novelty coexists with tradition.
- Authenticity: Authenticity here is performative and dynamic—dishes evolve while maintaining connections to cross-cultural origins.
- Cultural Capital: Cooking classes and food-history walks cultivate cosmopolitan taste, reinforcing visitors' global cultural capital.
- UNESCO ICH Role: The ICH framework legitimizes hybridity as heritage rather than dilution, exemplified by the protection of *Macanese cuisine*, which fuses Portuguese and Asian influences.

3.2 Comparative Interpretation

Across these clusters, gastronomy emerges as both an economic strategy and a cultural discourse.

- Post-industrial cities institutionalize heritage through regulatory authenticity and cultural capital accumulation.
- Emerging Global South hubs practice negotiated authenticity, where food heritage supports social inclusion and community resilience.
- Fusion heritage cities redefine authenticity through hybridity, reflecting global cultural flows and creative reinterpretation.

Applying Push–Pull and Cultural Capital theories across these typologies demonstrates that gastronomic identity is co-constructed through local histories and global imaginaries. The typology thus provides an analytical framework for comparing how cities mobilize food heritage to navigate the intersections of tradition, innovation, and sustainability.

4. TYPES OF PRODUCTS AND EXPERIENCES IN GASTRONOMY TOURISM

The diversity of gastronomy tourism products can be interpreted through both experiential engagement and cultural meaning. Following Hjalager and Richards (2002), gastronomy experiences exist on a continuum between mass consumption and skilled participation, while Ellis et al. (2018) emphasize that motivation, authenticity, and culture underpin tourists' culinary choices. Accordingly, gastronomy tourism products can be organized into three broad categories: Interactive Experiences, Consumption-Based Experiences, and Cultural & Heritage Experiences. These categories capture the varying depth of visitor participation, the degree of cultural immersion, and the balance between experiential value and heritage safeguarding.

Interactive Experiences

An interactive experience in gastronomy tourism refers to hands-on, participatory activities where tourists actively engage with food, cooking processes, and local culinary traditions, rather than being passive observers. Examples of interactive experiences include activities such as cooking classes, culinary workshops, farm visits, wine tastings, and guided food tours.

- **Cooking Classes & Workshops**: Cooking classes represent a form of gastronomy tourism experience and take many forms, such as part of homestay accommodation, home-based cooking classes, professional culinary schools and small restaurants offering cooking lessons along with dining (Kokkranikal, & Carabelli, 2021). This is common in Cinque Terre, Italy

- **Culinary Tours**: Guided tours exploring local food scenes, markets, and producers. Culinary tours are common in Osaka, Japan & Napa Valley, USA. In Osaka, guided culinary tours take tourists into the heart of street food culture, helping tourists explore local markets, savoring takoyaki or okonomiyaki, and meeting vendors in order to promote cultural understanding through food.

- **Food Festivals & Events**: Participating in celebrations dedicated to local foods and beverages.

- **Farm & Factory Visits**: Tours of agricultural producers, vineyards, and food processing facilities to learn about production processes.

Consumption-Based Experiences

Consumption-based gastronomy experiences are passive yet sensory-intense, focusing on enjoyment and aesthetic appreciation. Tourists consume prepared dishes and beverages that embody place and culture, thus acquiring symbolic rather than practical knowledge.

- **Local Food Tasting:** Sampling regional specialities in situ connects the palate to terroir.

- **Street Food Exploration:** Experiencing everyday cuisines in *Bangkok* or *Osaka* offers authenticity through informality.

- **Fine Dining:** High-end restaurants such as *Noma (Copenhagen)* or *Blue Hill (New York)* reinterpret local ingredients through innovation, turning dining into art.

These experiences speak to **push–pull motivation theory**: tourists are *pushed* by curiosity and *pulled* by the promise of taste, prestige, and sensory pleasure.

Cultural & Heritage Experiences

Cultural and heritage experiences engage visitors with the historical, symbolic, and identity-forming aspects of food. They preserve culinary memory and connect gastronomy to place, tradition, and community (Bessière, 1998; UNESCO, 2017).

- **Gastronomy Museums:** Exhibitions on the evolution of local foodways, such as cheese or olive-oil museums.
- **Culinary Heritage Trails:** Thematic routes, like the *Tuscany Chianina* or *Franciacorta train* trails, combine landscape, history, and taste.
- **Stories & Traditions:** Oral histories, rituals, and symbolic dishes communicated through storytelling or performances.

These experiences foster existential authenticity (seeking meaning and connection) and highlight gastronomy's role in intangible cultural heritage transmission

Table 2. Real-World Examples of Gastronomy products and experiences

Experience Type	Example (Location)	Highlights
Cooking Classes	Cinque Terre, Italy	Market visits and pesto & seafood lessons
Culinary Tours	Osaka (street food), Napa Valley (wineries)	Cultural immersion via guides
Farm/Winery Visits	Tuscany (agritourism estates)	Harvest, cooking, storytelling
Local Tasting	Blue Hill (NY), Noma (Copenhagen)	Farm-to-table and foraged cuisine
Street Food	Bangkok & Osaka	Sensory-rich, affordable cuisine
Festivals	Melbourne; La Tomatina; Ubud; Fish Week	Celebration of food traditions
Local Festivals	Abergavenny, Narberth (Wales)	Community-centric, educational
Heritage Trails	Tuscany Chianina tour; Franciacorta train	Food, history & landscape combined
Luxury Culinary Stay	Kenya "Kitchen in the Wild" retreat	Immersive, exclusive, sustainable

4.1 Advantages of Utilizing Food Tourism

Using cultural globalisation as an interpretive lens, the advantages of food tourism extend beyond immediate economic gains to encompass cultural sustainability and global connectivity. As illustrated in studies of *York and Sheffield* (England), the interaction between global and local food cultures generates both market opportunities and community benefits when managed strategically. Below are the advantages of gastronomy tourism as writting by Meegle, (2021):

1. Food Tourism Increase Revenue and Diversify Economies. Food tourism opens new income streams by linking local producers to international visitors. Cultural globalisation amplifies visibility (global media, festivals, and digital storytelling attract high-value tourists seeking authentic culinary experiences). This enhances destination competitiveness while reinforcing local production networks.

2. Enhance Brand Loyalty through Authenticity. When visitors encounter genuine local culture within globally recognizable narratives, they develop emotional attachment and loyalty. Such encounters merge global reach with local meaning, turning authenticity into a relational asset.

3. Broaden Market Reach via Global Visibility. Globalisation enables destinations to market their cuisines worldwide. Digital platforms democratize storytelling, allowing small producers to engage global audiences without losing cultural integrity.

4. Promote Sustainability and Responsible Consumption. Cultural globalisation encourages reflexivity: destinations integrate global ethical trends (such as fair trade and farm-to-table) with local ecological practices. This alignment advances environmental stewardship and supports heritage conservation.

5. Foster Community Development and Cultural Exchange. By involving artisans, farmers, and cultural custodians, food tourism becomes a participatory process. The dialogue between global visitors and local communities transforms tourism into a tool for social inclusion, skill transfer, and intercultural understanding.

6. In addition, the advantages of utilising food tourism arise from the productive tension between global connectivity and local rootedness. When harnessed through sustainable planning, gastronomy tourism not only generates economic value but also strengthens cultural identity, promotes ethical consumption, and contributes to the long-term resilience of destinations.

4.2 Challenges and Considerations

Despite its benefits, integrating food tourism into business operations presents several challenges that must be addressed to ensure success. Below are the Challenges and Considerations of gastronomy tourism as written by Meegle, (2021) These include:

- **Logistical Complexities:** Organizing food tourism experiences involves coordinating various elements, such as transportation, accommodation, and scheduling. Ensuring seamless operations requires careful planning and coordination, which can be resource-intensive.
- **Cultural Sensitivities:** Food tourism involves engaging with diverse cultures, necessitating sensitivity to local customs and traditions. Businesses must prioritize cultural respect and avoid practices that may offend or misrepresent local communities.
- **Continuous Innovation:** To remain competitive, businesses must continuously innovate their offerings to keep them fresh and appealing. This requires staying abreast of emerging trends and consumer preferences, as well as investing in research and development.
- **Safety and Hygiene:** Ensuring the safety and hygiene of food tourism experiences is paramount, particularly in the wake of health concerns. Businesses must adhere to stringent safety protocols and prioritize customer well-being to maintain trust and credibility.

CONCLUSION AND THEORETICAL CONTRIBUTIONS

This chapter has demonstrated that gastronomy tourism extends beyond the celebration of cuisine to function as a strategic governance mechanism connecting heritage, identity, and development policy. Through a comparative analysis of UNESCO Creative Cities of Gastronomy, the chapter revealed that destinations most effectively mobilize food heritage when three interrelated dynamics are present: motivational alignment, authenticity management, and cultural-capital creation.

These dynamics interact synergistically rather than existing in isolation. Motivational alignment drives visitation by appealing to tourists' desire for novelty and meaning. Authenticity management ensures that these experiences remain credible, balancing preservation with innovation to meet global expectations. Cultural-capital creation bridges visitors and residents through participatory learning, transforming gastronomy into a shared site of knowledge, skill, and social distinction. Together, these mechanisms form an integrative model of gastronomic governance, where tourism acts simultaneously as a cultural, economic, and educational process.

Theoretically, this study contributes to the literature by connecting Push–Pull motivation theory, Authenticity theory, and Bourdieu's concept of cultural capital under the umbrella of UNESCO's Intangible Cultural Heritage (ICH) framework. This synthesis clarifies how global heritage instruments mediate local food systems, turning intangible culinary practices into tangible drivers of development and diplomacy. The framework also advances debates on cultural globalisation by illustrating that the interplay between homogenisation and localisation can foster—not threaten—cultural sustainability when properly managed.

Practically, the chapter underscores that successful gastronomy destinations design experiences that are both globally legible and locally grounded. Policies should therefore promote capacity building among local producers, integrate digital storytelling to expand cultural reach, and adopt participatory heritage governance models that include communities as co-creators rather than beneficiaries. For UNESCO and related agencies, the findings suggest a need to recalibrate heritage evaluation criteria to account for dynamic, hybrid food identities emerging from global-local interaction.

Future Research Directions

Future research should extend this framework through comparative, longitudinal, and participatory studies. Cross-regional analyses could examine how motivational and authenticity strategies evolve as destinations mature, while ethnographic work could explore how local actors experience and reinterpret cultural capital in everyday culinary practice. Additionally, investigating the role of digital media and youth participation in constructing new forms of gastronomic heritage would deepen understanding of how cultural transmission adapts in the digital age.

Ultimately, gastronomy tourism should be understood not as a peripheral niche but as a critical site of cultural governance in the 21st century, where identity, sustainability, and globalisation intersect. By framing food as both heritage and strategy, this chapter advances the theoretical conversation and provides a foundation for more equitable, and sustainable approaches to gastronomy-driven development.

Practical and Policy Implications

Destination managers and city planners should:

- include community stakeholders in decision-making to avoid culinary gentrification.
- Use digital storytelling and experience-economy principles to engage new audiences without diluting heritage.
- Implement sustainability standards (local sourcing, food-waste reduction) as criteria for UNESCO recognition.

Future Research

Comparative, longitudinal studies could track how UNESCO designation affects local economies, community identity, and environmental outcomes over time. Digital ethnography would further illuminate how online narratives shape visitor expectations and post-trip advocacy.

In summary, when gastronomy tourism is governed inclusively and critically, it offers a powerful pathway for sustainable cultural development, positioning food not merely as a tourist attraction but as a catalyst for resilient and creative cities.

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CHAPTER 3
SHAPING THE FUTURE OF DIETARY BEHAVIORS: INTEGRATING CULTURAL INSIGHTS, EMERGING TECHNOLOGIES, AND SUSTAINABLE FOOD ENVIRONMENTS

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GASTRONOMY HERITAGE, HEALTH ORIENTATIONS, AND EVOLVING FOOD CULTURES: PERSPECTIVES IN GASTRONOMY RESEARCH

INTRODUCTION

The nature of the interaction between internal and external influences that influence food preferences is a multidimensional issue that is difficult to understand. The consumption pattern of people fosters through the ongoing relationship between individual, social, cultural and structural factors. On the micro (individual) level, sensory inclinations like taste and texture, mental and emotional moods, and the customary meal time also affect the choices taken on daily meals (Contento, 2016). Meso levels include families, schools, and workplaces that influence the eating patterns by setting availability of food, social norms concerning meals, and meaning of practices of food (Swinburn et al., 2011). On the macro level, food systems, pricing policies, marketing and cultural traditions define the availability, affordability and social acceptability of the foods (Story et al., 2008). All these layers of influence emphasize that food choice is not a mere occurrence of personal preference but rather the outcome of the larger socio-cultural and environmental ecosystem.

One of the most potent factors that determine the eating behavior is the social environment. In the homes, the family members and peers determine the food that gets cooked, the perception of the food, and the type of food that is given priority. Schools and workplaces can support the patterns by scheduling meals and providing menus. Cultural involvement and intergenerational education lead to the acquisition of food knowledge and skills (Vidgen & Gallegos, 2014). The first is food literacy, which defines the ability to choose, plan, and cook healthy food as a way to overcome the influence of misinformation and make a well-informed decision despite the marketing efforts (Azevedo Perry et al., 2017). Therefore, the eating behavior should be considered as a socially framed and a culturally mediated process rather than the individual behavior.

On a broader level, there is an emerging trend to consider the food supply chain, including production, processing, distribution, consumption, and waste, both ethically, environmentally, and health-wise (Willett et al., 2019). The dietary identity is still determined by cultural traditions and practices, but globalization and industrialization have changed the traditional diets, creating new patterns of food hybrids and undermining parts of culinary traditions (Popkin, 2020).

The interaction of three aspects, namely, culture, technology, and sustainability regarding the development of modern food systems is thus vital to comprehend.

1. ADDRESSING OF THE RESEARCH PROBLEM

Although there has been an impressive advance in terms of food environment and nutrition studies, still, there is no model of integration that would, in turn, relate cultural logics, digital mediation, and structural environments in order to forecast dietary behaviors. The current research is a response to this gap as it addresses two major research questions.

RQ1: How do cultural and digital mediation processes and personal and collective food preferences in various settings relate to each other?

It is argued that digital platforms have been transformed into mediating spaces through which the cultural norms of food are reproduced and remade. The social media, food blogs and mHealth applications all develop the meaning of health, body image and taste preferences at the same time and establish new feedback loops between cultural ideals and individual actions. An example is that online food communities share traditional and globalized recipes and create hybrid so-called digital cuisines that determine their consumption behavior in reality. Through these processes, cultural and digital mediations can be seen as intertwined processes by which individuals manage identity, belonging, and health consciousness. Consequently, the shift in dietary practices can be seen as an outcome of a dynamic conversation between cultural cuisine and digitalized images of what is considered to be healthy or true to authenticity in terms of eating habits.

RQ2: What are the means of developing multi-level interventions (micro-meso-macro) in order to ensure sustainable and fair diets?

Behavioral education, community involvement and structural change should be incorporated in a multi-level approach. On the micro level, food literacy can be improved by means of the mHealth tools enabling people to develop cooking skills, understand nutrition, and avoid misleading advertising.

Schools, families and workplaces at the meso level should establish favorable food environments that popularize healthy culturally appropriate foods and communal meals.

On the macro level, there should be policies controlling ultra-processed foods (UPF), supporting healthy production, and fair distribution of healthy foods. A combination of these interventions can produce reinforcing conditions, which, through regulation of individual capacity, social support, and structure opportunity, can support sustainability and also promote public health.

2. FRAMEWORK AND DEFINITIONS CONCEPTUAL

In order to explain the scope of analysis, the paper establishes the following important constructs:

- **Environment:** The physical, economic, policy, and sociocultural environments that influence food access and food decisions.
- **Food culture:** The collective sense, food practices and rituals of preparation and consumption of food.
- **Cultural food:** Dishes and food traditions in relation to identity, memory and tradition.
- **Food literacy:** Competencies, knowledge, and behaviors that help people make well-informed food choices.
- **Ultra-processed foods (UPF):** Products that contain a high proportion of additives, fats, and sugars and low amounts of whole ingredients that are industrially manufactured.
- **mHealth:** Digital or mobile health technology which supports dietary education, self-monitoring, and behavior change.

A multi-level conceptual scheme is created, where micro-level individual agency is connected to meso-level social systems and structural contexts on a macro-level **(Figure 1).**
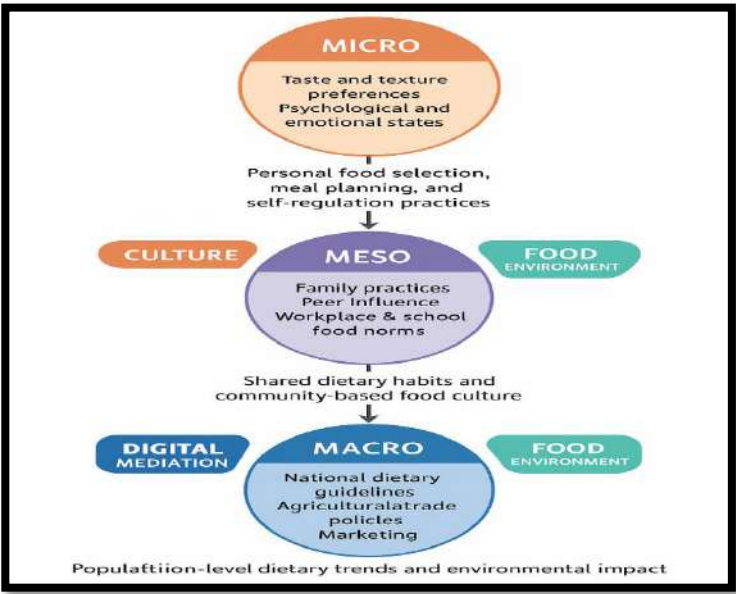
Figure 1. Multi-Level Conceptual Framework of Food Choice Determinants.

The framework encompasses micro- (individual), meso (social/institutional), and macro- (policy/market) levels of influence on dietary behavior. Cultural logics, digital mediation, and the food environment serve as intersecting forces that shape feedback loops among personal, social, and structural determinants of food choice.

3. THE SOCIAL CONTEXT AND THE ROLE OF FOOD ENVIRONMENTS

The dietary patterns are formed as a result of a complicated interplay between the physical, economic, social, and policy-related factors that form the food environment. Glanz et al. (2005) define the food environment as conceptualized within four domains: community environment (e.g., the location of food outlets, the type of outlets), organizational environment (e.g., workplace, schools), consumer environment (e.g., prices of foods sold, their availability, advertising within the outlets), and information environment (e.g., media, labelling, public communication).

According to this multidimensional approach, food decisions are driven by more than accessibility and affordability, since they also depend on cultural meanings and social norms of food consumption. Social and environmental influences are dynamically interactive in these realms to influence the dietary practices and health outcomes as **depicted in figure 2.**

Physiological and Economic Food Environments

Physical food environments refer to space and economic factors that define availability, accessibility, and cost of foods. The closeness to hypermarkets, supermarkets, and convenience stores also affects the exposure to healthy and unhealthy food instead of ensuring a healthier choice is made (Downs et al., 2020). The increased access to retail stores in most cities is usually accompanied by high availability of ultra-processed foods (UPFs) whereas in food deserts, the population is unable to access affordable and nutritious food (Walker et al., 2010).

Dietary diversity and quality is further limited by economic factors such as household income and the price of food. Diets rich in fat, sugar, and ultra-processed food are closely linked to risks of obesity and chronic diseases, especially those in which structural inequity prevents access to healthier food. The solution to these disparities is structural interventions, including urban planning policies, fair pricing policies, and subsidizing fresh produce, which will make healthy foods more accessible, affordable, and available among communities.

Social and Cultural Influences

In addition to the physical access, social and cultural setting is a very important factor that determines what and how individuals consume. Habitus as an embodiment of the internalized cultural dispositions that capture the class, taste, and social identity have been highlighted by theorists like Pierre Bourdieu (1984) as determining food practices. On the same note, a theory of commensality delineated by Fischler (2011) describes that having meals together- known as commensality- strengthens belonging, sense of identity and social cohesion.

The food behavior is affected by commensality and social networks that determine the social norms in relation to the timing, size of a meal, and the type of food that is acceptable (de Castro, 1997). Those who are integrated into the networks where fast food eating is accepted have higher likelihoods of earning the same habits (Higgs, 2015), whereas families and communities that encourage collective home meals and healthy diets help establish healthy eating habits long-term (Robinson et al., 2019). Eating, therefore, is not simply a biological need but a socially and symbolically significant practice which indicates larger cultural logic and membership of groupings.

Environments of an Institutional and policy-level

There is also the strong influence of the institutional and policy-level environments which include schools, working environments and government structures over food behavior. The type of food environment in an organization influences the foods that people consume on a daily basis (Story et al., 2008). It has been proven that nutrition education, behavioral nudging, and provision of healthier menu choices can be effective methods of promoting healthier choices in such situations (Thow et al., 2018).

Short-term awareness campaigns are however not enough to create a lasting change. Food literacy needs to be supported on an ongoing basis, and conditions that would render healthy choices not a choice but the default should be provided (Vidgen & Gallegos, 2014). On a policy level, a coherent regulation of food marketing, taxing incentives on sustainable farming, and institutional catering guidelines can bring about structural changes in eating habits towards ones that are healthier. Finally, structural change should be backed by individual agency in order to make healthy eating both possible and socially conditioned.
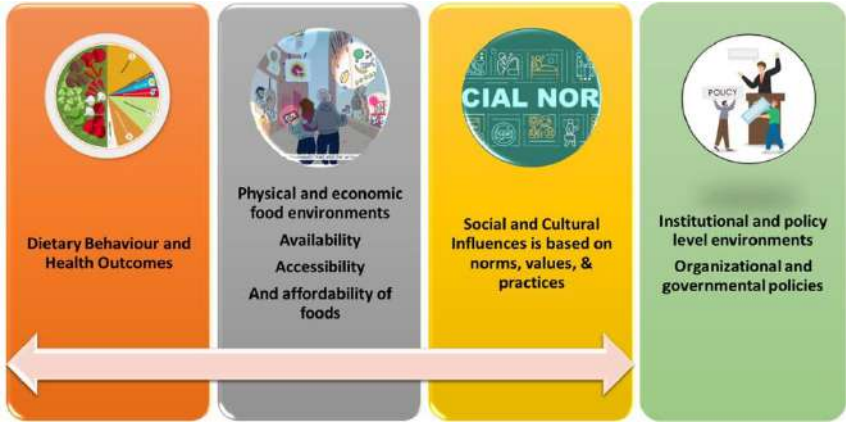
Figure 2. This conceptual framework demonstrates the dynamic interplay among physical, social, and policy environments.

Cultural norms, social relationships, and institutional frameworks converge to affect food access, selection, and consumption, ultimately influencing dietary habits and public health outcomes. Food Culture, Traditions, and Globalisation.

4. GLOBAL NUTRITION TRANSITION: CULTURAL AND HEALTH IMPLICATIONS

The global nutrition transition can be defined as the global change in eating habits whereby the traditional food consumption patterns that include a significant amount of whole and minimally processed foods are replaced with dietary patterns that include energy-dense foods with ultra-processing (Popkin, 2020). Urbanization, increasing household incomes, and globalization of agri-food markets have driven this change, which, together, change food systems and consumer patterns in both developed and developing economies (FAO, 2020). With the modernization of the societies, food items like grains, legumes and fresh fruits are rapidly being substituted by refined carbohydrates, added sugar, fat and animal protein products (Miller and Welch, 2013). The broadening of the power of transnational food companies with the assistance of aggressive marketing and convenience of ready-cooked dishes has led to the general acceptance of Western-style diets, especially in low- and middle-income groups (Baker et al., 2020).

Drivers and Consequences of Dietary Change

One of the characteristics of this shift is the proliferation of ultra-processed foods (UPFs) industrial formulations made of refined food ingredients, additives, preservatives, and artificial flavorings (Monteiro et al., 2018). High palatability, low satiety response, and long shelf life are the features of these products which have a cumulative effect on overconsumption and low quality of diet (Moodie et al., 2013). Obesity, type 2 diabetes, heart disease, and depressive symptoms have been strongly linked to the increasing consumption of UPFs (Srour et al., 2019). There is consistent epidemiological data showing that diets rich in UPFs cause a vast increase in the worldwide morbidity of non-communicable diseases (NCDs) and early mortality (Afshin et al., 2019). This change has also strengthened the dual burden of malnutrition where in the same households or communities undernutrition and overnutrition occurs and is evident in low and middle income countries (Haddad et al., 2016).

Sociocultural Transformation and Food Heritage

There are sociocultural implications of the nutrition transition beyond those of physiological health effects. The prevalence of globalized food systems and uniform food items also leads to the loss of culinary traditions and the substitution of traditional foodways with hybridized and globalized food consumption. This change is not only the change in what people eat but also how and why they eat- changes in identity, social class, and the day-to-day life (Mintz and Du Bois, 2002; Bourdieu, 1984; Counihan and Van Esterik, 2013).

It is important to differentiate between food culture, which is the common meanings, symbols and social values about food, and cultural foods, which are dishes or recipes that are based on heritage and are associated with a particular community or region. Whereas food culture is a set of values, including commensality, hospitality, and identity, cultural foods represent materialized forms of these values in terms of traditional processes of preparation and consumption. Due to the globalization and industrialization, both elements are under pressure as homogenized food marketing is also a threat to local autonomy and traditional knowledge systems (Goel et al., 2023).

The Cultural Preservation and Policy Responses

It needs multi-sectoral policy and cultural measures to tackle the negative effects of the nutrition transition. Government, civil society groups and local communities should work together in an effort to ensure that there is a promotion of food systems that are sustainable and health oriented. Some of the policy interventions can be taxation of sweet or ultra-processed food items, preventing marketing to children, and encouraging local farming that supports traditional diets (Thow et al., 2018). At the same time, programs of cultural preservation (e.g., community meals, school food literacy, and recording traditional food practices) can enhance food identity and resistance to homogenization.

There is a need then to have an interdisciplinary and intercultural approach to unify the concepts of public health, cultural heritage, and environmental sustainability. With the dietary interventions being aligned with the cultural logics and ecological ethics, the societies can address the negative implications of the nutrition transition and foster the healthier, more sustainable and culturally-based food futures.

The Global Nutrition Transition, Ultra-processed Food and Health Issues

Popkin (2020) continues to say that the global nutrition transition is the slow, multi-step change in diet patterns through energy-dense, high-fat, and ultra-processed foods (UPFs) replacing the traditional patterns of eating (whole and minimally processed food). The change is being globalized by urbanization, growing disposable incomes, globalization of food market, and exposure to transnational food corporations (FAO, 2020). With the advancement of economies, refined carbohydrates, sugars, saturated fats, and animal products are replacing the staple foods like grains, legumes, and fresh produce (Miller and Welch, 2013). The Western-style diets have spread rapidly because of the marketing strategies that focus on convenience, affordability, and social aspiration especially among low- and middle-income groups (Baker et al., 2020). These trends are indicators of more socio-economic and cultural changes that not only change the food that people consume but also change their perceptions and values of food.

Ultra-Processed Foods (UPFs) and Health

According to the NOVA classification system (Monteiro et al., 2018), ultra-processed foods (UPFs) are industrial preparations, which are generally refined ingredients, additives, preservatives, and artificial flavorings aimed at improving palatability, shelf life, and marketability. These products are pocket-friendly and full of energy but they are characterized by high energy density, low fiber content and poor nutrient quality, which cause overconsumption, metabolic dysregulation, and nutrient displacement (Moodie et al., 2013). The epidemiological literature continues to support high UPF intake as a risk factor with several diseases, including obesity, type 2 diabetes, cardiovascular disease, depression, and premature death (Srour et al., 2019). High palatability and low satiety of UPFs stimulate overconsumption and habitual consumption are supported by aggressive marketing, especially in children and adolescents. All these trends are indicative of more than simply a change in diet, but a whole system change of food systems in the world toward industrialized eating habits with negative health consequences.

International Health Issues and Dual Burden of Malnutrition

The increased prevalence of nutrition-related non-communicable diseases (NCDs) in the world including obesity, diabetes, and cardiovascular disorders presents the far-reaching health consequences of the nutrition transition (Afshin et al., 2019). Nevertheless, this transition is accompanied by chronic undernutrition that is the simultaneous existence of undernutrition and overweight or obesity in the same population group, community, or household, resulting in what scholars refer to as the dual burden of malnutrition (Haddad et al., 2016). This contradiction demonstrates severe inequalities in the access to healthy foods. In numerous developing and middle-income nations, cheap, energy-dense UPFs are more available than vegetables and fruits. Together with urban sedentary habits and poor food literacy, the conditions contribute to creating an environment that supports caloric excess and poor quality of nutrients (Swinburn et al., 2011). As a result, population diets worldwide are currently contributing to the cause of micronutrient deficiencies as well as disorders linked to obesity- another characteristic of the current nutrition transition.

Policy and Intervention Strategies

To solve the health and sustainability issues surrounding UPFs, there is need to involve multi-level policy interventions that comprise of the aspects of public health, economic, and cultural aspects. It has been indicated that a number of effective strategies exist: Fiscal Measures: Taxes on sugar-sweetened drinks and ultra-processed foods and subsidies on fruits, vegetables, and whole grains may promote the adoption of healthier eating habits (WHO, 2020; Thow et al., 2018).

Food Labeling and Regulation: Requirement of front of pack labeling and clear disclosure of ingredients and nutrient profiles enhance consumer awareness and decision making.

Marketing Restrictions: When advertising of UPFs is restricted among children, the children are less exposed to the unhealthy food norms at early stages (Swinburn et al., 2019).

Public Procurement Policies: Healthier institutional settings can be achieved through reforming school meal programs, hospital food services and workplace canteens to place a greater emphasis on minimally processed foods.

Cultural and Educational Programs: Food literacy and community cooking programs and maintenance of traditional food cultures facilitates sustainable and identity-driven eating patterns. These interventions should be contextual and interdisciplinary and intercultural in nature without violating the local food traditions but fulfilling the global health needs. The governments, civil society and local communities have a duty to establish sound food systems that can ensure not only the community is healthy but also protect their cultural heritage.

Nutrition transition is not only a shift in nutrition; it is an embodiment of a radical shift in world food production, consumption, and identity. The development of UPFs leads to an increasing number of health-related issues and homogenization of culture in societies. It requires concerted efforts that would balance the goals of health to the population, cultural preservation as well as environmental sustainability. The development of nutritionally sound, culturally significant and ecologically responsible food systems continues to be one of the most immediate challenges of the 21 st century.(Shown in figure-3)
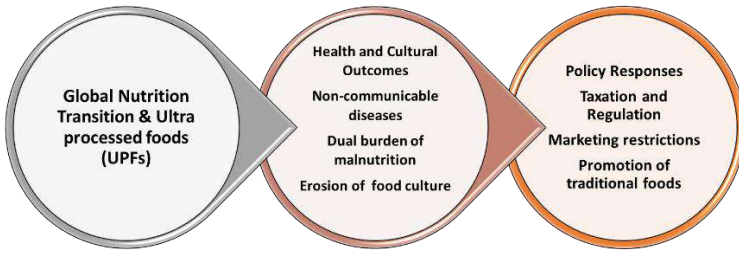
Figure 3. Nutrition Transition, Ultra-Processed Foods, and Health Challenges

This diagram depicts the interrelated processes that connect the global nutrition transition to health and cultural outcomes. The transition—from traditional diets that prioritize minimally processed foods to those increasingly reliant on ultra-processed foods (UPFs)—is influenced by globalization, urbanization, and evolving socioeconomic conditions. The rise in UPF consumption is linked to non-communicable diseases, the dual burden of malnutrition, and the decline of traditional food cultures. To address these challenges, policy measures such as fiscal regulation, marketing restrictions, and the encouragement of traditional and sustainable food practices are crucial.

4.1 Promoting Cultural Perspectives in Dietary Interventions
The Significance of Culture in Eating Interventions

Dietary interventions need to be effective and sustainable by being consistent with the culture, values and daily habits of the people. Food is not only a means of food, it is also a major constituent of identity, social membership and emotional release (Kittler et al., 2019; Airhihenbuwa, 1995). Culturally significant strategies increase acceptance and compliance since people become more accepting of behavior change when it does not interfere with well-known food customs. The interventions can promote healthier versions of the traditional cuisine instead of substituting the culturally relevant meals with unknown ingredients or foreign eating patterns (Jomaa et al., 2020).

These cultural friendly approaches can preserve social identity and enhance the quality of diet.

Cultural Tailored Strategies and Models of Nutrition Education

Culturally-specific dietary interventions refer to dietary interventions that are based on beliefs, values, and practices of certain communities. The PEN-3 Model by Airhihenbuwa (1995) offers a culture-focused theory that considers 3 dimensions, namely, cultural identity, relationships and expectations, and cultural empowerment as the guiding principles of health promotion that can be accepted by the community values. Cultural relevance, social support, and perceived benefits are further expounded in behavioral theories like the Social Cognitive Theory (SCT) and the Health Belief Model (HBM) which explain the behavioral change toward dietary behavior (Glanz et al., 2015).

The ways to change traditional recipes, peer-led training, and storytelling as culturally incongruent forms of nutrition communication are considered as practical strategies. Also, nudging techniques as described by Thaler and Sunstein (2008) may be effectively helpful in the areas of influencing healthier food decisions in challenges of culturally familiar settings, e.g. rearranging the canteen displays or using culturally relevant plate models that display the balance and proportion of food. Effective ones are community cooking sessions where traditional dishes are combined with a focus on healthier cooking methods (Contento, 2016; Renzaho, 2019). These interventions do not only enhance food habits; they also enhance social unity and maintain culinary traditions.

Community-Based and Participatory Approaches

The engagement with the community is one of the foundations of culturally based nutrition programs. CBPR is an active method of including local stakeholders in designing, implementation, and evaluation of programs that provides assurance of trust, ownership, and sustainability (Israel et al., 2010). Such participatory approaches improve flexibility and integration, which result in the increased success with diverse populations (Minkler and Wallerstein, 2011).

Responsiveness Programs based on the local leadership like those undertaken by community centers, faith-based groups, and cooperatives of women are especially useful in reducing health disparities and developing change capacity. New digital technologies like mobile health (mHealth) interventions and culturally customizable food apps only increase the scope of such efforts. Digital interventions will encourage inclusive health communication across diverse and metropolitan environments by tailoring content to language, images, and culturally specific meal plans (Shariful Islam et al., 2019).

Combination of Cultural Awareness, Technology and Public Health

The combination of cultural awareness with behavioral science and technological advancement can be a broad-based solution to developing equitable and sustainable nutrition programs. Culturally sensitive interventions enhance dietary habits in addition to enhancing social identity, psychological well-being, and community resilience. With the inclusion of culture in nutrition education and policy, the goal of promoting equity in health, environmental justice, and nutrition justice in the world can be achieved.

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4.2 Emerging Technologies and Digital Tools in Nutrition
Technological breakthroughs: Wearables, Mobile Applications, and AI Systems

The use of technological innovations in the computing and mobile health (mHealth), is changing the way people track, organize, and improve their health conditions and nutrition levels. Smartphone apps or wearable sensors and AI-driven digital platforms have transformed the consumption habits and attitudes toward nutrition (Chen et al., 2020). The tools also give immediate feedback, customized suggestions, and data-driven information, allowing users to make more informed and sustainable food choices (Liu et al., 2022). AI algorithms especially come in handy when it comes to creating individualized dietary evaluations with regard to the likes and preferences, socioeconomic status, and health goals of the users.

Fallaize et al. (2019) report that individualized digital feedback leads to motivation and responsibility, which enables behavioral change of long-term behavior.

Opportunities and Benefits: Social Support, Gamification, and Personalization

The digital platforms are having a greater effect on users, their attitudes, and behaviors about nutrition. Social networks and online communities provide platforms of peer support, exchange of knowledge as well as collective motivation towards healthy lifestyles. However, the same platforms may use the misinformation and non-evidence-based eating habits to spread the information regarding eating habits and body image (Carrotte et al., 2017). The spread of misinformation can be opposed by promoting the use of evidence-based communication and collaboration with the credible institutions in the field of public health, promoting the promotion of trustful nutrition advice. Moreover, gamified interventions, i.e., step competition, cooking contests, and goal-setting group activities, can be used to improve user engagement, combining both entertainment and positive reinforcement of behavior (Maher et al., 2017). These plans employ the established behavior change methods, such as self-monitoring, feedback, social comparison, and reward systems, which have been identified to enhance the ability to stick to healthy behaviors.

Threats and dangers: Digital Divide, Privacy, and Algorithmic Bias

Although these advances have been made, there are various structural and ethical obstacles that exist. The use of digital nutrition tools in socioeconomic layers is not distributed equally, and rural communities, elderly people, and people with low income have significant barriers connected with affordability, digital literacy, and access to technological infrastructure (Chung et al., 2020). Algorithms bias and lack of publicity of data and autonomy by the user form part of ethical considerations in digital health development. The issue of algorithmic bias should also be considered because, in most cases, AI dietary recommendation systems are trained on Western-oriented datasets, resulting in culturally unrepresentative suggestions.

To solve this problem, one should consider an inclusive data collection that represents various dietary customs and nutrient compositions. The General Data Protection Regulation (GDPR) and Health Insurance Portability and Accountability Act (HIPAA) are examples of data protection regulations that define essential principles of personal health data protection. In addition, international ethical standards, including the Guidance on Ethics and Governance of Artificial Intelligence in Health provided by the World Health Organization (2021) focus on transparency, equity, and accountability of digital health innovations.

5. INTEGRATION WITH PUBLIC HEALTH AND CULTURAL CONTEXTS

Digital technologies can also become a component of a more comprehensive and culturally sensitive approach to the American public health when incorporated into community-based nutrition interventions. Individualized personal digital information coupled with the involvement of the community allows the practitioners to tailor interventions to fit the everyday life, level of literacy and cultural food behaviors of the users. This combination of concepts of behavioral science, cultural sensitivity, and adaptability to technology promotes dietary equity and empowers communities to make sustainable and health-advancing decisions. **(Shown in Table-1)**

Table 1. Overview of Emerging Digital Nutrition Tools

Technology Type	Description / Function	Health & Behavioural Benefits	Limitations / Challenges
Mobile Apps (e.g., MyFitnessPal, Yazio)	Track calorie intake, set goals, monitor weight	Enhance self-awareness and accountability	May promote obsessive tracking; limited cultural customisation
Wearable Devices (Fitbit, Apple Watch)	Record physical activity, heart rate, and sleep	Support energy balance awareness and motivate activity	Cost barriers; privacy issues
AI-Powered Nutrition Tools	Provide real-time personalised dietary advice using AI algorithms	Adapt recommendations to user health data and preferences	Data accuracy and bias issues

Gamified Health Challenges	Use rewards and social competition to encourage healthy habits	Increase engagement and enjoyment in health behaviours	Sustained motivation may decline over time
Social Media Campaigns	Disseminate health information and community support	Influence social norms and promote healthy trends	Risk of misinformation spread
Telehealth & Virtual Coaching	Provide remote counselling and dietary monitoring	Expand access to nutrition professionals	Dependent on digital literacy and internet access

5.1 Ethical Food Systems and Sustainable Food Environments

The world food systems have major sustainability challenges, which include interrelated environmental, social, and economic aspects. The un sustainability in agricultural systems is also a cause of greenhouse gas emissions, soil degradation, and biodiversity destruction, and unfair food distribution systems increase hunger and social injustice (Willett et al., 2019). In order to overcome these objections, it is necessary to define some important concepts: Sustainable Food Environments are the physical, economic, political, and sociocultural circumstances that render healthy, affordable, and environmental friendly foods ambient and appealing to everyone (Swinburn et al., 2019).

Ethical Food Systems are those in which the ecological, animal, fair labor, and social justice are incorporated in production, distribution, and consumption of food (Garnett, 2014).

Food Sovereignty puts more emphasis on the rights of societies to determine their food systems, with a major concern on local control and culturally fitting production, whereas Food Security is concerned with achieving adequate and unchanging access to safe and nutritious food (FAO, 2019). They are both complementary goals of sustainable development models.

The Necessity of Sustainability: Environmental and Social Requirements

The modern food systems are thought to be the cause of about a third of global greenhouse gas emissions, and one of the primary factors of deforestation, soil erosion, and loss of biodiversity (Willett et al., 2019). The industrialized modes of agriculture put more emphasis on harvesting and profitability over the sustainability of the ecosystem and fairness. Meanwhile, malnutrition and obesity are present worldwide, which demonstrates systemic inefficiency and unequal food access and distribution (Clark et al., 2020). The shift to sustainability is thus an inter-dimensional requirement, i.e., safeguarding planetary borders and at the same time providing equitable feeding to both the present and future generations.

The Principles of Sustainable Food Environments

Swinburn et al. (2019) identify availability, affordability, cultural acceptability, and environmental responsibility as the features of a sustainable food environment. It implies that the healthy and culturally appropriate foods should be affordable and accessible to all and be as ecologically friendly as possible. Such systems can only be achieved through concerted efforts- policy reform, sustainable agricultural innovation and ethical market practices. The idea is to transform the healthiest and most sustainable foods to be the simplest and cheapest foods not privilege of the few.

Barriers to Implementation

Although the awareness has increased, several hindrances still exist. Sustainable foods tend to be not as affordable and not as accessible, especially in low-income and marginalized populations (Hirvonen et al., 2020). These disparities are aggravated by structural inequities, poor policy motivations and disjointed governance systems. Moreover, the globalized supply chains often externalize the environmental and labor costs and conceal the real cost of production. Such restrictions highlight the importance of policy coherence, cross-sectoral cooperation, and inclusive governmental systems to put the economic incentives in balance with the environmental and ethical aspirations.

5.2 Policymaking and Multi-Stakeholder Solutions

To Change Food Systems, There Is a Need to Involve a Variety of Sectors

Fiscal and regulatory policies, including subsidies on sustainable food production, carbon taxes, and acquisition specifications, can be used by governments to encourage the production of more friendly food (Springmann et al., 2018). The private industries are able to decrease wastes, restructure the supply chains, and enhance on sourcing transparency. The communities and farmers are significant actors in the creation of local and circular food economies, which fosters resilience via localized production and consumption systems. There are policy models that combine both environmental and health goals in such international frameworks as the EU Farm to Fork Strategy and the EAT-Lancet Planetary Health Diet. In the same manner, the National Dietary Guidelines in Brazil underline culturally-based, low-processing diets in line with the principle of sustainability.

Ethical Aspects of Food Systems

Sustainable food systems promote fairness and responsibility at every food chain level. This includes: Laborers in the agricultural industry and food industry should have fair wages and safe working conditions. Standards of animal welfare which reduce suffering and humane treatment in rearing. Food justice, or the equitable access to healthy food items independent of super economic standing and geography. These moral values solidify the fact that sustainability belongs not just to the environmental target but is also a moral and social necessity (Garnett, 2014; Bene et al., 2020).

Education and Consumer Empowerment Function

Education is one of the pillars of sustainable change. Education of nutrition and food systems Education in nutrition and food systems (as part of schools, community initiatives, the media) enables people to make informed, value-based choices about diets. Bene et al. (2020) also state that markets and policy agendas can be influenced by the demand of ethically sourced, sustainable products as a result of food literacy and consumer awareness.

Finally, sustainable diets ought to be a regular practice and not an exception. Incorporating ethics, equity, and environmental care into personal and institutional food selections will transform world systems into resiliency and equity.

6. CASE STUDY: INTEGRATIVE NUTRITION INTERVENTION IN THE URBAN COMMUNITY

Background

This case study is based on a description of an integrative community nutrition intervention undertaken in a mid-sized urban city in southeastern Canada (where the population is about 250,000 residents). The project was a joint venture between local health facilities, schools, small enterprises and local municipal agencies. Its main focus was to enable the community members to make healthier and more sustainable food decisions as well as encouraging culturally sensitive and environmentally friendly eating habits.

Before Implementation, a Mixed-Methods Needs Assessment Was Done Using

Household surveys (n = 520) to determine the accessibility and affordability of nutritious foods. The focus groups (n = 12) expressed different cultural groups to investigate the traditional dietary habits and impediments to eating healthy. Mapping retail food environment to determine geographic differences in the access of food. The results obtained showed that affordable fresh food in low-income neighborhoods was limited, young people were not fully aware of sustainable nutrition, and their cultural values were deeply rooted in traditional foods. These observations were used to design the culturally sensitive intervention. The project was based on a Community-Based Participatory Research (CBPR) paradigm, and the participation of residents, local leaders, and researchers at all stages of development, implementation, and evaluation of the program were met.

Intervention Design

The intervention was aligned by five combined interventions, which included nutrition education, online interaction, and strengthening the local food system.

Workshops Based on Culturally Based Nutrition

Interactive workshops were created based on the ingredients that are available locally and employing traditional recipes that are known to the community. Nutrition educators showed how one could change classic meals, such as by cooking with baked instead of fried techniques or eating whole-grain instead of refined grain with no loss of taste or cultural identity. Participants particularly the older people who take the issue of culinary culture seriously felt a great sense of pride and ownership. Biweekly workshops in community centers were undertaken and covered more than 480 participants in six months.

Digital Monitoring Tools

To improve self-monitoring and participation, the participants were given access to a mobile application that could monitor the type of dietary intake and provide their personalized recommendations as well as show the availability of food in the season and locally available food. Data were provided in three languages of the immigrant communities, French, and English. Moreover, the hotspots with touchscreen interfaces were placed in libraries and community centers to provide residents with less access to smartphones. These digital tools created more dietary self-awareness and gave the participants the ability to track their improvement.

Food and Catering Changes

Cafeterias in schools and workplaces implemented evidence-based choice architecture designs: placing the fruits and vegetables on the eye level position, color-coded labels on the healthy options, and discounting the least processed foods. The cafeteria audits post intervention revealed that there was an improvement of 27 percent on fruit sales and 19 percent reduction in purchasing processed snacks at the participating sites.

Behavior Reinforcement and Social Media Engagement

The weekly social media challenges were used to ask them to share pictures of balanced meals, methods of reducing food waste, and creative healthy recipes. This community-based involvement created mutual accountability and communal motivation. The metrics on participation showed that there were more than 2,300 posts shared on major social platforms over three months, which is a good indication of high digital engagements and cohesion of the community.

Economic Support on the Bases of Local Producers

The local and municipal authorities have created incentives programs among the small scale farmers and local distributors to provide fresh foods to school, markets and restaurants. These policies enhanced local food systems and local economies, decreased dependency on imported products, and environmental stewardship by shortening the supply chains. Consequently, there was an upsurge in local procurement by 35 percent and three community-supported agriculture (CSA) programs were initiated in the initial year.

Methodological Framework and Evaluation

The program used a mixed-methods evaluation strategy which incorporated:

Pre and post-intervention surveys (n = 420) to evaluate the change in dietary habits.

To reflect the perception of the participants and the cultural relevance, qualitative interviews (n= 40) will be conducted. Sales and procurement information at partner cafeterias and local markets to determine the behavioral outcomes. The intervention was informed by the Social Ecological Model that focuses on the multi-level factors of dietary behavior (individual, community, and policy levels).

Results and Outcomes

Quantitative and qualitative analyses proved the presence of significant positive results: There was a 22 percent (3.1 to 3.8 servings/day) increase in average consumption of fruit and vegetables ($p < 0.05$). The purchases of

processed foods reduced by 18, percent among the participating households. Retention rate of participants: 86% in six months. Self-reported satisfaction: 92% of the respondents indicated that the program was highly relevant to their daily living. Community cohesion: The participants of the focus groups stressed the ability to communicate the knowledge of cooking and the interest to the cultural foods between generations.

Discussion And Conclusion

The Integrative Nutrition Intervention established that culturally inclusive, digitally enabled and community-based interventions can be effective in changing dietary behavior and food sustainability among urban populations. The use of the CBPR framework facilitated the contextual orientation of the interventions and its social equity.

The major lessons learned are the need to: Integrating cultural relevance of health promotion strategies. Using digital technology to engage and monitor. Creating sustainable food policies in line with local economic incentives. On the whole, the case demonstrates that interdisciplinary, participatory nutrition interventions can lead to long-term changes in health equity, environmental sustainability, and food resilience on local levels. (Shown in Table-3)

Table 3. Summary of Intervention Strategies and Outcomes

Intervention Strategy	Description	Evaluation Indicators	Measured Outcomes
Culturally Based Nutrition Workshops	Cooking sessions using traditional recipes and local ingredients, modified for health improvement.	Attendance records; participant surveys; and qualitative interviews.	480 participants reached; 22% increase in fruit/vegetable intake; strong cultural engagement reported.
Digital Monitoring Tools	Mobile app and public kiosks for dietary self-tracking and personalized feedback.	App usage data; pre-post dietary recall surveys.	68% of participants actively used tools weekly; improved dietary self-awareness.

Cafeteria and Food Service Modifications	Healthier meal placement, labeling, and pricing strategies in schools and workplaces.	Sales data from cafeterias; observational audits.	27% rise in fruit/vegetable sales; 19% decline in processed food purchases.
Social Media Engagement	Weekly challenges promoting healthy meal sharing and food-waste reduction tips.	Number of social media posts; engagement metrics.	Over 2,300 posts shared; high participant motivation and peer reinforcement.
Policy and Economic Support for Local Producers	Incentives for local farmers and vendors to supply schools and community markets.	Procurement records; policy implementation tracking.	35% increase in local sourcing; launch of 3 new CSA programs; strengthened local food networks.

CONCLUSION AND RECOMMENDATION ON PUBLIC HEALTH PRACTICE AND POLICY

Culturally based, community-based, and digitally based interventions proved to be effective in the integrative nutrition intervention to enhance the dietary habits and the development of local food systems. The program works, since it inserted nutrition education into the settings of the familiar cultural life and used the digital monitoring devices to increase the intake of fruits and vegetables, reduce the consumption of processed food, and suggest the overall engagement of the members of the various cultural and age groups. The sense of community ownership was played possible through the participatory design that was informed by the Community Based Participatory Research (CBPR) model that ensured that interventions were contextually relevant and sustainable. These are achieved though there are still several challenges. The economic inequities, the reduced number of low-income/age populations that have access to digital, and the absence of long-term funding remain limiting factors to the scalability of the program. Moreover, the implementation of the traditional cooking with the existing health provisions should be balanced to presuppose the stable adjustment and cultural relativism to ensure that the food traditions will not be eradicated or homogenized.

Such interventions should be scaled and reproduced in the future by paying attention to:

- Cultural and contextual modification- Co-designing programs alongside locals in the population so that they align with the local food culture, social norms and linguistic diversity. Policy integration- to ingrain sustainability and cultural applicability in municipal and national food policies, procurement systems and eating habits.
- Sustained evaluation- long-term and mixed methods evaluation to find out behavior change, equity outcomes and level of impact in society.
- Capacity building and intergenerational learning-connection between schools, elder and local groups to preserve traditional cooking skills and also help build modern health literacy.

Implications on Practice/Policy in Public Health

The findings support the significance of multilevel and culture-sensitive nutrition interventions. The behavioral asset of the health should be responded to not only within the framework of the individual behavior but by the efforts to overcome the systemic barriers to healthy eating through the environmental, economic, and policy interventions. The participation models employed by practitioners should not ignore cultural diversity and allow communities to assume active roles in food decision making.

At the level of policy governments and health agencies ought:

- Incorporate culturally relevant nutrition education in schools and national nutritional policies.
- Shop locally and offer local farmers and sustainable food producers monetary incentives and procuring support.
- Promote intersectoral collaboration among the health, education, agriculture, and technology to create opportunities to access nutrition equally.
- Place monitoring systems that support the measurement of the nutritional outcomes and the cultural relevance of interventions.
- These initiatives will result into robust food systems that contribute to dietary health, cultural heritage and community health by making sure that public health nutrition is in line with equity, cultural integrity and sustainability.

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CHAPTER 4
CULINARY HERITAGE AS A TOOL FOR DESTINATION BRANDING

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INTRODUCTION

Food tradition encompasses more than recipes; it's a dynamic cultural ecology of ingredients, techniques, practices, and knowledge. According to Bessiere (1998), culinary heritage is an evolving system of knowledge, practices, and values passed through communities, covering both material aspects like food and cookware and intangible aspects such as rituals and environmental understanding (Sustainability Directory, 2025). Modern studies link it to cultural sustainability and destination identity (Scarpato, 2003; Montanari, 2006; Sims, 2009). UNESCO's recognition of culinary practices emphasizes their role in community cohesion and cultural diversity, with techniques like fermentation and preservation preserving ecological wisdom amid changing environments (Grace et al., 2023). Culinary heritage is a living system balancing continuity and change.

The Concept of Destination Branding

According to Brent Ritchie (1999), destination branding involves building a unique identity and image as an enticement to visitors and investment. In addition to its marketing orientation, modern scholarship discusses branding in terms of experiential, cultural, and symbolic orientation that frames the tourists' perception, consumption and memorization of destinations (Kavaratzis & Ashworth, 2006; Anholt, 2010). When applied to gastronomy and heritage, branding is a socio-cultural practice in which the intangible culinary tradition is turned into a source of meaningful experiences and authenticity. Sims (2009) notes that local food generates a sense of connectedness and authentic place interaction. Authenticity in gastronomic storytelling is achieved in the digital age across social and travel platforms, in the form of visual and participatory narratives. These representations work as dress performance agreements between the local sense and global imagination informed by symbolic consumption (Bourdieu, 1984) and cultural identity theory (Hall, 1996). The culinary heritage, therefore, becomes a multi-level branding instrument that integrates marketing, culture and identity in the aim of achieving sustainable place uniqueness.

Importance of Linking Food Culture with Destination Identity

The relationship between food culture and destination identity is symbiotic, based on sensory experience, emotion, and shared memory. Culinary heritage is not just consumption but an experience and a symbolic representation of place (Hjalager & Richards, 2002). Research shows that food is an identity marker used in cultural storytelling through taste, ritual, and memory (Bessiere, 1998; Sims, 2009; Lin et al., 2010). Experiential value theory suggests that food experiences create emotional and aesthetic values, forming impressions of authenticity (Holbrook, 1999). When tourists explore local foods, they perform acts of cultural identification, highlighting a destination's uniqueness. This authenticity aligns with cultural identity theory, which sees heritage as negotiated between practice and performance.

There are tensions between commodification and preservation. Tourism marketing often promotes culinary traditions but risks creating a commercialized image disconnected from cultural roots. Scholars warn that this can harm culinary heritage (Cohen & Avieli, 2004). The chapter frames culinary identity within cultural sustainability, balancing economic development and heritage preservation (Richards, 2012).

Thus, food culture and destination identity are more than marketing activities—they mediate cultures. By balancing sensory experiences, community involvement, and heritage, destinations can create authentic tourism experiences, fostering a sense of place and social cohesion. Culinary heritage acts as a bridge between place memory and its modern expression in international tourism.

1. HISTORICAL PERSPECTIVES ON CULINARY TRADITIONS

Food culture has been changing alongside these larger trends in human evolution: migration, trade routes, colonization, technological change and environmental transformation. Culinary history is, thus, the history of adjustment, the history of culture as well. According to Mintz and Bois (2002), food gives us the gift of viewing society, economy and identity changes as they occur.

GASTRONOMY HERITAGE, HEALTH ORIENTATIONS, AND EVOLVING FOOD CULTURES: PERSPECTIVES IN GASTRONOMY RESEARCH

The procurement, preparation, and perception of food have been transformed by each epoch, starting with the nowadays globalization, with the ancient spice deals, and the rest.

Traditionally, culinary customs were influenced by the cross-cultural experiences- the sharing of ingredients and methods among civilizations around Europe, the Middle East, Asia and Africa. These interactions resulted in the hybrid cuisines that are today considered cultural identifiers and heritage (Montanari, 2006). It can be used as an example when the spread of rice, spices and methods of food preservation along trade routes not only transformed diets but also instilled ecological knowledge in local cuisine. The records that exist in the historical cookbooks, recipes and rituals that are recorded in both the religious or domestic settings indicate that food practices were encoded with social hierarchies, moral beliefs and collective memories (Goody, 1982).

From the perspective of cultural hybridity, the culinary evolution is a continual negotiation between conservatism and change (Bhabha, 1994). The hybrid cuisines never water down the heritage; instead, they reflect how communities simply internalize foreign elements whilst retaining fundamental cultural ideals. Every translation, be it the replacement of ingredients, the cooking technique or the meaning of the ritual, is part of an everlasting conversation between our ancestors and ourselves. Therefore, the food heritage can be viewed as a living library of what was the identity, and each meal recounts the story of migration, trade, and her endurance.

The world food chains of production and consumption persist in transforming the food terrain in the modern period. However, even with these changes, local foods still stand strong as memories and places of ownership. They link individuals to their ancestral origins and give physical touch to continuity in a world that is becoming more and more mobile and globalized (Bessiere, 2013). Through these historical continuities, we know culinary heritage not as something that is being left behind but as a dynamic process of culture that speaks of the common history of human movement, accommodation and innovation.

2. COMPONENTS OF CULINARY HERITAGE: INGREDIENTS, TECHNIQUES, RITUALS, STORIES

Gastronomic identity is a combination of diverse components that create culinary heritage. Instead of considering the recipes as autonomous items, it is important to realize the compound structure on which the culinary knowledge works. Based on the heritage studies (Smith, 2006) and the concept of cultural memory (Assmann, 2011), components of ingredients, techniques, rituals, and tales are interpreted as elements that convey tangible and intangible heritage studies. Every element represents food as grown, cooked, practised and recollected around the ecological, social, as well as symbolic aspects of the food heritage.

Ingredients

The ecological basis of culinary heritage consists of ingredients and reflects the close contact between environment, economy and identity. A notion that can perhaps be used to clarify the phenomenon is the notion of terroir, which was initially used in the context of wine making to explain the way the local knowledge, climate and soil combine to create particular flavours that are not reproducible in any other regions (Trubek, 2009). Local ingredients are understood as cultural embeddedness; the ability to capture the ecological adaptation communities adopt, and their potential to produce food sustainably.

The practices of traditional folk society, such as corn growing of Indigenous Americans and millet farming of South Indians, should be seen as manifestations of how local produce is both a means of social subsistence and a form of identity, independence, and revolt against globalization (Wilk, 2006). In that way, heritage foods have both environmental and cultural values, which stand against the homogenising forces of the global food systems, therefore, restating the ecological knowledge and a sense of culinary self-determination by a community.

Techniques

Food skills are the embodied experience of families; applied creativity, survival, and adjustment.

Food preservation techniques like fermentation, drying, or smoking had in the past been invented to facilitate the increased shelf life of foods, but also to provide embedded deep ecological and cultural wisdom (Hobsbawm, 1983). An example of this is Korean kimchi, Indian idli batter fermentation or Ethiopian injara preparation, which are all manifestations of the intersection of environmental necessity and taste, ritual and social meaning.

These methods are not just mechanical operations, and they are performance processes of passing on heritages. Cultural memory is maintained by bodily practices; so, too, the food-making methodology performs the memory of the hands. These acts are propagated in families or communities, and thus, culinary labour is linked to the continuity of cultures through reproduction and modification (Connerton, 1989).

Rituals

Food rituals place cuisine in its social and spiritual aspects. They organize the beats of everyday living, celebrations and rituals, uniting societies with collective commensality and emotionality (Durkheim, 1912; Turner, 1969). The breaking of bread, offering sweets at a party, preparing ritual foods to honour ancestors, these are all actions that symbolize forms of hospitality, thanksgiving, and remembrance.

Theoretically, the rituals may be interpreted as the shows of belonging as the reenactment of social relationships and collective memory (Bird & Bell, 1999). Food ceremonies do not just conserve a tradition but revive it; the repetition of ceremonies makes sure that cultural values are continually being played out and replayed. Food in this regard then becomes a social language which serves to evoke continuity and identity using the sense of taste and gesture.

Stories

Narratives are the pieces of interpretive stick that attach significance to ingredients, techniques and rituals. Anecdotal memories, legends and family stories on specific foods bring about emotional attachments that make food a memory carrier (Sutton, 2001).

Migration, invention, or adaptation stories associate recipes with their cultural backgrounds and accentuate the metaphorical connection between the present and the past.

Culinary heritage is transferred through the process of storytelling to emerge as a cultural narration beyond the material act of cooking. Community pride and moral values are passed down through recipes, legends, as well as oral histories, and food is placed within larger discourses of identity and belonging. These stories make food a breathing cultural document, one that does not merely tell the story of sustenance but of social meaning, perseverance, as well as imaginative power.

3. CULTURAL SYMBOLISM OF LOCAL CUISINE

Food culture, which is heavily steeped in narratives, rituals and even tastes, is a very strong marker of community identity and membership. It can frequently be a marker of expressiveness, segregating ethnic, religious or regional groups. Some foods or recipes may be used as symbols of culture: think of how sushi serves as the subject of Japanese cuisine, couscous to represent North African culture, or kimchi to represent Korean identity. In addition to external symbolism, food can be used within groups, internally, as a way of reinforcing boundaries, what is consumed and in what way and by whom and at what time can carry values, taboos, and group affiliation (Sangma, 2025).

The spiritual symbolism of food goes into ritual and religion. The belief in healing, magical or sacred properties of certain foods flourishes in many societies and practices, such as the consumption of particular sweets during holidays to symbolize wealth or the act of breaking bread as a religious experience of community. Even something as simple as sharing a meal has profound social significance and forms ties of trust and mutuality that sustain social life.

In response to imported pressures or homogenising forces, the traditional foods become a venue of memory, resistance and pride. Food practices, therefore, serve as a means through which communities can negotiate change, whilst maintaining a sense of continuity; foodways can thereby become acts of persistence and identification.

The example of regional specialities not only tells the stories of the past but also provides a sensorial mode of acquaintance with the place, which becomes a taste of its specificity that binds people with the past (Raza, 2023).

4. CULINARY HERITAGE AND TOURISM

Culinary heritage and tourism now form a key part of global conversations on experiential and sustainable tourism. Travellers seek authentic, sensory, participatory experiences, with gastronomy satisfying these needs. Food becomes a cultural experience and storytelling medium. According to Long (2013), culinary tourism involves deliberate engagement with local food culture for learning or pleasure, serving as a cultural performance connecting producers, chefs, and visitors through shared sensory experiences (Richards, 2012). This enhances local economies, cultural pride, and sustainability via traditional knowledge. Theories like symbolic consumption (Bourdieu, 1984) and experiential value (Holbrook, 1999) explain food experiences' appeal, involving senses like taste and smell, creating emotional bonds and memories. Urry (2002) describes this as the tourist gaze, where authenticity and locality become cultural capital. However, commercialization risks commodifying food and eroding authenticity and social meanings. Sustainable gastronomic tourism needs to balance economic benefits with cultural integrity, termed cultural sustainability (Saarinen et al., 2009). Practically, culinary heritage can be part of strategic branding and cultural ecosystems. Regions increasingly use gastronomy in destination marketing, exemplified by Japan's Washoku, Italy's slow food, and Indian regional thalis, fostering local pride and economic strength. Culinary tourism also promotes intercultural dialogue, empathy, and understanding, acting as cultural diplomacy—a form of soft power. The overlap of culinary heritage and tourism embodies a sustainable approach integrating economy, culture, and ecology. Food should be seen as a dynamic activity, enabling models of tourism rooted in authenticity, inclusivity, and cultural continuity, aligning with global patterns that view gastronomy as a community vehicle.

Examples of Destinations Famous for Their Cuisine

Examples of how food heritage may be held as a strategic and symbolic asset in destination identity are the culinary destinations. In various geographical settings, gastronomy can be used as a cultural signifier and a marketing tool that implies authenticity and a sense of belonging. But effective case studies show that culinary destinations that are resiliency-focused to both heritage conservation and innovation can allow them to grow sustainably to preserve the culture as well.

An exemplary example can be found in France, where food has been institutionalized as a source of national identity. In 2010, when UNESCO made the Gastronomic Meal of the French an Intangible Cultural Heritage, it institutionalized what Bessiere (2013) terms as the social construction of taste. French food cannot be understood as an event that is simply about food; rather, it is a ritualized social activity that is an orchestration of manners, friendliness, and performance of culture. The emphasis on the regional foods (e.g., Provence, Burgundy, Alsace) emphasizes the way in which terroir and place form the basis of the symbolic authenticity of French cuisine. France with its policies emphasizing both the appellation systems and culinary education and slow food movements, illustrates how heritage-based tourism can reinvent economic vitality as well as cultural diversity.

The Japanese Washoku culture, included by UNESCO, is also written evidence of the level that gastronomy can reflect environmental ethics and social philosophy (Ehara, 2017). Washoku developed out of this aesthetic of wa (harmony), and incorporated season awareness, balance and nature respect as food practices. Japan popularizes Washoku both nationally and globally; this is a kind of culinary diplomacy, a national identity into taste, aesthetics, and values of sustainability (Cwiertka et al., 2015). The Washoku model connects with the past and the present - retaining traditions of culinary artistry, but incorporating the modern gastronomic creativity in them, hence becoming a foundation of destination branding in Japan.

The Italian Slow Food movement began in 1986 in Piedmont and serves as an expression of anti-globalization and anti-homogenization of fast food. It is a culture through food, but also a culture of philosophy that stresses biodiversity, place and social attachment.

According to Petrini (2007), the movement reinvents pleasure as a leftist action - subverting daily consumption into activism and identification. Cities such as Bologna, Parma, and Naples have repositioned themselves based on regional speciality and handicrafts and made culinary tourism a sustainable and community-based activity. The example of Italy shows that cultural sustainability is not the same as the ability to preserve the culture in place, but by engaging in its active use and reinvention.

The cuisine of India is diverse due to its plural history of different cultures; regional food epitomizes centuries of commerce, movement, and interreligious communication. New emerging food tourism initiatives in the country, like heritage food walks in Delhi, spices trails in Kerala, and millet festivals in Karnataka, reflect the mobilization of the diverse food traditions in support of sustainable tourism. Indian cuisine is the pluralism that works as a living reminder of hybridity, connecting the Mughal, South Asian, and colonial foodways and preserving major local identities (Banerjee-Dube, 2018). The application of the models of storytelling, community involvement, and farm-to-table tourism demonstrates how culinary heritage can be used as a means of social inclusion and empowerment of rural areas.

The presence of these examples worldwide is an indication that culinary heritage is multifaceted and can be used in various ways as a cultural repository, a source of the economy, and a source of sustainability. Successful destinations rely on gastronomy to create a sense of belonging and continuity and stability in a quickly globalizing world, either through institutional recognition (France, Japan) or through grassroots innovation (Italy, India).

The Impact of Culinary Festivals and Food Trails

Culinary festivals and food trails are important tourism promotion and development tools as well as cultural transfer means. They are a good example of what Turner (1969) describes as such cultural performance: ritualized occasions, as a result of which community members publicly construct and reclaim a sense of collective identity. Festivals provide a kind of experiential space in which economic activity is combined with emotional and social value.

These experiences are experiential ecosystems (Holbrook, 1999) that combine sensory, affective, and symbolic experiences. Outside of entertainment, they maintain inter-generational knowledge transfer and strengthen a sense of belonging to a community. Good case studies - the Salone del Gusto in Turin or the Spice Route festivals in Kerala demonstrate how food trails can become cultural avenues and how local producers, artisans and visitors interact in their participatory event to join up.

Festivals provide job opportunities, revive local economies and bring investment. As a cultural treasure trove, they act as living schools in culinary arts that promote values toward local products and ways of doing things. On the policy level, culinary festivals have been integrated into tourism planning as they facilitate sustainable development through enhancing the alignment of economic growth and cultural preservation. In this regard, culinary festivals do not take place in a vacuum but, on the contrary, bring together heritage protection and experiential branding.

5. HOW CULINARY HERITAGE STRENGTHENS DESTINATION BRANDING

Culinary traditions contribute significantly to destination branding by transforming intangible values—memory, authenticity, and belonging—into tangible experiences. As Anholt (2010) explains, destination branding is a form of symbolic differentiation, and cuisine represents its sensory dimension. When visitors engage with local dishes, they participate in the cultural and emotional narratives that define a place.

Following Barthes (1961), food functions as a semiotic code through which destinations communicate meaning. The aroma of French bread, the ritual of Japanese tea, or the vibrancy of Indian street food each acts as a cultural signifiers that embed place identity in perception and memory. Culinary branding, therefore, operates as an emotional and semiotic interface between tourists and destinations, turning the act of eating into a multidimensional experience of culture and place.

For policymakers and marketers, incorporating gastronomy within branding strategies enhances authenticity and visitor loyalty.

As Ritchie (1999) observes, the strongest destination brands integrate symbolic meaning with lived experience—a synthesis that culinary heritage naturally provides. Thus, gastronomy serves as both an identity marker and an experiential promise, positioning food as a strategic medium through which destinations communicate distinctiveness and emotional value.

Creating a Unique Brand Narrative Through Food

Destination identity revolves around storytelling. Ricoeur (1988) defines that narrative provides coherence to experience, by connecting memory, action and imagination. When framed as a narrative, food is then a cultural communication of everyday consumption. Story representative of communal ideals, moral teachings, or ecological experience, each recipe, ritual or ingredient has a story to tell. Culinary storytelling is a technique that is increasingly utilized to humanize destination brands. As examples, there is the narrative of Slow Food in Italy, which glorifies moral pleasure and biodiversity; the story of the Gastronomic Revolution in Peru, which glorifies the national renewal of cuisine; and the image of street food in Thailand, which glorifies spontaneity and warmth. These stories make visitors feel a part of a continuing conversation-making consumers participants. This narrative model of co-creation improves the emotional connection by asking the travellers to become part of the story using their senses. Such participatory storytelling reinforces authenticity in branding and creates affective relationships, which cannot be erased even after the visit. Culinary stories are, therefore a strategic connecting point of cultural heritage and destination marketing.

Emotional and Sensory Appeal of Culinary Experiences

Food experiences are multisensory because they include taste, sight, sound, smell, and touch. Based on the Experience Economy framework introduced by Pine and Gilmore (1999), gastronomy is a good example of tourism in terms of a shifted focus from passive consumption to active involvement. The food is sensory, which activates emotion, memory, and attachment, which are major factors leading to visitor satisfaction and loyalty.

Food experiences can be viewed as affective landscapes of emotional geography in which emotion and place are intimately connected (Davidson and Milligan, 2004). Pie and cake friendliness, the beat of the vendors, or the physical appearance of the food dish bring up a sense of closeness and family. These emotional experiences make destinations a living experience instead of just being an attraction.

Therefore, the sensory experience serves both a psychological and promotional purpose: it facilitates a stronger attachment of visitors to the destination as well as brand recollection. Culinary tradition thus turns out to be a way to tell emotional stories that connect the symbolic and the sensual.

6. CASE STUDIES OF DESTINATIONS LEVERAGING CULINARY HERITAGE

Destinations across the world have understood that gastronomy can become a potent branding tool and force behind sustainable tourism. Connecting heritage, authenticity, and the creative aspect, food has turned into a symbol of belonging and pride, which was already a necessity in the local context. Although different countries adhere to different culinary traditions, they all demonstrate how cuisine is turning out to be used as a place branding and experience tourism instrument.

France: Gastronomy as Cultural Institution

France is one of the most effective cases of food heritage institutionalization. The identity of the Gastronomic Meal of the French as UNESCO Intangible Cultural Heritage (2010) scored cuisine as a significant element of nationalism (Adams, 2014). The French gastronomy represents terroir -the close connection to the place, produce and people- and reflects a tradition of regional diversity. With the help of culinary education, systems of appellation and promotion of local dishes, France has turned food into a discourse of cultivation, conviviality, and pride. When it comes to destination branding, it proves the intersection of policy and ritual and sensual experience to create a consistent image of cultural sophistication and sustainability.

Italy: Slow Food and Cultural Sustainability

The Italian culinary identity is a result of regionalism, local ingredients and community involvement. The Slow Food movement was founded in the region of Piedmont in 1986, and it transformed the discussion around food by connecting pleasure with biodiversity, ecology and ethics. According to Petrini (2007), Slow Food made eating a political act. Through promoting minor local levels, home-cooked recipes, and relaxed meals, Italy employs gastronomy as the prototype of sustainable tourism based on authenticity and cultural continuity. Italian destinations such as Bologna to Naples are enhancing this ethos through food trails, farm-to-table events, as well as local festivals where local craftsmanship is celebrated.

Thailand: Street Food as Everyday Authenticity

Thailand presents a powerful example of the way informal food venues can be utilized to establish destination identity around the world. The night markets of Bangkok, the Chiang Mai street-food culture, have become iconic of the discursive authenticity of everyday life. These are the spaces that offer an immersive experience in which taste, smell, and touch are incorporated into the beats of local living. Food tourism in Thailand has always occupied a middle ground between local and global: domestic cuisine such as Pad Thai or Som Tam is both national and a transnational product at the same time. Thailand exemplifies the role of destinations in facilitating sustainable tourism appeal by turning the routine food practices into the performative spectacles that exploit the sensory immediacy and sociability effects.

Peru: Culinary Diplomacy and Nation Branding

The gastronomic renaissance of Peru shows that food can be used as a diplomatic and developmental asset. The amalgamation of both indigenous and colonial cuisines also has been essential to the country, and its culinary masterpieces, including ceviche, aji de gallina, and quinoa-based stews, are key elements to its global identity. Chefs like Gaston Acurio took a lead in the movement of culinary nationalism as a way of promoting Peruvian foods as an art and a way of expressing biodiversity.

This food diplomacy has promoted the international image of Peru, and gastronomy can now be a key area of sustainable development, community values, and national branding.

India: Pluralism and Culinary Diversity

The food culture in India forms a mix of traditions, climates, and religions. Culinary pluralism is the key component of destination identity in India, whether it is seafood cuisine in coastal areas or local vegetarian thalis and Mughlai cuisine. Food tourism through heritage food festivals, spice routes and regional cookery tourism encourages food as a symbol of inclusivity and cultural coexistence. Gastronomy blends more and more into the Incredible India campaign to convey sensory variety and cultural richness and to clarify the idea of India being a multidimensional gastronomic destination, with flavour, faith and folklore existing in a complex interrelationship.

Iran and Turkey: Borderless Culinary Hybridity

An example of how collective food customs run across political boundaries is the case of Iran and Turkey, helping shape transcultural identity and soft power. Both nations capitalize on culinary diplomacy, promoting their fusion of heritages of kebabs, stews and sweets to draw tourists who desire authenticity and historical connection. The fusion of Persian sophistication and the Ottoman sumptuousness displays hybrid authenticity (Clifford, 1997), in which cuisines would serve as the culture bridges between the East and the West. Food as heritage revival and cross-civilizational narration is manifested by the countries through festivals, museum gastronomy, and culinary routes.

7. CONCEPTUAL FRAMEWORK

As an analytical tool, the chapter uses the Destination Competitiveness and Sustainability Model by Ritchie and Crouch (2003) to provide contextualization of these patterns. According to this model, five dimensions define long-term success of a destination: core resources, supporting factors, destination management, policy and qualifying determinants. Food culture cuts across all of these dimensions.

- **Core Resources:** Local products, local recipes, and landscapes are some of the distinctive draws that characterize destination appeal.
- **Supporting Factors:** These resources are safeguarded and supported by infrastructure, human capital and governance.
- **Destination Management:** Experience The heritage is converted into experiential products through branding, storytelling and festival organization.
- **Policy and Planning:** Gastronomy is incorporated into the development agenda of cultural and tourism policy, thus guaranteeing community involvement and sustainability.
- **Qualifying Determinants:** The effectiveness of culinary heritage in enhancing destination competitiveness is dictated by socio-cultural context, authenticity and innovation.

The utilization of that framework shows that culinary heritage is both related to economic performance and cultural resilience. Gastronomy can be combined with policy, marketing and community development to make destinations not only competitive but also sustainable- food is not only a symbol of identity, but also a tool of growth in an inclusive strategy.

8. STRATEGIES FOR INTEGRATING CULINARY HERITAGE IN BRANDING

With the growth of a diverse and more experiential tourism, culinary heritage is increasingly becoming a new tool employed by destinations in their branding. Gastronomy provides not just an attraction but also an emotional richness and belonging, and longevity through its combination of ethics, sensory pleasure, and cultural memory. Based on the concept of co-creation of place brand described by Kavaratzis and Hatch (2013), culinary branding can be perceived as a collaborative effort in which the identity is created by chefs, producers, policymakers, and visitors engaging in a lived experience as opposed to imagery. Similarly, narrative branding transforms culture into an emotional tale, which connects authenticity and creativity (Fog et al., 2010). This way, a meal has become not only a representation of tradition, but a form of culture.

The image of a destination is also reinforced by strategic culinary branding because it links local food culture with international ideas of sustainability, innovation, and responsible tourism. Finally, culinary heritage is not merely a marketing instrument but a kind of cultural narration and diplomacy that establishes emotional links between culture, people and place.

Promotion Through Storytelling and Media

In the digital era, storytelling has become one of the most effective ways to communicate authenticity and sustain engagement with culinary destinations. It transforms gastronomy from a simple act of consumption into a shared cultural experience that blends personal memory with collective identity. As Prahalad and Ramaswamy (2004) suggest, effective destination storytelling embodies the principle of co-creation, where visitors and locals jointly influence brand meaning. Digital narratives about food thus evolve into participatory cultural performances rather than one-directional promotional content.

Tussyadiah and Fesenmaier (2009) further emphasize that interactive media allows travellers to become co-authors of destination stories. Through documentaries, chef interviews, recipe videos, and travel blogs, culinary storytelling on social platforms democratizes destination identity, enabling audiences to interpret authenticity in their own way. Destinations that successfully adopt this dialogical approach—highlighting heritage cuisines or contemporary food movements—transform casual consumption into emotionally engaging experiences.

Aligned with Pine and Gilmore's (1999) Experience Economy framework, digital storytelling fosters emotional connection, multisensory engagement, and cross-cultural understanding. By weaving visual and interactive narratives, destinations amplify the visibility of local cuisines while nurturing a sense of loyalty and belonging. Ultimately, culinary storytelling embeds gastronomy within the fabric of destination identity, creating an enduring emotional bond between people, culture, and place.

Collaboration with Chefs and Local Producers

The involvement of the chefs and local food producers is essential to base the culinary heritage branding on the grounds of authenticity and quality. Chefs can be described as cultural ambassadors who take and transform traditional cuisines by bridging the gap between the past, present, and future trends of past cuisines with current tastes. They take part in culinary festivals and cooking classes, as well as in media promotion and give authority and imagination to destination brands. By putting their culinary professionals, along with their stories, techniques, and values, the destinations create a vibrant gastronomic environment that appeals the tourists in search of authentic and high-quality foods that are appealing.

Local food producers, such as farmers, craftsmen, and fishermen, play a vital role in preserving food and communities as well as the cooking practices that comprise culinary heritage. The cooperation with the producers will also contribute to preserving the indigenous crops, artisanal food products, and sustainable farming practices. Through this collaboration, it is also possible to establish authentic food supply chains benefiting the local economies and offering unique food experiences that cannot be found back home. Protected designation of origin (PDO) or a geographical indication (GI) of a product empowers producers and offers marketing opportunities based on ensuring the authenticity of a product (Jurweniene & Sukiene, 2025; Banerjee, 2018).

Developing Culinary-Centric Marketing Campaigns

Culinary-centric marketing initiatives are campaigns that place food experiences at the heart of a destination's promotional strategy. They use engaging visuals, creative slogans, and well-structured events to attract both food enthusiasts and culturally curious travellers (Banerjee, 2018). Effective campaigns combine culinary heritage with broader destination narratives, showcasing signature dishes, food festivals, and themed food-and-wine trails that create memorable visitor experiences.

Successful marketing also involves segmenting audiences—such as food lovers, heritage tourists, and wellness travellers—and tailoring content to their interests.

Modern campaigns often blend traditional media with digital strategies, including social media promotion, influencer collaborations, and interactive websites featuring recipes, itineraries, and user-generated content (Gupta et al., 2024). Food festivals and culinary trails, in particular, serve as anchor experiences that generate buzz, attract media attention, and foster community participation. Integrating culinary branding across tourism offerings—such as accommodation, local transport, and cultural tours—ensures a seamless visitor journey and strengthens the overall brand identity (Watson, 2023).

9. CHALLENGES AND LIMITATIONS

Several limitations are recognized in this study that can impact on generalizability and depth of the findings. First, the areas covered are only six major destination cases (Italy, Thailand, Peru, India, Iran and Turkey), which, although varied, are not the whole world in terms of culinary heritage practices. Selection is based on data availability and visible nature in culinary tourism, but it may exclude less-researched areas that have potential for food tourism. Second, there are also data limitations due to the dominant use of secondary and recorded case studies instead of broad primary empirical research, and this can prevent an in-depth understanding of local stakeholder views. Lastly, the cultural and regulatory heterogeneity between and within these areas is a problem in its own right that demands some form of regional adaptation to dismiss standardized approaches to the world.

Balancing Authenticity vs. Commercialization

The aspect of finding a balance between authenticity in culinary practices and the needs of tourists to make food an attraction and a commercial endeavour is considered one of the most urgent. Travellers rely greatly on authenticity when looking forward to experiencing a place with its vibrancy, and the challenge that destinations encounter is to either discourage all forms of adaptation or make it unavoidable due to the competition instigated by other destinations. Industrialization can also lead to over-commercialisation, which can water down the culture and integrity of food traditions and render them into objects of mere commodification or simple performances without the social and historical background.

The result of this can be the simplification or (similar to the case of Westernization). The "Westernization" of some heritage recipes in an attempt to make them more palatable to foreign visitors, a process that can be perceived as hostile or even distorting to locals, or quite possibly an attempt to alter culinary identity as well. The challenge of tourism destinations is to balance these forces by making sure that stakeholders are involved, placing an emphasis on education and awareness in tourism services, and creating culinary experiences that preserve tradition but still transform (Juriene & Suckien, 2025).

Preserving Traditions Amid Evolving Tastes

The transmission of traditional culinary heritage continuously changes due to the effects of changing consumer tastes, globalization, and the development of technology. Although adaptation is an element of living culture, shifts in taste can be extremely fast due to health trends, convenience foods or fusion food, which can pose a threat to the continued existence of heritage ingredients or methods. Younger generations might prefer international fast foods or altered traditional foods, and hence, a drop in information transfer.

Tourism will not only complicate this dilemma, but it will also provide a remedy. On the one hand, adapting to the needs of tourists can provide a commercial incentive for changing the recipes towards a more common palate. On the other hand, culinary tourism offers economic motives to maintain and sustain heritage foods, feeding longstanding agricultural produce as well as artisanal crafts. Sustainable tourism projects and educational activities where communities are featured can contribute to striking a balance between preservation and innovation so that food heritage throws light on communities facing changing conditions (Juriene & Suckien, 2025).

Addressing Concerns About Cultural Appropriation

Cultural appropriation is a potentially serious ethical and reputation risk of culinary heritage branding in that unacknowledged or inappropriate use of elements of one culture by another.

Commodification of food whereby marginalized communities or indigenous communities have their food extracted without any benefit-sharing will have the effect of generating misrepresentation, exploitation, and the loss of cultural rights. This is particularly relevant in a globalized world where meals, rituals and customs are markedly shared, copied and commercialized without the original context of meaning and owners.

Tourism destinations and tourism enterprises should be mindful and ethically concerned about culinary heritage - respecting local communities in promoting it, proclaiming its heritage, and ensuring an equitable share of economic benefits with people who own the cultural heritage. Some of the strategies will involve intellectual property rights like geographical indications, co-branding with local stakeholders or genuine narratives that are mindful of cultural contexts. Combating cultural appropriation is the key to strengthening relations with the residents and tourists and preserving the authenticity and pride of culinary heritage (Juriene & Suckien, 2025).

10. FUTURE OUTLOOK OF CULINARY HERITAGE IN TOURISM

Culinary tourism is evolving rapidly with advances in technology, changing traveller preferences, and an increasing emphasis on experiential journeys. Digital innovations such as augmented and virtual reality (AR/VR) are now being used to enhance gastronomic experiences—allowing visitors to explore virtual recreations of historical food markets, participate in simulated cooking sessions, and discover the stories behind traditional dishes. Online platforms and mobile applications have also made culinary travel more personalized, enabling customized food tours, easy reservations, and direct connections with local chefs and producers.

Recent trends highlight travellers' growing desire for authenticity and locality, reflected in the popularity of farm-to-table dining, heritage ingredients, and artisanal food products. At the same time, sustainability and ethical consumption have become key considerations, with tourists preferring destinations that support organic farming, reduce waste, and uphold fair trade practices.

The influence of digital media and food influencers has further transformed how culinary experiences are shared and perceived, making gastronomy an engaging and globally accessible storytelling medium.

Future studies could build on these developments by examining how technology, sustainability, and policy intersect within culinary tourism. Mixed research approaches—such as ethnography, interviews, and restaurant-based studies—would help explore how destinations balance authenticity, innovation, and sustainability in shaping the future of food-centred travel.

10.1 Sustainable Approaches to Culinary Heritage Promotion

Sustainable methods of culinary heritage promotion emphasize the maintenance of local food traditions that can be characterized in terms of their authenticity, the cultural and ecological backgrounds of food traditions, and supporting the economic growth of local communities through tourism. These kinds of strategies focus on collaboration with local communities to retain a sense of ownership and responsibility over culinary practices, so that the benefits of tourism are fairly generated and in line with cultural principles. Some of the main practices here involve the encouragement to use native ingredients as well as green cooking methods, food waste reduction, and heritage farming systems that conserve biodiversity. Community participation is at the centre of activities, along with the local community integration of cultural storytelling and education aspects to tourism activities, further enhancing visitor appreciation and engagement with food heritage through respectful engagement. Certifications such as Geographic Indications (GI) are also essential in protecting product authenticity and quality, promoting commerce recognition, and benefiting local farm holders. Altogether, sustainable food heritage marketing attempts to implement a compromise between cultural maintenance and tourist development so that the local foodways can be kept lively and relevant to the overall community until future generations, as well as supporting the socio-economic welfare of their host communities (Sirivadhanawaravachara, 2025).

CONCLUSION

Culinary heritage as a multidimensional agent mediates the identity, memory, and sustainability and reflects the way it is perceived and experienced. The chapter has demonstrated that food would move beyond materiality to a cultural text that allows people to demonstrate belonging and difference. In all the examples of France, Italy, Thailand, Peru, India, Iran, and Turkey, gastronomy comes out as an assembly archive of heritage and a living activity, always negotiating between authenticity and adaptation. Using concepts of destination branding and sustainability, the narrative demonstrates that culinary heritage enhances place identity, based on experiential experience, cultural control, and sharing stories. Local partnerships, festivals, and stories about food with digital twists turn food into a medium of emotion that connects both communities and visitors to create a sense of emotional attachment and financial sustainability. However, the balance between commercialization and cultural integrity is critical in case culinary history will be able to maintain its symbolic richness. Based on all that, food turns into a strategic asset and a humanistic intermediary--connecting local knowledge and global consciousness, solidifying diversity, and promoting intercultural awareness. Culinary heritage thus lies not only in the concept of maintaining the past but also in forming a common future where tourism, culture, and sustainability are going to live together. It has been known as one of the strongest and longest-lasting languages that uses destinations to express themselves and what they want to be.

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CHAPTER 5
EXPLAINING FOOD CULTURE USING THE EMPIRICAL APPROACH OF SCHWARTZ'S THEORY OF VALUES

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GASTRONOMY HERITAGE, HEALTH ORIENTATIONS, AND EVOLVING FOOD CULTURES: PERSPECTIVES IN GASTRONOMY RESEARCH

INTRODUCTION

The chapter adopts an empirical perspective grounded in the psychometric tradition of cross-cultural psychology, particularly Schwartz's Theory of Values. Our approach treats values as measurable constructs that predict behaviors, drawing on quantitative data and validated models to explore the food culture phenomena. While acknowledging diverse epistemological lenses in interdisciplinary scholarship, our focus prioritizes evidence-based insights in gastronomy to bridge empirical findings with practical applications in gastronomy.

In his work, "Food is Culture", Montanari (2006) argues that food fundamentally expresses culture rather than just a natural product. He explains this in three key ways: First, we actively produce food through a cumulative knowledge of creation and even reinvention, not merely harvesting or hunting. Second, we prepare food using fire, tools, and technological advancements. Finally, eating food is a matter of choices, arranging nutrients in various shapes, textures, and combinations, and imbuing the what/when/why/how/where we eat with symbolic meanings. Therefore, food inevitably reflects traditions, history, and social structures. However, across cultures, food reflects values, as expressions of what people consider important in life, guiding how we think, feel, and behave. Despite the essential role of values in understanding how we eat, prepare, and share meals, their sociopsychological study remains highly underrepresented in gastronomy. This chapter aims to fill this gap by focusing on the influence of values on food culture (and to a lesser extent, on cultural food), their predictive power, and potential applications based on empirical findings. We do so by building on Shalom Schwartz's values theory, the most prominent framework in cross-cultural studies for studying values, tested in over 80 countries and successfully applied to explain phenomena in related areas, such as education, environmental issues, and consumer research.

Food inevitably reflects traditions, history, and social structures. They represent a key part of cultural identity, with traditional dishes (e.g., sushi in Japan, tacos in Mexico) symbolizing national or regional pride. Several festivals and cultural rituals often involve specific foods (e.g., mooncakes for Mid-Autumn Festival in China).

Religion laws influence diets (e.g., kosher food in Judaism, halal in Islam), fasting and feasting traditions (e.g., Ramadan iftar, Hindu Navratri), and the history and migration of a country (e.g., potatoes from the Americas to Europe, spices along the Silk Road). Food is more than sustenance; it's a language of culture, telling stories of heritage, belonging, and adaptation. Exploring a culture's cuisine offers insight into its people's way of life.

The values and beliefs that define a group are often shaped by the foods they eat, the settings in which they share meals, and the people they dine with. The types of dishes chosen can shift depending on the occasion, reflecting local traditions that give daily life deeper meaning. Food serves as a vital thread, weaving together cultural, emotional, and physical aspects of existence. This chapter explores the role of food as a foundation of societal traditions. However, before we dive in the intersection between food and culture, it is important to differentiate between the concepts of cultural food and food culture.

Cultural Food vs. Food Culture

While closely related, the terms *cultural food* and *food culture* highlight distinct concepts and aspects of how food interacts with identity and daily practices. Cultural food refers to specific dishes or ingredients tied to a particular culture, region, or ethnic group. These foods often carry historical, symbolic, or traditional weight, prepared using time-honored recipes and techniques (Sproesser et al., 2022). For instance, dishes like *borscht* from Ukraine/Russia or *chow mein* from China are cultural foods, embodying the culinary heritage and identity of their respective peoples.

On the other hand, food culture is a broader concept that encompasses the rituals, values, and social norms surrounding food within a community (Jayasinghe et al., 2025). It includes how food is cultivated, harvested, cooked, shared, and consumed, as well as the customs that shape these practices—such as mealtimes and calendar, dining etiquette, communal gatherings, or the symbolic meanings tied to certain foods. In essence, cultural food refers to the specific dishes that represent a group's heritage, while food culture describes the wider practices and beliefs that shape how food is integrated into a society's way of life.

Food as a Reflection of Identity

Across the world, cuisines are deeply entwined with diverse communities' traditions, histories, and beliefs of diverse communities. Signature dishes like kebabs from the Middle East, tacos from Mexico, or sushi from Japan are more than just meals – they are symbols of national or regional identity. These dishes often highlight unique ingredients and preparation methods that reflect the creativity and diversity of global culinary traditions. For example, the precise techniques used to craft sushi or the vibrant spices in Middle Eastern kebabs showcase the artistry and distinctiveness of their respective cultures. Additionally, developing specific tools, such as knives, chopsticks, and bowls of different shapes and sizes, is integral to these culinary practices.

Food, in its many forms, acts as a bridge between generations, a marker of identity, and a celebration of shared values. By exploring both cultural foods and the broader food culture, we gain insight into how deeply food is woven into the fabric of human life. Exploring the variety of food cultures, their unique characteristics, and how they compare and contrast, is a challenging task because eating habits differ so widely across the globe. While some dietary patterns tend to group together based on geographic closeness or regional similarities within and between countries (e.g., *Maghreb* and *Mashriq* in the Arab world), it is only part of the story. The mixing of cultural influences, now more common in modern societies, has brought a lot of diversity to food practices, even within one culture. Therefore, applying external criteria appears to be a valuable approach to better understand how, why, and in what ways these food cultures have similarities and differentiate with one another, as well as how they can be explained and predicted. This is the main objective of this chapter.

Before addressing the interaction between food and culture, we will start by savoring the concept and theory of human values and some empirical evidence of its relationship with food. Next, we will provide anecdotal information based on stories and history rather than on scientific or systematic study and will report some research into the interaction of food with different variables.

By way of conclusion, we will wrap up the chapter with some ideas (more willingly than a proper research agenda) on topics that can be investigated in future studies.

1. PLAT PRINCIPAL: DEVELOPMENT
1.1 Human Values as Ingredients of Cultural Dishes

The concept of values has long intrigued scholars, with various complementary definitions proposed in psychology, all supporting models to explain their role in behaviors, attitudes, and choices. A key feature of values is their ability to *transcend actions and situations*. This characteristic prompt inquiry into whether human values should be considered in the context of food – its preparation, choice, and consumption practices. Focusing on human values to predict social phenomena related to food is essential for studying the intersection of food culture and broader cultural frameworks, exploring similarities and differences across food cultures. This section provides a historical review of the concept of human values, defines values, discusses levels of analysis, reviews values theory, and examines evidence on measuring values to investigate food and societal differences.

The importance of values in psychology is a growing field, capturing the interest of thinkers like Aristotle, who defined values as *what everyone wants as opposed to what they should wish* (Aristotle, 2001). However, there was little consensus among ancient philosophers like Socrates, Plato, and the sophists, with the latter viewing values as subjective, encapsulated in Protagoras' notion that *"human being is the measure of all things, of the things as they are and of the things they are not"* (Waterfield, 2009, p. 213). In psychology, values gained prominence in the 1980s and 1990s as scholars developed validated measures to demonstrate their role as fundamental principles shaping perspectives and motivating actions (Ros, 2006). Schwartz's (1992; 2012) values theory posits that values are *desirable, trans-situational goals* that guide interpretations, decisions, and behaviors. At a group level, values manifest in families or national cultures (Erez & Gati, 2004), unifying people across religion, gender, or ethnicity in a globalized economy (Erez & Shokef, 2008). Understanding values is crucial for cross-cultural negotiations and economic self-sufficiency (Glazer et al., 2014).

Theorists like sociologists (Williams, 1968/1983), anthropologists (Kluckhohn, 1951), and business scholars (Hofstede, 1980) view values as criteria for evaluating actions, people, and events.

1.2 Origins of Cultural Values Research

Research on cultural values and their links to social structures has yielded significant findings. Hofstede's (1980) influential study proposed four cultural dimensions—*power distance*, *individualism-collectivism*, *masculinity-femininity*, and *uncertainty avoidance*—based on data from over 50 countries. The Chinese Culture Connection (1987) added *Confucian work dynamism*, later adapted by Hofstede (2001) as *long-term/short-term orientation* (Chinese Culture Connection, 1987; House et al., 2004). These studies highlight how values influence intercultural encounters through indigenous societal aspects affecting individuals' emotions, behaviors, and cognitions (Oyserman et al., 2002).

Cultural attitudes and values are instilled early by parents, schools, and communities (Schwartz, 2013). Members of a culture share *relatively similar* perceptions and values, shaped by similar social influences (Smith et al., 2011; 2012). However, Smith and Bond (1999) note that cultural research, like Hofstede's, often analyzes beliefs and behaviors at the national level, where *"the unit of analysis is the nation"* (Smith et al., 1998, p. 358). Such findings apply to cultures, not individuals, and within-culture variance should not be discussed at the country level. Indirect measures of cultural differences, inferred from collective behavior, are recommended but may lose individual-level insights (Hofstede & Bond, 1988; Smith et al., 1994; Torres & Pérez-Nebra, 2015). Hofstede (2001) and House et al. (2004) focused on managers and workers, not the general population, risking the error of assuming that relationships or characteristics observed at the group or cultural level (e.g., across countries or populations) apply directly to individuals within those groups. Drawing conclusions about individual behavior, attitudes, or traits based on aggregate data, ignoring the variability within groups, was described in the literature as an *ecological fallacy (i.e.*, Robinson, 1950).

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Let us examine the relevance of *ecological fallacy* for gastronomy research. For instance, someone can spend a vacation in India for a gastronomic journey. As expected, while tasting the Indian food for the very first time, he promptly understands why Indian cuisine is recognized worldwide for its rich use of spices and its characteristic heat. Upon returning to his homeland, an Indian friend invites the person for dinner. However, this Indian friend is deeply intolerant to the capsaicin, the compound responsible for the "hot" sensation in chili peppers (Caterina et al., 1997). He serves the person a dish that is still very rich in spices, such as cumin, turmeric, cardamom, and ginger, but does not include chili peppers. The person then exclaims: *This is not authentic Indian food!*

In the above example the person just made an *ecological fallacy*: he used **group-level** data (e.g., the 'national average' on a food trait such as spiciness) to make the inference that all Indian **individuals** cook the same way, with lots of chili peppers. The main problem is that individuals within a culture vary widely, and group averages may not reflect individual experiences or behaviors. Aggregating data may mask other important variables (e.g., socioeconomic status, education, food allergies) influencing individual outcomes of interest in gastronomy research. This may result in incorrect assumptions that cause stereotypes or poor policy decisions.

Our searches across academic databases (e.g., Google Scholar, ScienceDirect) found no study about the *ecological fallacy* in gastronomy research. Also, we could not find a single study on its opposite, the *reversed ecological fallacy* (sometimes called the *individualistic fallacy*), when conclusions about a group are drawn based on an individual-level experience. It constitutes a notable gap in a literature that often intersects with food science, sensory analysis, cultural studies, and sustainability but rarely employs methodological critiques from social sciences like the *ecological fallacy* (e.g., Kuppens & Pollet, 2014). Studies on cultural food stereotypes (e.g., assuming all Indian cuisine is uniformly spicy based on national averages) could benefit from the concept of ecological fallacy to avoid overgeneralizations. This gap highlights a rich opportunity for interdisciplinary work, such as applying cross-cultural psychology analyses to gastronomy research.

1.3 Level of Analysis

The level of analysis is critical to avoid errors like the *ecological* or *reverse ecological fallacy*. Klein and colleagues emphasize that studies must align the *level of theory, measurement, and statistical analysis* to avoid incongruence (Klein et al., 1994, p. 198). Studies typically operate at individual, group, or cultural/systemic levels (Sackett & Larson, 1990). Findings at one level cannot be generalized to another. For example, characterizing entire cultures (e.g., *collectivist values*) explains cultural attributes, not individual behaviors (Smith & Bond, 1999, p. 60). To study groups, researchers must assume homogeneity, which is challenging as values within a country are not uniform (Klein et al., 1994; Smith et al., 2011). Data collection must align with the level of theory, using global scores for homogeneous groups and ensuring statistical analyses match the theory and measurement levels (Klein et al., 1994, p. 212). Schwartz (1992) addressed this by developing a theory of human values for individual-level analysis, later extended to cultural values (Schwartz, 1999). His measure reliably assesses both individual and cultural values, making it ideal for studying food culture.

This chapter emphasizes an individual-level analysis to elucidate how values influence food utilization, preferences, and consumption, limiting generalizations to cultural differences. Attaining congruence between theory, measurement, and analysis is essential in minimizing errors within values research. Although achieving such congruence implies intricate hierarchical relationships among culture, individual values, food choices, and societal transformations, the intention of this chapter is not to establish a systematic framework that explicitly delineates how these elements are interconnected or structured. Such an endeavor would necessitate a model outlining the relationships or causal pathways open to testing and replication. It would likely require multilevel modeling (Hox et al., 2017) to examine the interactions between individual and cultural factors, a challenge beyond the scope of our current discussion. Instead, this chapter serves as a preliminary step in underscoring the importance of incorporating values and other cultural variables into research on food culture.

Understanding the ways in which food cultures share similarities and differ—offering explanations and predictions—suggests that values may drive specific food choices, which in turn could catalyze societal transformations. A pertinent example of this phenomenon is the global proliferation of specific food restaurants within culinary tourism or the ongoing diet-health debate (e.g., Rozin et al., 1999). We will further elaborate on the pivotal role of values in gastronomy research in the subsequent discussion concerning their definition and influence.

1.4 The Concept of Values: Background and Definition

Values are abstract, trans-situational principles representing end-states or attributes (Feather, 1995). They function as personal norms influenced by societal pressures, often connoting virtues or ethical stances (Schwartz, 1973; Lefkowitz, 2017). A value cannot strongly predict a specific actual behavior but motivates decisions and behaviors in many ways (Allport, 1955; Lewin, 1942). Rokeach (1973) noted that the value concept can *"unify the apparently diverse interests of all the sciences concerned with human behavior"* (p. 3), emphasizing that while beliefs and attitudes are numerous, only a few values are of supreme importance, varying across individuals (Feather, 1995).

Thomas and Znaniecki (1918, as cited in Ros, 2006) distinguished attitudes as intra-subjective and values as inter-subjective, shared by social groups. Parsons (1949) introduced motivated action, defining values as *"an element of a shared symbolic system that serves as a criterion for the selection among the alternatives of orientation that are intrinsically open in a situation"* (p. 443). Kluckhohn (1951) defined values as *"explicit or implicit conception, characteristic of an individual or characteristic of a group, of the desirable which influences the selection of accessible modes, means and ends of actions"* (p. 441), emphasizing desirable principles over objects. Inglehart (1977) focused on national cultural values, using Maslow's (1954) needs to propose *materialism* (basic needs) and *post-materialism* (higher needs), driven by scarcity and socialization hypotheses (Marks, 1997).

Schwartz's (1992) theory, a cornerstone in psychology, views values as motivational constructs addressing biological, social, and welfare needs (Schwartz & Bilsky, 1987).

His research evolved from Rokeach's (1973) Value Survey, testing 70 abstract values across seven countries, refining to 57 items after eliminating redundancies (Helkama et al.,1992). The Schwartz Values Survey (SVS) was developed with international collaboration, covering 10 value orientations and later refined to 19 in the Refined Values Theory (Cieciuch et al., 2014; McQuilkin et al., 2016; Schwartz et al., 2012). These form four higher-order values: *Conservation vs. Openness to Change* and *Self-Enhancement vs. Self-Transcendence*.

The Values Theory

Schwartz's (1992) theory designed cross-culturally, transforms the study of values into a robust framework for predicting behaviors like consumer choices (Voorn et al., 2021), political behavior (Tatarko, 2017), and well-being (Sagiv et al., 2015). Values are defined by five characteristics: (1) beliefs tied to emotions, (2) motivational constructs for desirable goals, (3) transcending specific situations, (4) guiding evaluations, and (5) ordered by importance (Schwartz & Bilsky, 1987). Ten value types - *security, tradition, conformity, benevolence, universalism, self-direction, stimulation, hedonism, achievement, power* - address universal human needs (Schwartz, 1992).

Schwartz's (1992) study across 20 nations confirmed the universality of these values, analyzing 210 samples from 67 countries (64,271 participants) to distinguish cultural and universal aspects (Schwartz, 2006). The theory organizes values in a circular structure, where adjacent values (e.g., *security* and *tradition*) are compatible, and opposing values (e.g., *self-direction* and *security*) conflict. Four higher-order values form two dimensions: *openness to change vs. conservation* and *self-promotion vs. self-transcendence* (Schwartz, 1992).

The 2012 refinement introduced a total of 19 more narrowly defined value types, including *face* and *humility*, enhancing predictive power while retaining the original structure (Schwartz et al., 2012). The refined theory maintains the circular logic (Figure 1), with values grouped by personal vs. social focus and growth vs. self-protection.
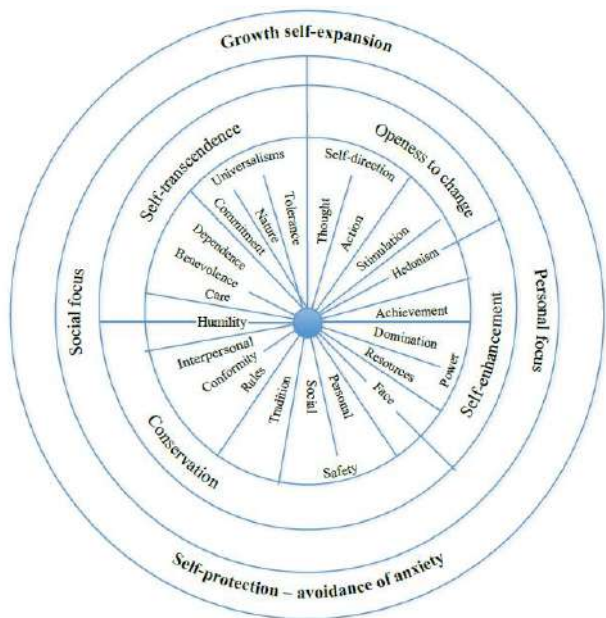
Figure 1. Motivational Circle According to the Refined Basic Values Theory
(adapted from Torres et al., 2016)

The values expressed at the top of Figure 1 represent growth and self-expression, being more likely to motivate people when they are free from anxiety, whereas those expressed at the bottom of the figure are aimed at protecting the ego against anxiety and threat. A breakdown of the 19 values of the refined theory is presented in Table 1.

Table 1: Refined Values Theory in Comparison

Originating value (1987/1990 Theory)	Value in the Refined Theory	Definition components
Self-direction	Self-direction of Thought	Freedom to cultivate your own ideas and skills.
	Self-direction of Action	Freedom to determine your own actions.
Stimulation	Stimulation	Excitement, novelty, and change.
Hedonism	Hedonism	Pleasure and sensual gratification for yourself.

Achievement	Achievement	Success according to social standards.
Power	Power Dominance	Power by exercising control over other people.
	Power Resources	Power for control over social materials and resources.
------- a	Face	Maintaining public image and avoiding humiliation.
Security	Security Personal	Security in your immediate environment.
	Security Societal	Security and stability of wider society.
Tradition	Tradition	Maintenance and preservation of culture, family or religion.
Conformity	Conformity Rules	Comply with formal rules, laws, and obligations.
	Conformity Interpersonal	Avoid upsetting or hurting other people.
------- a	Humility	Recognition of one's own insignificance in a broad context.
Benevolence	Benevolence Dependability	Be a trusted and being a trusted member of the in-group.
	Benevolence Caring	Devotion to the well-being of members of the in-group.
Universalism	Universalism Concern	Commitment to equality, justice, and protection of all people.
	Universalism Nature	Preservation of the natural environment.
	Universalism Tolerance	Acceptance and understanding of those who are different from themselves.

Note. [a] No match in the 1992 Theory of Values. *Adapted from Schwartz, 2012.*

The refined theory has been validated globally, including in South Korea (Choi & Lee, 2014), Russia (Schwartz & Butenko, 2014), and Brazil (Torres et al., 2016). Yet, this does not mean that the refined theory has been used in the cultural level of analysis.

Schwartz's (2006) cultural values theory addresses societal issues: (1) group-individual relationships, (2) behavior preserving social structures, and (3) humanity's relationship with the environment. It proposes three bipolar dimensions: *autonomy vs. conservatism*, *hierarchy vs. egalitarianism*, and *mastery vs. harmony*.

1.5 Foundational Measurements

The Allport-Vernon Study of Values (SOV; Allport, Vernon, & Lindzey, 1951) was the first instrument to measure values, emphasizing their role in guiding aspirations. Rokeach's (1967, 1973) Values Survey (RVS) classified values into *terminal* and *instrumental*, widely used in marketing (Andrews et al., 2020).

Schwartz's Values Survey: Schwartz's (1992) SVS expanded Rokeach's work, using a 9-point scale to assess values as *"a principle that guides my life"* (Schwartz, 2005). It requires respondents to rate values' importance, creating a personal value hierarchy.

Portrait Values Questionnaire: The SVS's abstraction limited its use for less literate populations, leading to the Portrait Values Questionnaire (PVQ; Schwartz et al., 2001), with 40 sentences rated on a 6-point scale. A 21-item version was included in the European Social Survey (Bilsky et al., 2011).

Portrait Values Questionnaire – Refined: The refined PVQ-R (Schwartz et al., 2012) uses 57 items to assess 19 value types, validated in countries like Russia (Schwartz & Butenko, 2014) and Brazil (Torres et al., 2016). It offers greater predictive power while maintaining the motivational continuum.

What Can We Take from All of This?

Hofstede (1980, 2001) and Schwartz (1992; Schwartz et al., 2012) have rarely been applied to food culture studies. Few examples have been found in the searched literature that joined the concept of values with the study of food. Nofal (2025) found that values, mediated by *consumer ethnocentrism* and *cosmopolitanism*, influence food choices among Syrian immigrants and Brazilians, with Syrians prioritizing *self-transcendence* and Brazilians *self-enhancement*.

The relationship between values and culture has also been found by Allen and Torres (2006), who investigated the symbolic meaning of red meat in Australia and Brazil by exploring the values endorsed by red meat buyers and how these values influence food choice. They observed that vertical values predicted red meat consumption beyond that accounted by the food attribute importance, implying that social hierarchy is one cultural association of red meat in Brazil. Their finding calls to mind the intriguing proposal of some sociologists and anthropologists that red meat symbolizes hierarchy in cultures that have hierarchical social relations. Monteiro (2009) found children's food choices shaped by TV ads and values. Measuring individual values as *trans-situational goals* can enhance understanding of food culture phenomena.

2. FOOD AND CULTURE: HOW DO THEY ACCOMPANY EACH OTHER?

Although Brazilians like to believe that *feijoada* – a typical stew made with black beans, pork, and various smoked sausages – was created by the African slaves during the country's slavery period, history suggests otherwise. Because the main ingredients in *feijoada* are salt-cured pork cuts such as feet and tail, the popular legend holds that African slaves would receive these parts of the animal, which were not eaten by the landowners, salt-cure it to make them last longer, and later cook it with black beans – a widely grown legume in Brazil to this day. However, anthropological evidence (Silva, 2005) indicates that this was hardly the real origin of the dish. First, pork cuts such as tail and feet were not considered inferior; rather, they were regarded as delicacies, prized as uncommon items on the masters' table. Second, the slaves' diet was restricted mainly to cassava flour, corn, and a few fruits, such as coconut and banana (Freyre, 1933/2006). Finally, it seems unlikely that the masters consumed such vast quantities of pork loin that the leftovers – like feet and tail – would have been sufficient to feed large groups of slaves. It is more plausible (Carvalho, 2006; Silva, 2005) that *feijoada* emerged in colonial Brazil as an adaptation of a Portuguese dish, *sopa de pedra* ("stone soup"), with the addition of local ingredients such as black beans and other accompaniments.

This traditional Portuguese dish, originating in the Ribatejo region of Portugal, consists of a soup made with red beans and chopped pork meat not commonly used (such as feet and tail).

As a typical winter dish, a scalding-hot stone is still placed inside the soup when serving to keep it warm, hence the name of the dish.

Despite having an origin far removed from the popular imagination, *feijoada* has been incorporated into Brazilian identity as a symbol of cultural mixing and the blending of different traditions (Silva, 2005). By contrast, *sopa de pedra* is described as a symbol of Portuguese collective effort and collaboration – transforming something simple into something rich and flavorful (Carvalho, 2006). This meaning differs sharply from that of *feijoada* which, like any other dish, can be interpreted as an objective cultural expression (Kluckhohn, 1951); in this particular case, of social hierarchy, one of the core values of Brazilian culture. One of Brazil's cultural traits is its high degree of social distance, a cornerstone of Hofstede's *power distance* dimension (Hofstede, 2001). Yet, like other culturally-rooted social phenomena, the two dishes, while marking cultural differences, also symbolize similarities between the cultures. For Bellino (2004), *sopa de pedra* serves as a metaphor for the ability to transform an apparently difficult situation into something positive, which parallels the concept of the *jeitinho brasileiro*. Literally translated as "little way," the Brazilian *jeitinho* has come to mean a kind of collective fatalism that fosters a constant process of improvisation to achieve immediate goals (Torres et al., 2020) and to solve problems and difficult situations through creative workarounds (Duarte, 2006).

The case of *feijoada* and its origin in another typical food like the *sopa da pedra* is not unique to these dishes, nor to other countries that were European colonies. The inclination to safeguard cultural heritage through food-related practices becomes particularly pronounced when a cultural group is not predominant within the wider society (Beoku-Betts, 1995). However, misconceptions regarding the origin or eating habits of a particular group can also occur regarding the dishes of countries that previously were not (or still aren´t) economic and military powers, i.e., when dominated cultures influenced dominant cultures.

This counterintuitive route of cultural influence was named the "Eating the Other" metaphor (Sheridan, 2000) and refers to the ways dominant cultures consume and incorporate elements of other, often marginalized, cultures, through food sometimes without fully understanding or respecting the original cultural context of the dish.

That is, it occurs when the colony also played a role in the configuration of food of the 'metropole', thus demonstrating a reciprocal influence. Naming specific cuisines as 'ethnic food' is a good example of how cultural (or racial) differences might function as a source of pleasure for a dominant culture.

The concept of reciprocal influence in Berry's (2003) acculturation model suggests that the acculturation process is dynamic in such a way that, given certain contextual norms and specific historical moments, it is not just about the non-hegemonic culture adapting to the dominant culture, but also about both groups influencing each other. If we translate these findings in individual-level terms, which is part and parcel of the cultural level (Berry, 1989), we can say that while the host culture influences how migrants encounter the new culture, migrants also bring their own cultural values, beliefs, and practices that will impact the host culture. This dynamic and reciprocal process where both cultures are influenced and transformed through their interactions also applies to food and the interpretation given to each dish, which goes far beyond merely meeting nutritional needs. In multicultural contexts, cooking and eating practices serve not only as symbolic expressions but also as tangible means by which migrants maintain and transmit their ethnic identities (D'Sylva & Beagan, 2011).

The case of the influence of the Portuguese stone soup on the perception of Brazilian *feijoada* finds parallels in many other regions. For example, tea, now considered an example of British elegance and, to some extent, a cultural heritage of that country, was popularized in the British Isles by a Portuguese queen, Catherine of Braganza (1638–1705). Although it is widely known that Westerners owe thanks to China for the original tea cultivation (Lu, 2016), it was during an official visit that Catherine of Braganza first introduced the drink to the English aristocracy, which later popularized it among British citizens.

In the 17th century, tea was already gaining popularity in Portugal due to the influence of the Dutch East India Company (Boxer, 1965) in Portugal during the period of the Iberian Union, starting in 1605. Imported from the East, its high price and exoticism quickly made its consumption mandatory in aristocratic circles and in the Iberian royal court (Ferguson, 2004).

More than half a century after its popularization in Portugal, in 1662 Princess Catherine of Braganza was brought to England to marry the future King Charles II. Historian Agnes Strickland (2015) explains that she was received by her future mother-in-law, Queen Henrietta Maria of France, known as Queen Mary of England and Scotland. When asked by Queen Mary what she would like to drink to recover from the long journey, Princess Catherine requested tea, which caused great embarrassment to the English court due to their unfamiliarity with the beverage. Along with a chest of loose-leaf tea inscribed with the tag *Transporte de Ervas Aromáticas* (Portuguese for "Transport of Aromatic Herbs" – later abbreviated as T.E.A.), Catherine of Braganza also introduced the use of cutlery and tobacco to the English court (Burstein, 1998).

There are numerous other anecdotes pointing to common misconceptions associated with dishes attributed to a specific culture. Other examples include: the *Curry*, which originates from the word *kari* of southern India, meaning "broth" or "sauce", brought to the West by the Portuguese during the colonization of Goa, who then the Indian word to *caril* and later on to the curry we know today, referring to dishes seasoned with this spice blend; *Tempura* (from the Latin word *tempora*, meaning "the time period", used by Spanish and Portuguese missionaries to refer to the Lenten period), also originated in Portugal, introduced to Japan by Portuguese missionaries in the 16th century during the period before Easter when Catholic religious prohibitions banned meat consumption (Ishige, 2014) and making the practice of frying fish and vegetables in a light batter an alternative; this culinary technique, known as *tempora* (in Latin, fasting period), became extremely popular in Japan to the point that it is now attributed to that culture;

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Paella, an iconic Spanish dish has its origins in Moorish and Arab cuisine, with the use of rice and spices (Duhart, 2009); *Sauerkraut*, a typical German dish, was created in China during the construction of the Great Wall and brought to Europe by the Huns (Mauch & Vasconcellos, 1994); although an icon of French pastry, the *Croissant* which original name is *Kipferl* has Turkish roots as a crescent-shaped bread that was created in commemoration of the Ottoman Sultan Suleiman's invasion of Austria (Chevallier, 2009); among several other examples.

What the aforementioned anecdotes have in common is that they lack of an explanatory variable for the food conception and its consumption practices, something that can be contributed to by the social and cross-cultural psychology field. Cross-cultural research acknowledges that food practices, preferences, and perceptions are shaped by cultural background, and that food can play a powerful role in social interactions and the expression of cultural identity. Interestingly, however, very few studies have been found in the field which involve directly the relationship between food and cultural characteristics, such as human values or cultural dimensions. Indeed, scientific venues appear to give great importance to the interaction between food and culture, especially when examining food habits, food choice and well-being, but without providing explanatory mechanisms for this relationship.

Examining the studies we observe that food culture serves as a fundamental medium for shaping individual and collective identities, intertwining biological, cultural, psychological, and social dimensions. In a seminal study, Fischler (1988) paved the path for the concept of food culture by introducing the notion of food as a bridge between the biological and cultural, as well as the individual and collective. He emphasized the omnivorous nature of humans, which creates an ambivalence encapsulated in the phrase "you are what you eat," reflecting both organic and symbolic dimensions of identity formation. This ambivalence arises from the dual role of food as a nutritional necessity and a cultural symbol, influencing beliefs and representations. Similarly, Ruiz and Gerhardt (2019) explored how daily food practices in a rural community reflect a marked rural identity, shaped through reactions to social stigmata.

Under the lens of gift theory, they highlighted how eating practices reveal sociocultural belonging, reinforcing group identity through shared meals. Reddy and van Dam (2020) extend this discussion to multicultural societies like Singapore, where food practices are central to identity preservation, particularly for individuals who view traditional foods as essential for health and cultural continuity. Unlike migrant communities in places like Canada, where fear of cultural loss drives food practices, Singaporeans integrate cross-cultural food practices for health, convenience, and variety, blurring culinary boundaries.

These studies collectively underscore that food is not merely sustenance but a powerful vehicle for constructing and expressing identity, shaped by individual and collective experiences.

Food is deeply embedded in cultural practices, serving as a medium for socialization, ritual, and tradition. Norenzayan et al. (2016) highlight food's role in fostering social bonds, celebrating rituals, and connecting people across cultures. By exploring diverse cuisines, individuals gain insights into societal histories, traditions, and structures, such as gender roles and power dynamics revealed through food preparation and consumption. Likewise, Lu (2021) examines food culture as a complex cultural phenomenon, reflecting national characteristics shaped by regional, climatic, and social factors. Their study found that 76% of interviewees believe a nation's dietary customs represent its culture, underscoring the interplay between cultural psychology and dietary practices. Building upon that study, Arcadu et al. (2024) focused on food's role in intercultural exchanges, specifically between Italian hosts and Ukrainian refugees. Food practices served as a tangible link to cultural roots, facilitating symbolic exchanges that transmit traditions and values, fostering intercultural dialogue. Cheung et al. (2021) added to that discussion suggesting that beliefs, social rules, and food taboos shape emotional responses to food, influencing consumption behaviors based on culturally significant values. Together, these studies illustrate how food practices embody cultural heritage, mediate social interactions, and reflect the values and customs of diverse societies.

In multicultural and globalized settings, food practices navigate cultural differences, market dynamics, and national identities. Wang (2023) analyzed localization strategies of McDonald's and KFC in China, an emerging market with significant cultural differences.

KFC's success in adapting to Chinese consumer preferences through supply chains, site selection, and market positioning highlights the importance of cultural sensitivity in global markets, while McDonald's excels in standardization. This contrast reveals the tension between global standardization and local adaptation in food industries in a marked-oriented perspective, a slightly different focus of Reddy and van Dam's study cited above, which emphasizes social and cultural outcomes, such as identity preservation and the blurring of culinary boundaries, and food's role in reflecting multiculturalism rather than economic performance.

In contrast, Ranta & Ichijo (2022) examined food's political dimensions, particularly its role in nationalism. They argue that food serves as a lens for understanding politics, from "'bottom-up" banal nationalism (everyday food practices) to "top-down" gastrodiplomacy, where national cuisines are leveraged internationally. Lindsey (2024) further investigates cross-cultural differences in food preferences, finding that cultural heritage, globalization, and socio-economic factors shape dietary behaviors. Their study advocated for culturally sensitive interventions to address health disparities, drawing on theories like cultural anthropology and social identity.

Multiple studies reinforce the pivotal role of food in preserving cultural roots during intercultural encounters (Schnettler et al., 2013). Understanding food practices, shaped by life experiences and contextual factors, is critical due to their global implications for individuals' well-being and adaptation within an increasingly globalized world (Terragni et al., 2014). Food practices function as a medium for symbolic exchange, transmitting traditions, history, and cultural values, and serve as a foundation for fostering intercultural dialogue by leveraging their communicative and cultural attributes (Brown & Paszkiewicz, 2017). When intercultural contact is not presential (in-person), a study of food systems and their educational implications reflects broader societal shifts toward sustainability and equity. Levkoe et al. (2020) explored the rise of online food studies courses, accelerated by the COVID-19 pandemic. They contrast the "food from nowhere" regime of corporate food systems with the "food from somewhere" regime of equitable, sustainable systems.

Online education offers benefits like accessibility but poses challenges in student engagement and personal connections, prompting reflection on teaching localized food concepts in a de-spatialized virtual environment.

It becomes clear by revisiting the studies aforementioned that food serves as a multifaceted lens for understanding identity, culture, and societal dynamics across various contexts. It plays a critical role in identity formation, intertwining biological, cultural, psychological, and social dimensions to shape individual and collective senses of self. Through daily practices and symbolic meanings, food reinforces belonging and reflects shared values, whether in rural communities or multicultural societies.

In cultural practices, food acts as a medium for socialization, rituals, and intercultural dialogue, embodying national and cultural values while facilitating social bonds and emotional connections. In multicultural and globalized settings, food navigates the complexities of cultural adaptation, nationalism, and globalization, balancing local traditions with global influences and addressing challenges like health disparities through culturally sensitive interventions.

The study of food systems and education highlights the tension between corporate-driven "food from nowhere" and sustainable "food from somewhere" regimes, emphasizing the need for innovative educational approaches and policies to promote equitable, culturally informed food practices. Collectively, these insights underscore food's dynamic role in shaping human experiences, from personal identity to global systems, necessitating nuanced strategies for policy, education, and cultural preservation. Yet, as previously mentioned, there still appears to be a gap in understanding food culture's nuances, predicting behaviors and informing culturally sensitive decisions. With this chapter, we hope to have contributed to addressing this gap.

2.1 Dessert: *conclusion*

The anecdotes previously presented (about the tea, curry etc.), albeit very interesting and fun to know, give us no real information about the relationship of those dishes with their respective cultures, and how the latter have influenced the creation and/or consumption of the former. Food culture serves as a profound lens for understanding human values and cultural identity, weaving

together biological, psychological, and social dimensions. Schwartz's (1992; 2012) values theory, with its trans-situational goals like self-transcendence and self-enhancement, offers a robust framework for analyzing how values shape food culture across diverse contexts. Some studies reveal how values influence food preferences, its symbolism in reflecting cultural characteristics, among other aspects. However, if food transcends mere sustenance acting as a medium for intercultural dialogue, as seen in cases like *feijoada* and *sopa de pedra*, they embody cultural blending and adaptation (Silva, 2005; Carvalho, 2006).

Despite the extensive literature on food and culture, systematic connections with value theory remain scarce. This chapter advances the field by explicitly integrating Schwartz's theory of values with gastronomy research. We draw from earlier seminal (Kluckhohn & Strodtbeck, 1961) and contemporary (Minkov & Kaasa, 2024; Stanciu et al., 2020) scholarly discussions on the values theory and the origins of values research in psychology. Also, framing food culture through the lens of trans-situational values, we move beyond descriptive accounts of gastronomy and provide a predictive conceptual tool that explains how cultural practices emerge, adapt, and persist. And building on our earlier historical review of values research - from ancient philosophers like Aristotle, to modern frameworks such as Hofstede's cultural dimensions - this integration highlights the enduring relevance of values in guiding human behavior, including food-related decisions. Our theoretical framing not only enriches food studies but also contributes to interdisciplinary dialogues, offering psychology-based mechanisms to complement anthropological and sociological perspectives. It aligns with the methodological rigor discussed in the "Level of Analysis" section, where Schwartz's validated measures ensure that individual and cultural value assessments avoid ecological fallacies, enhancing the empirical robustness of our proposition. This cross-referencing enriches the chapter's analytical depth, resonating with readers from psychology, anthropology, and food sciences by bridging data and conceptual clarity. In doing so, this chapter lays the groundwork for future research that tests value-based explanations of food practices across cultures.

It also extends the theoretical boundaries of both value theory and food culture studies, maintaining empirical thrust in the meantime.

From Catherine of Braganza's introduction of tea to the British court, passing by the global spread of dishes like tempura and curry, to scientific studies involving our variable of interest, food illustrates reciprocal cultural influences, challenging simplistic origin narratives (Berry, 2003). In multicultural settings, food practices preserve identity while navigating globalization's tensions, as evidenced by KFC's localization in China (Wang, 2023) and Singapore's culinary integration (Reddy & van Dam, 2020). These dynamics underscore food's role in fostering social bonds and shaping societal structures. By applying Schwartz's framework of human values, researchers can address gaps in understanding food culture's nuances, predicting behaviors and informing culturally sensitive policies for health, sustainability, intercultural exchange, and so much more in an increasingly globalized world.

Future research should also investigate longitudinal impacts of migration on value-driven food adaptations in diverse populations; explore digital platforms' role in evolving food cultures amid pandemics; empirically test refined values theory in underrepresented regions for predicting sustainable eating behaviors; and examine intersections with climate change, focusing on how conservation values influence eco-friendly culinary innovations. To make these directions more actionable, we propose the following research questions and methodological approaches: 1) How do migrants' personal values evolve in relation to food practices over time? A longitudinal mixed-methods design could track value shifts and dietary adaptations; 2) What role do digital food communities play in shaping value-driven food choices? A cross-sectional survey using Schwartz's PVQ-R combined with content analysis of social media posts is suggested; 3) Sustainable Diets: Which human values predict the adoption of eco-friendly diets? Experimental designs could test interventions that prime specific values and measure behavioral outcomes; 4) Climate Change: How do conservation-related values influence support for climate-resilient food policies? Multilevel models (Hox et al., 2017) could capture the dynamic interaction between individual and collective values, extending the theoretical reach of both food culture and value theory.

2.2 Coffee and mignardises: *final remarks*

As final remarks, we highlight that several practical implications can be derived from our analysis. For example, values-based segmentation can inform culturally sensitive nutrition campaigns and sustainability policies. In the realm of gastronomy education, integrating values theory into culinary training can help chefs and educators understand how cultural values shape food preferences and rituals. In terms of menu engineering and design, restaurants can tailor menus to reflect dominant values in their target demographic, enhancing customer engagement and satisfaction.

This chapter explored food culture as a dynamic interplay of human values, traditions, and cross-cultural exchanges, revealing how food transcends mere sustenance to embody identity and societal bonds. By applying Schwartz's framework of human values – particularly concepts like self-transcendence and power distance – it addresses a notable gap in gastronomy research, demonstrating the underutilization of values theory in explaining food-related behaviors. Through anecdotal and empirical evidence, the chapter challenges common misconceptions and highlights the reciprocal influences that emerge in intercultural food encounters. It also introduces the concept of ecological fallacy as a methodological risk in cross-cultural food studies, a concern previously overlooked in this domain. By proposing Schwartz's refined values theory as a predictive framework, our analysis lays the groundwork for future empirical studies that integrate psychological constructs into the study of food culture, identity formation, and intercultural dynamics.

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CHAPTER 6
CRAFT GASTRONOMY AND THE TOURISM IMAGINARY OF TRANSCARPATHIA

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GASTRONOMY HERITAGE, HEALTH ORIENTATIONS, AND EVOLVING FOOD CULTURES: PERSPECTIVES IN GASTRONOMY RESEARCH

INTRODUCTION

In recent years, the study of craft gastronomy has gained prominence as part of a wider shift in cultural economy research that explores how food production and consumption express identity, generate symbolic capital, and contribute to regional development. In Europe, food heritage has become not only an element of cultural continuity but also an instrument of place-making, tourism, and community resilience (Bessière, 2013; Everett & Aitchison, 2008). Within this framework, Transcarpathia—a borderland region of Western Ukraine—offers a unique empirical landscape where ethnic diversity, mountain ecology, and artisanal skills converge into a dynamic gastronomic system. Local foods, crafts, and festivals are not isolated phenomena but interdependent components of what can be conceptualized as a craft-based cultural economy.

In contemporary cultural economy research, craft production has re-emerged as a locus where tradition, creativity, and local identity converge within processes of globalization and market transformation. Scholars increasingly interpret crafts not merely as remnants of pre-industrial production but as dynamic socio-economic systems embedded in the logic of the *experience economy* (Pine & Gilmore, 1999), *cultural sustainability* (Throsby, 2010), and *place-based development* (Ray, 2001). Within this framework, artisanal food production—particularly cheese-making, winemaking, brewing, and confectionery—has become central to the study of *gastronomic identity* and *territorial branding*, forming part of a wider discourse on the *heritagization of food* (Bessière, 2013) and *glocalized consumption* (Robertson, 1995).

Transcarpathia (Zakarpattia), located in the Carpathian region of Ukraine, presents a unique empirical context for examining these interrelations. Its multiethnic composition, borderland position, and strong craft traditions have created a distinctive gastronomic landscape that integrates Hungarian, Ukrainian, Romanian, Slovak, and Hutsul cultural influences. While previous regional studies (e.g., Shandor & Klyap, 2013; Hodia, 2018; Koval, 2019) have documented the diversity of local cuisine and the revival of traditional foodways, they have tended to adopt a descriptive ethnographic lens, often isolated from broader theoretical debates on local production systems and cultural economies.

GASTRONOMY HERITAGE, HEALTH ORIENTATIONS, AND EVOLVING FOOD CULTURES: PERSPECTIVES IN GASTRONOMY RESEARCH

Despite a growing corpus of literature on gastronomic tourism in Central and Eastern Europe, the Transcarpathian case remains underexplored within international scholarship on craft and gastronomy as drivers of regional development. Existing studies often provide descriptive accounts of regional cuisines or events without situating them in the broader discourse on gastronomic identity, gastronomic image, and gastronomic tourism as interconnected analytical dimensions.

This study positions Transcarpathian craft production within the theoretical discourse of the *gastronomic cultural economy* (Everett & Aitchison, 2008), which views food-related practices as vehicles for identity construction, value creation, and tourism-led regeneration. Conceptually, it draws on three interrelated perspectives:

1. *Cultural economy of place,* emphasizing how crafts materialize regional distinctiveness and contribute to symbolic capital formation (Harvey, 2001);
2. *Sustainable rural development,* framing small-scale artisanal production as an anchor of short food supply chains and community resilience (Marsden et al., 2000); and
3. *Gastronomic tourism,* linking experiential consumption of local foods to destination image and heritage valorization (Hall & Sharples, 2003).

Epistemologically, the study adopts an *interpretive-constructivist* stance, recognizing that meanings attached to craft products are socially constructed through narratives of authenticity, locality, and innovation. Rather than treating craft production as a static economic category, it is examined as a cultural process shaped by evolving practices, actor networks, and policy frameworks. The analysis integrates qualitative regional data with conceptual insights from cultural geography, tourism studies, and food sociology to elucidate how Transcarpathian artisans navigate between preservation and modernization.

This research addresses several gaps. First, there is limited integration of Ukrainian regional studies into global debates on craft and food heritage. Second, the interplay between *traditional know-how* and *innovation* in Transcarpathian production systems remains empirically underexamined, particularly regarding post-crisis recovery and cross-border cooperation.

Third, while craft is widely recognized as a tourism asset, few studies assess its broader socio-economic contribution to sustainable regional development.

Accordingly, this paper seeks to (1) conceptualize Transcarpathian craft production within the framework of the cultural economy of gastronomy; (2) analyze its structural characteristics, innovative dynamics, and linkages with tourism; and (3) outline development prospects and policy implications in the context of European integration and post-war recovery. In doing so, the study contributes to a more nuanced understanding of how peripheral regions transform traditional food cultures into engines of cultural resilience and territorial competitiveness.

The research adopts an interpretive–constructivist approach, viewing gastronomy as a process through which communities produce and negotiate meanings of belonging, quality, and authenticity. Rather than measuring economic output quantitatively, the study focuses on how cultural values are constructed and mobilized through festivals, craft industries, and narrative branding. Methodologically, the paper is based on case study analysis supported by empirical observations, regional documentation, and secondary sources. This design allows for tracing the interaction between tradition and innovation across different subsectors of Transcarpathian gastronomy.

The theoretical framework builds upon the triadic model of identity →

image → tourism. Gastronomic identity refers to the embodied practices and local knowledge through which food and craft production acquire meaning. Gastronomic image encompasses the narratives, symbols, and quality signals that translate local identity into a form recognizable within wider cultural and market contexts. Gastronomic tourism represents the sphere where these identities and images become experiences, creating economic value and reinforcing cultural recognition. This model provides a consistent lens through which both festivals and craft production can be examined as parallel expressions of Transcarpathia's evolving food culture.

The article is structured in two main parts. Part 1 gives an overview of craft gastronomy as a productive system encompassing cheese, beer, wine, meat, sweets, and honey.

It interprets these sectors as nodes of the creative economy that merge traditional know-how with innovation and contribute to regional sustainability. Part 2 examines gastronomic festivals as performative spaces where local identity is ritualized, branded, and converted into a tourism experience. Through four extended case studies, it demonstrates how different event types embody varying degrees of professionalization, regulation, and grassroots authenticity.

The paper concludes with a cross-case synthesis, identifying common mechanisms—ritualization, storytelling, short food supply chains (SFSCs), and clustering—that underpin Transcarpathia's gastronomic resilience. By bridging cultural and economic analysis, the study contributes to broader debates on how craft-based food systems can serve as models for sustainable development in post-crisis and borderland contexts.

1. CRAFT GASTRONOMY: CONCEPTUAL OVERVIEW

Transcarpathia, a region rich in cultural and culinary traditions, continues to practice several traditional craft gastronomy production methods that hold significant potential for developing regional tourism. These methods not only preserve the unique culinary heritage of the area but also offer opportunities to attract tourists interested in authentic gastronomic experiences. The region's diverse culinary practices, including winemaking, traditional dish preparation, and distillation, are integral to its cultural identity and can be leveraged to enhance its tourism appeal.

Craft gastronomy in Transcarpathia represents a living interface between cultural heritage, small-scale entrepreneurship, and sustainable territorial development. While the region's festivals serve as symbolic showcases of culinary identity, the craft production system forms its economic backbone, translating tradition into livelihood. Each segment—cheese, beer, wine, meat, sweets, and honey—constitutes a microcosm of regional creativity where local resources, artisanal skill, and ecological consciousness converge.

The unique flavors and traditional production methods of Transcarpathian foods and beverages prove to be extremely attractive for gastronomic tourists.

These visitors are interested in exploring local cuisines, participating in culinary events, and learning about the history and preparation of traditional foods (Marymorych, 2023; Zhyrak & Malovana, 2024).

The integration of traditional crafts into tourism offerings also enhances the cultural tourism experience. The Route of Traditional Crafts in the Subcarpathian Province, for example, demonstrates how presenting traditional crafts interactively can attract tourists and promote cultural heritage by showcasing folk traditions and crafts, attracting tourists interested in interactive experiences with local artisans, thereby promoting regional gastronomy and cultural heritage, which can significantly contribute to the development of tourism in the area (Wieszaczewska, 2015).

Craft gastronomy is stimulating for local economies by creating vibrant markets and encouraging longer tourist stays. The production and sale of craft products, such as local cheeses and wines, can enhance the region's attractiveness and support the development of the hotel and restaurant sectors (Zhyrak & Malovana, 2024; Komlichenko et al., 2023).

While the potential for developing regional tourism through traditional craft gastronomy in Transcarpathia is significant, challenges remain. The region's gastronomic infrastructure is underdeveloped, and there is a lack of marketing and branding for Transcarpathian cuisine. Effective partnerships between government, local businesses, and community organizations are necessary to overcome these challenges and fully realize the potential of gastronomic tourism in the region (Shchuka et al., 2023).

In contemporary tourism research, the gastronomic potential of a region is increasingly analyzed as intersections of gastronomic identity, gastronomic image, and gastronomic tourism—three interrelated constructs explaining the symbolic and developmental functions of regional food heritage (see Table 1).

Table 1. Operationalization Of Constructs (Indicators)

Construct	Indicators (examples)
Gastronomic identity	Ritual/technique depth; tradition-bearer involvement; landscape/season linkage; GI presence
Gastronomic image	Narrative & visual coherence; quality signaling (OIV/GI); media mentions; cross-border appeal
Gastronomic tourism	Producer/stall density; on-site transactions; seasonality extension; linkages to routes/nearby attractions

Gastronomic identity refers to the collectively shared meanings and practices that link specific foods to a place, history, and community (Bessière, 2013). It embodies local knowledge systems, production techniques, and rituals of consumption that define the "taste of place."

Gastronomic image, by contrast, is the externally perceived representation of this identity within tourism markets (Everett & Aitchison, 2008). It operates through branding, storytelling, and aestheticization of authenticity.

Finally, *gastronomic tourism* provides the interactional framework where identity and image converge—where local foodways are transformed into experience-based commodities contributing to both cultural continuity and economic regeneration (Hall & Sharples, 2003).

Aiming at conceptualizing Transcarpathian craft production within the framework of the cultural economy of gastronomy, this research follows this triadic logic when giving an overview of the most remarkable gastronomic riches of the Silver Land.

1.1 Craft Cheese-Making

Transcarpathian craft cheese-making embodies the fusion of pastoral traditions and modern craftsmanship. Rooted in centuries-old sheep-herding practices, it utilizes the rich biodiversity of the Carpathian highlands and the purity of local raw materials. The region hosts around twenty artisanal dairies, including Selyska, Saldobosh, Perechyn Manufactory, and the Monastery Dairy. Their assortment ranges from traditional soft cheeses (bryndza, budz, vurda) to hard, Alpine-style varieties (Selyskyi, Narcissus of Carpathians, Menchul), often enriched with herbs, lavender, or nuts.

Cheese-making here is not only production but also a ritual of place and continuity. Families transmit recipes orally; small cooperatives aggregate milk from mountain households, creating transparent and traceable short supply chains. In this sense, Transcarpathian cheese represents a terroir product whose identity rests on both material and cultural landscapes.

The image dimension has evolved through guided tastings, farm tours, and educational workshops—especially at Selyska Dairy and Izky Farm. These experiences combine sensory pleasure with heritage education, allowing tourists to witness the transformation from raw milk to ripened cheese. The introduction of eco-certifications and storytelling around the "Carpathian lifestyle" reinforces the product's authenticity.

From a tourism perspective, cheese-making underpins the emerging Cheese Route of Zakarpattia (over 100 km), connecting dairies with restaurants, eco-hotels, and festivals. Thus, cheese functions as both a gastronomic attraction and a symbol of rural revitalization, providing income diversification for smallholders and anchoring cultural tourism in everyday production.

1.2 Craft Brewing and Distillation

Brewing in Transcarpathia traces back to the 16th century, with Mukachevo historically hosting one of the oldest breweries in Ukraine (1568). Modern craft brewing revives these traditions through micro-scale, innovation-oriented enterprises. Over twenty mini-breweries now operate across the region, among them Tsypa (Kvasy), Fichte'n (Korytniany), Yuber (Uzhhorod), and John Gashpar (Berehove).

Their collective identity stems from water purity and mountain ecology—spring sources are not only technical resources but also symbolic markers of Carpathian naturalness. Brewers maintain adherence to both tradition (Reinheitsgebot-style purity) and innovation, experimenting with ingredients such as blueberries, spruce, and herbs. The collaboration between Tsypa Brewery and Chateau Chizay Winery, aging beer in oak wine barrels, exemplifies this creative hybridity.

The image of Transcarpathian craft beer blends the aesthetics of Central European brewing with Hutsul and mountain motifs. Visual branding emphasizes rustic authenticity, while urban craft bars and festivals (e.g., Uzhhorod Beer Days) project modernity and cosmopolitanism.

From the tourism perspective, breweries act as micro-destinations: visitors engage in tastings, production tours, and food pairings, creating immersive gastro-cultural experiences. These enterprises also generate new forms of community entrepreneurship, revitalizing small settlements and fostering local employment.

The production of palynka, a traditional moonshine, is another craft that has deep roots in Transcarpathian culture. Despite historical challenges, such as legal restrictions, palynka remains a popular local product with potential for tourism if properly marketed and legalized (Leno, 2022).

1.3 Viticulture and Winemaking

Viticulture represents one of Transcarpathia's oldest gastronomic traditions, with evidence of vineyards dating to the 10th century. The region's wines, such as those from Mukachevo and Berehove, have historically been significant, even reaching royal tables. This tradition continues today, with local winemaking being a key aspect of the region's enological resources and a potential draw for wine tourism (Matiega et al., 2023). Despite decline during the Soviet "prohibition," the post-2000 revival has been driven by family wineries—Chateau Chizay, Staryi Pidval, Kish's Farm, Nota Bene (Nagy family), Shosh, Ursta. These producers cultivate both European (Merlot, Chardonnay, Sauvignon) and indigenous varieties (Ruby of Holodraha, Krasen), reflecting a conscious balance between innovation and authenticity.

In identity terms, winemaking in Transcarpathia acts as a civilizational heritage marker, connecting the region to both the Carpathian and Central European wine worlds. Many wineries reuse historical cellars—reclaimed after decades of neglect—as living archives of local craftsmanship.

The image dimension is built through strong regional branding: "Wines of the Silver Land," initiated by the Winemakers' Association, aims at a future geographical indication (GI).

Tasting halls, vineyard walks, and festival collaborations (e.g., with Chervene Vyno) integrate the narrative of quality and belonging.

In tourism terms, wine routes link Berehove, Mukachevo, and Vynohradiv districts, forming a coherent cultural corridor. Wine-tasting tourism now functions as a pillar of experiential travel, generating local income while strengthening the European orientation of Transcarpathian identity.

1.4 Craft Meat and Charcuterie

Craft meat production illustrates the fusion of tradition, ecology, and social entrepreneurship. Producers such as Vuiko Eco, Zelenyi Hai, and Poriadnyi Hazda revive ancient recipes—shovdar, hurka, makhan, pâtés—using locally sourced meat from Mangalitsa pigs, buffalo, and sheep. Production remains strictly artisanal: small batches, wood smoking, no preservatives.

The identity component lies in handmade authenticity and the symbolic continuity of home-based production. These foods carry narratives of self-sufficiency, resilience, and familial knowledge. In some cases—like Vuiko Eco, founded by Armed Forces veterans—craft also functions as a social rehabilitation platform, turning community solidarity into entrepreneurial action.

The image of Transcarpathian charcuterie is strengthened by eco-labeling and online promotion through "Turinform Zakarpattia." Packaging and presentation emphasize mountain purity and moral responsibility.

For tourism, meat crafts complement cheese and wine on local tasting routes and fairs. They cater to culinary tourists seeking direct purchase, storytelling, and human connection—embodying the Short Food Supply Chain (SFSC) logic of authenticity through proximity.

1.5 Craft Sweets and Honey

The confectionery and apiculture sectors merge natural biodiversity with artisanal aesthetics. Local producers—Golden Fruit, Priano, V. Shtefanio's Confectionery, Carpathian Honey, Turianskyi Honey—create high-value products that fuse ancient recipes (pastila, lekvar, gingerbread) with modern eco-design.

In identity terms, these products express the gentle, nurturing dimension of Carpathian gastronomy: handwork, generosity, and purity. Beekeeping families transmit knowledge across generations, while confectioners adapt traditional fruit preserves into boutique sweets.

The image dimension relies on storytelling around naturalness and healing: honey mixed with nuts and berries symbolizes health, while lekvar (plum jam) embodies domestic warmth. Social initiatives like FrontMed, donating profits to the Armed Forces, add ethical depth to the brand landscape.

From the tourism perspective, sweets and honey play a crucial role in the souvenir economy and experience tourism. Among the sweets, notable products include "Golden Fruit" (Bushtyno), "Priano" (Uzhhorod), the "Uzhhorod" cake (V. Shtefanio), "Mukachevo at Twilight" candies (Bondarenko), and "Transcarpathian Gingerbread." Attractions such as the Plum Jam Museum in Botar or the Honey House in Mukachevo connect visitors directly to production processes, enhancing the emotional and educational dimensions of travel.

Thus, craft gastronomy can operate as a systemic driver of regional development. Across sectors, Transcarpathian craft gastronomy demonstrates a synergistic integration of agriculture, creativity, and tourism. It converts natural and cultural resources into symbolic capital while sustaining local livelihoods. Common denominators include:

- reliance on local raw materials and environmental purity,
- manual production and storytelling,
- emergence of SFSC networks, and
- progressive tourism integration through tasting experiences and thematic routes.

However, the system faces vulnerabilities: fragmentation of producers, seasonality, limited financing, and weak institutional support. Addressing these requires clustering, certification, and coordinated marketing. The creation of a Craft and Gastronomy Cluster of Transcarpathia, coupled with regional quality labeling (HACCP, organic, GI), would ensure coherence and visibility.

Environmental and social sustainability must remain central. Investment in recyclable packaging, "zero waste" technologies, and microfinancing for women and IDP-led enterprises will reinforce community resilience.

Educational partnerships with universities and vocational schools can anchor innovation in research and training.

In the post-war and post-pandemic context, craft gastronomy emerges as a resilient recovery model. Its low capital intensity, cultural rootedness, and export potential align with European green and rural development priorities. Cross-border cooperation with Slovakia, Hungary, Romania, and Poland can transform Transcarpathia into a Carpathian Gastronomic Corridor—a shared cultural space of taste, identity, and sustainability.

Ultimately, craft gastronomy in Transcarpathia is not simply about producing food—it is about producing meaning: transforming the labor of hands into narratives of belonging, creativity, and hope.

2. GASTRONOMIC FESTIVALS AS EXPRESSIONS OF REGIONAL IDENTITY

The preceding section examined craft gastronomy as the material and symbolic foundation of Transcarpathia's culinary economy, emphasizing how artisanal production—through cheese, wine, beer, meat, sweets, and honey—embodies inherited knowledge, local resources, and adaptive innovation. Building on this foundation, the following part of the study turns to the representational and experiential dimension of the region's food culture. Whereas craft gastronomy sustains identity through production, gastronomic festivals enact and communicate this identity through collective performance, storytelling, and public participation. They transform everyday culinary practices into cultural events that both affirm local belonging and invite external recognition. Thus, the analysis that follows interprets Transcarpathia's major gastronomic festivals as interfaces between production, image, and tourism, examining how these events stage authenticity, shape regional narratives, and contribute to the broader cultural economy of the Carpathians.

2.1 Conceptual Framework

The analytical model applied in this section follows the same triadic logic as the overall analysis:

(1) identity, grounded in inherited skills and symbolic meaning;

(2) image, produced through storytelling, branding, and quality assurance; and

(3) tourism value, created through experiential engagement and local economic circulation.

Gastronomic festivals represent a form of cultural performance through which local communities articulate and reimagine their identities within broader socio-economic processes. Within this logic, *gastronomic festivals* serve as mediating institutions between tradition and modernity. They not only preserve culinary heritage but also stage it for visitors, converting local culture into symbolic and economic capital (Harvey, 2001; Richards, 2015). Their epistemological significance in this study is interpretive, aiming to understand how these events communicate cultural meanings and reinforce community cohesion while functioning as drivers of tourism-led development in Transcarpathia.

Adopting an interpretive–constructivist stance attaches meaning to festival foods seen as socially produced, negotiated, and staged by organizers, producers, and visitors with the goal to interpret how festivals communicate cultural identity, shape destination image, and organize markets for craft producers rather than to estimate causal effects.

2.2 Empirical Context: The Festival Landscape of Transcarpathia

Transcarpathia hosts more than one hundred festivals annually, among which gastronomic events play a central role in defining the region's cultural and tourism landscape (Zakarpatska Oblasna Rada, 2011). After the disruptions caused by COVID-19 and the Russian–Ukrainian war, the years 2023–2025 mark a phase of post-crisis revival (see Table 2). Four major festivals—"Chervene Vyno" in Mukachevo, "Berlybaskyi Banosh" in Kostylivka, "Hutsul Bryndza" in Rakhiv, and the "Lekvar Festival" in Hecha—exemplify how gastronomic events perform multiple cultural and economic functions.

The *"Chervene Vyno" (Red Wine)* festival, Ukraine's oldest wine celebration (since 1996), encapsulates the transformation of local winemaking into a European-standard cultural product. Through professional tastings evaluated by OIV criteria and blockchain-based systems, it blends heritage and innovation, reinforcing the region's emerging *gastronomic image* as a wine destination. Organized by the Association of Viticulturists and Winemakers of Zakarpattia, the event not only markets regional wines but also symbolizes resilience and modernization in post-crisis recovery.

The *"Berlybaskyi Banosh"* festival in Kostylivka foregrounds culinary identity and the transmission of tradition. Dedicated to the Hutsul cornmeal dish banosh, it re-enacts pastoral practices and communal cooking rituals that connect people to land and livestock. Through interactive masterclasses, folklore performances, and craft fairs, the festival becomes an *educational and identity-sustaining platform* that fuses cultural continuity with tourism attractiveness. It exemplifies how traditional foodways are transformed into participatory heritage, aligning with Pletsan's (2022) concept of ethno-festivals as creative industries of heritage preservation.

The *"Hutsul Bryndza"* festival in Rakhiv epitomizes the link between *agro-pastoral tradition and gastronomic branding*. Centered on bryndza—Ukraine's first product with a geographical indication—the event integrates culinary demonstration with folk performance and inter-regional cooperation. It reaffirms the symbolic significance of sheep farming and bryndza-making as pillars of Hutsul identity while contributing to the construction of a *territorial gastronomic image* recognizable at national and international levels (Ohiienko & Ohiienko, 2019).

Finally, the *"Lekvar Festival"* in Hecha demonstrates how *ethnic minorities* use gastronomy to sustain cultural heritage and foster local development. Rooted in the Hungarian community's tradition of cooking plum jam (*lekvar*) in open cauldrons, the festival transforms domestic labor into a collective spectacle, reinforcing community cohesion and intergenerational knowledge transfer. The participatory cooking rituals and competitions serve as mechanisms of cultural resilience, turning everyday practice into public heritage and economic opportunity (Na Berehivshchyni provely…, 2021).

Taken together, these festivals illuminate the multidimensional role of gastronomy in Transcarpathia's cultural economy. Conceptually, they embody *gastronomic identity* through the materiality of local dishes, perform *gastronomic image* through tourism branding and visual representation, and operationalize *gastronomic tourism* as a developmental strategy. Epistemologically, their study reveals how communities narrate belonging, negotiate authenticity, and adapt heritage to market realities.

In this interpretive framework, gastronomic festivals function simultaneously as identity narratives, economic instruments, and policy tools for regional regeneration. They translate the cultural specificity of Transcarpathia—its multiethnic composition, mountain ecology, and artisanal production—into a sustainable model of experiential tourism. As such, they are not merely celebratory events but dynamic arenas of cultural communication and socio-economic transformation, illustrating how Transcarpathia's gastronomy evolves from local tradition into a globally resonant brand.

Table 2 : Gastronomic Festivals of Zakarpattia by Seasons in Conditions of Post-Crisis Recovery (2023-2025)

Season	Name of a Gastronomic Festival	Location	Description
Winter	Festival "Chervene Vyno" (Red Wine)	Mukachevo	Brings together the best winemakers of Zakarpattia, combines wine tastings from local grape varieties, a gastronomic fair, and a cultural-entertainment program.
	Salo Fest	Village of Poliana	Culinary festival of salo (pork fat) and hot borshch, held at the PolianSki resort.
Spring	Festival-Championship of Bograch	Village of Koson	Traditional bogrács cooking tournament

	Gastrofest "Ohyn i Mniaso" (Fire and Meat)	Mukachevo	Cooking dishes over fire, competitions, concerts, wine tastings, and craft beer tastings
	Wine Festival "Uhochanska Loza" (Vine of Uhocha)	Vynohradiv	Wine tastings, fairs, master classes, music
	Festival "Berlybaskyi Banosh"	Village of Kostylivka (near Rakhiv)	Preparation of banosh (traditional Hutsul cornmeal dish), masterclasses, fair, and Hutsul clothing exhibition.
	Wine and Honey Festival "Sunny Drink"	Uzhhorod	Winemakers and beekeepers, bogrács, shashlyk
Summer	International Festival of Czech Beer	Village of Kolochava	Czech brewers, contests, music, and local delicacies.
	Kolochavska Riplianka	Village of Kolochava	"Old Village" Museum, where they cook corn puree with machanka, theatrical performances, concerts, and master classes

(Compiled by the authors based on the open sources online)

2.3 Case Analyses

Case 1: Chervene Vyno (Mukachevo)

Background and Context. The Chervene Vyno Festival (literally Red Wine) in Mukachevo is both the oldest and the most influential wine festival in Ukraine. Founded in 1996, it began as a civic initiative to preserve the region's viticultural heritage during a period of post-Soviet economic instability. Held annually in January, around the Old New Year, it deliberately coincides with the traditional end of the fermentation cycle and the blessing of new wine barrels—an agricultural ritual that predates industrial winemaking in the Carpathian foothills.

Over nearly three decades, Chervene Vyno has evolved from a modest local fair into a flagship event of Transcarpathia's cultural economy, now organized by the Association of Viticulturists and Winemakers of Transcarpathia in cooperation with the Mukachevo City Council.

In the post-COVID and wartime recovery context (2023–2025), the festival has acquired new symbolic and practical significance. It not only celebrates viticultural craftsmanship but also serves as a platform for rebranding Transcarpathia as a European-quality wine region within Ukraine's cultural tourism market.

Figure 1. "Chervene Vyno" Festival (Mukachevo, Zakarpattia Region, Ukraine)
Source: https://surl.li/vyxoau

Gastronomic Identity. Within the interpretive framework of gastronomic identity (Bessière, 2013), the festival performs the collective memory of wine. The opening ritual—blessing of the first barrel, processions in folk costume, and the municipal wine fair—transforms professional expertise into a public enactment of continuity between past and present. Each participating winery presents both traditional and experimental vintages, reflecting the dual imperative of heritage preservation and innovation.

The Old New Year timing carries cultural semiotics of renewal and fertility, resonating with folk calendar rituals and thus embedding enological practice into the symbolic order of the community. The presence of small family cellars alongside larger producers demonstrates horizontal inclusivity: a living transmission of artisanal knowledge across generations.

Through these performative dimensions, Chervene Vyno materializes local belonging and positions winemaking as a key marker of regional identity in the multiethnic Transcarpathian landscape.

Gastronomic Image. The festival's external image operates within what Everett & Aitchison (2008) term the gastronomic cultural economy: the conversion of local foodways into branded cultural capital. From 2018 onward, Chervene Vyno introduced OIV-based professional tastings—the same evaluation framework used by the International Organisation of Vine and Wine—aligning local practice with global quality standards.

In 2025, the competition jury evaluated 152 samples from 37 producers, and the results were certified digitally via the GustosLife blockchain platform. This technological innovation performs two symbolic functions. First, it legitimizes the region's products through procedural transparency and international comparability. Second, it modernizes the image of Transcarpathia, signaling that heritage and innovation can coexist without contradiction.

Local media and tourism boards amplify this image through coordinated storytelling that merges folklore with modern design: advertisements feature the Mukachevo castle silhouette, snow-covered vineyards, and slogans invoking "European quality in a Carpathian heart." The repetition of these semiotic elements across years consolidates a coherent gastronomic image that blends authenticity with professionalism.

Gastronomic Tourism. As a tourism product, Chervene Vyno exemplifies Pine & Gilmore's (1999) experience economy. The festival transforms the act of tasting into an immersive event through interactive zones, masterclasses, and folk performances, creating multisensory experiences that extend beyond consumption to participation. Visitors encounter producers directly—over 100 stands offering wine, cheese, honey, and charcuterie—forming a dense Short Food Supply Chain (SFSC) where products move directly from maker to consumer.

Economically, the event serves as a winter-season anchor for Mukachevo's hospitality sector. Accommodation occupancy during the festival rises sharply, local restaurants develop "festival menus," and wine-themed excursions to nearby cellars lengthen visitor stays.

Municipal authorities estimate that the four-day event generates over €300,000 in direct sales and hospitality revenue (Turinform Zakarpattia 2024). Beyond immediate profit, these interactions build relational capital—repeat customers, export inquiries, and collaborative branding initiatives among producers.

Thus, in view of the research hypotheses, Chervene Vyno exhibits a high degree of procedural authenticity: ritual blessing, seasonal symbolism, and inter-generational participation create strong community recognition. The introduction of OIV standards and blockchain scoring provides credible quality signals, translating local identity into a legible external image. The narrative of "European-level Transcarpathian wine" situates the region within global enological discourse while retaining local symbolism. The density of producer–visitor interaction and extended hospitality effects validate the economic role of SFSCs as engines of local tourism. Technological modernization (digital certification) and traditional ritualization coexist harmoniously, demonstrating innovation without identity dilution—a pattern typical of resilient cultural economies (Ray 2001; Throsby 2010).

Within the triadic framework of identity → image → tourism, Chervene Vyno stands as the most mature articulation of Transcarpathia′s gastronomic system. It anchors identity in viticultural ritual, converts it into an image through standardized evaluation and digital mediation, and monetizes it through touristic experience. The festival's success lies in achieving equilibrium between authenticity and professionalization—it remains a local celebration yet operates within global circuits of meaning and value.

In doing so, Chervene Vyno exemplifies the study's broader proposition that heritage-based craft production can function as a dynamic cultural-economic system, transforming regional identity into symbolic capital and sustainable tourism development.

Case 2: Berlybaskyi Banosh *(Kostylivka)*

Background and Context. The Berlybaskyi Banosh Festival, founded in 2006 in the mountain village of Kostylivka (Rakhiv district), celebrates one of

the most emblematic dishes of Hutsul gastronomy — banosh, a creamy maize porridge cooked with sour cream and sheep's cheese.

The event emerged as a community initiative aimed at revitalizing traditional pastoral life and promoting local tourism after the socio-economic decline of the 1990s. Organized annually in May, when herders traditionally depart for high-altitude pastures, the festival marks the opening of the mountain grazing season and symbolically honors the continuity between landscape, livestock, and livelihood.

In contrast to the urban sophistication of Chervene Vyno, Berlybaskyi Banosh exemplifies the rural-ritual type of gastronomic event, deeply embedded in seasonal and spatial rhythms. It showcases how food festivals can serve as ritualized arenas of cultural transmission, reaffirming mountain identity and reinforcing inter-generational knowledge exchange. The preparation of authentic dishes like banosh, a regional specialty, and its promotion is seen as a way to develop ethno-gastronomic tourism routes in the region (Боратинський et al., 2023).

Figure 2. "Berlybaskyi Banosh" Festival (Kostylivka village, Zakarpattia region, Ukraine)
Source: https://surl.lt/kqcamx

Gastronomic Identity. Within the theoretical lens of gastronomic identity, Berlybaskyi Banosh functions as a performative reconstruction of Hutsul pastoral life. The central event — a collective preparation of banosh in enormous copper cauldrons over open fire — re-enacts the shepherd's practice of cooking in mountain huts.

The cooking teams typically include village elders, young apprentices, and women responsible for dairy processing, transforming the act into a living ethnographic tableau.

The festival's soundscape — trembita horn calls, folk polyphony, and ritual blessings — situates the dish within a continuum of sacred and profane meanings. Symbolically, banosh represents both subsistence and celebration — the simplest meal of the shepherd elevated to the status of regional emblem. Through these embodied practices, the community reaffirms its ethno-territorial identity, translating everyday food into heritage.

Gastronomic Image. The festival's gastronomic image operates through the aesthetics of authentic simplicity. Local and regional media depict Berlybaskyi Banosh as "the taste of the Carpathians," combining rugged natural landscapes with pastoral authenticity. Costumed participants, decorated sheep, and open-fire cooking scenes provide visually potent imagery that circulates across social networks and tourism portals.

The festival's logo and design elements — sheep motifs, maize patterns, wooden textures — reinforce this narrative. Although lacking the formalized branding and certification mechanisms of Chervene Vyno, its ethno-aesthetic coherence conveys credibility through sensory immediacy rather than institutional endorsement. Visitors are invited to taste authenticity directly, blurring the line between spectator and participant.

This visual and narrative consistency contributes to destination image formation (Baloglu & McCleary, 1999), projecting Hutsul cuisine as both ancient and accessible. In doing so, Berlybaskyi Banosh turns pastoral subsistence into a cultural spectacle, generating symbolic capital that complements Transcarpathia's broader image as a mountain-gastronomic region.

Gastronomic Tourism. From the perspective of gastronomic tourism, Berlybaskyi Banosh provides a multi-layered experiential framework. Visitors do not merely observe cooking but engage in tasting, assisting, and attending workshops on traditional dairy production and corn milling. Craft fairs and folk concerts integrate local producers of cheese, honey, and herbal products, creating a compact Short Food Supply Chain (SFSC) environment where transactions occur face-to-face.

The festival's economic footprint, though smaller than that of Chervene Vyno, is proportionally significant for the local community. Smallholders sell hundreds of kilograms of cheese and maize meal during the event; guesthouses and homestays report full occupancy. Importantly, the festival stimulates off-season tourism, extending visitation beyond the winter ski and autumn leaf-peeping periods. Educational components, such as school competitions and culinary masterclasses, further integrate the event into community learning and cultural continuity.

Thus, in view of the research hypotheses, the festival exhibits profound ritual authenticity. The communal act of cooking banosh, involving real shepherds and families, anchors identity in practice rather than representation. The embodied participation of residents ensures inter-generational transmission of know-how. While lacking formal certification or international quality signals, the festival achieves image coherence through narrative and visual consistency — mountain motifs, traditional music, and folklore storytelling. Authenticity is performed as an aesthetic of simplicity rather than a codified brand. Dense SFSC linkages — direct sale of cheese, honey, and crafts — enhance local income retention. The event attracts both domestic and international visitors, particularly from neighboring Romania and Hungary, confirming its cross-border appeal. Although firmly rooted in tradition, the festival integrates modest innovation through educational workshops, culinary competitions, and online promotion. These incremental updates revitalize rather than commodify the heritage, preserving symbolic integrity.

Berlybaskyi Banosh illustrates how rural, ritual-based gastronomic festivals function as mechanisms of cultural resilience and micro-regional development. Within the identity → image → tourism logic, it:

- anchor's identity in embodied communal practice;
- constructs an image through authentic storytelling and ethno-aesthetic coherence.
- and generates tourism value through direct market participation and experiential education.

The festival thereby exemplifies the interpretive-constructivist thesis of the study: that gastronomic events are not merely tourism products but symbolic negotiations of belonging and continuity.

While lacking the formal professionalization of urban festivals, Berlybaskyi Banosh offers a powerful counter-model of cultural economy from below, demonstrating that authenticity itself can be an effective form of innovation.

Case 3: The "Hutsul Bryndza" (Rakhiv)

Background and Context. The Hutsul Bryndza Festival, held annually in Rakhiv on the first Sunday of September, stands among the most emblematic gastronomic events in the Ukrainian Carpathians. Established in 1999, it originated as a celebration of the end of the mountain grazing season, when shepherds descend from the alpine pastures (polonyna) bringing home their sheep and the freshly made bryndza — a soft, tangy sheep's milk cheese central to Hutsul cuisine.

Over two decades, the festival has evolved from a local pastoral gathering into a national symbol of Carpathian identity and a platform for promoting geographical indication (GI) as a mechanism of rural development. It is organized by the Rakhiv District Council in cooperation with local producer cooperatives and cultural associations. Since 2021, Hutsul Sheep Bryndza has held Ukraine's first registered GI status, officially recognized by the European Union, making the festival both a cultural and legal celebration of origin-linked quality.

Gastronomic Identity. In the logic of gastronomic identity, Hutsul Bryndza functions as an annual ritual of belonging, reaffirming the connection between community, landscape, and livelihood. The cheese embodies centuries of transhumant tradition, in which shepherds move livestock between valleys and high pastures, sustaining a distinctive mountain ecology.

Figure 3. "Hutsul Bryndza" Festival (Rakhiv, Zakarpattia Region, Ukraine).
Source : https://www.kapitoliy.net.ua/festyval-gutsulska-brynza/

During the festival, shepherds dressed in traditional keptar and serdak garments present cheese wheels blessed by a local priest, symbolically uniting sacred ritual and artisanal labor. The procession of herdsmen, accompanied by folk ensembles and trembita horns, transforms economic activity into a performative expression of identity.

The making and sharing of bryndza—by taste, smell, and texture—constitute what Bessière (2013) calls a sensorial heritage, a tangible marker of cultural continuity. Through these embodied practices, the festival transmits ethno-pastoral identity while situating it within the broader cultural economy of the Carpathians.

Gastronomic Image. If Chervene Vyno illustrates standardization through technical quality control, Hutsul Bryndza represents heritage branding through geographical indication (GI). The GI designation defines a specific production zone across parts of Transcarpathia, Ivano-Frankivsk, and Chernivtsi regions and requires that bryndza be made from raw sheep's milk using traditional rennet and aging methods at altitudes above 700 meters.

Within the festival context, this legal framework is translated into narrative and symbolic capital. Producers exhibit official GI logos on packaging, and educational stands explain the certification process to visitors. The event thus performs authenticity as regulation, not as folklore, but as codified heritage, aligning local know-how with European quality norms.

Media coverage and tourism campaigns highlight the festival as the "heart of Hutsul taste," combining rustic charm with professional credibility. The GI serves as both an economic safeguard and an image amplifier, ensuring traceability and reinforcing Transcarpathia's reputation as a producer of high-mountain artisanal foods. In branding terms, the festival acts as a territorial trademark—a public demonstration that authenticity can be both celebrated and institutionalized.

Gastronomic Tourism. From the tourism perspective, Hutsul Bryndza offers a multi-sensory, educational, and participatory experience. Visitors can attend live cheese-making demonstrations, taste diverse regional variations (smoked, salted, mixed with herbs), and purchase products directly from shepherd families—creating a vibrant Short Food Supply Chain (SFSC) environment.

The event attracts 20,000–25,000 visitors annually (pre-war figures), including domestic tourists and guests from neighboring Romania, Slovakia, and Hungary. The local hospitality sector—guesthouses, cafes, craft shops—benefits from full occupancy, while the festival's cultural program (folk concerts, craft fairs, ethnographic exhibitions) generates broader destination spillovers.

In parallel, masterclasses by contemporary chefs introduce innovative culinary uses of bryndza, bridging traditional and modern gastronomy. Educational sessions on GI awareness and sustainable grazing underscore the link between cultural preservation and ecological stewardship. Thus, the festival acts simultaneously as a marketplace, a classroom, and a cultural stage—a microcosm of the region's gastronomic ecosystem.

In view of the research hypotheses, the festival demonstrates procedural and symbolic authenticity through ritualized enactments of shepherd life and direct involvement of producers. The sacred blessing, traditional attire, and cheese processions anchor identity in lived practice. The GI designation elevates bryndza from a local specialty to a certified emblem of quality, integrating the region into European heritage circuits. This hybridization of tradition and regulation enhances image coherence and credibility. High attendance, cross-border participation, and dense SFSC interactions confirm the event's role as a key driver of rural tourism and local income generation.

The educational dimension deepens visitor engagement beyond consumption. While grounded in centuries-old practice, Hutsul Bryndza incorporates innovation through institutionalization: the adoption of GI mechanisms, culinary reinterpretations, and sustainability narratives. These enrich the heritage without commodifying it.

The Hutsul Bryndza Festival exemplifies how legal recognition of origin-linked foods can amplify both cultural and economic dimensions of gastronomy. Within the triadic model (identity → image → tourism), the event, thus:

- anchors identity in ritualized pastoral heritage;
- projects image through GI-based branding and educational storytelling; and
- generates tourism value via participatory experiences and market access.

By transforming authenticity into institutional capital, the festival bridges local tradition and European policy frameworks, demonstrating that cultural heritage and formal certification can coexist as complementary pathways to regional development. It therefore supports the study's broader proposition that Transcarpathia's gastronomic economy is evolving from informal cultural practice toward structured, innovation-driven sustainability.

Case 4: The "Lekvar Festival" (Hecha)

Background and Context. The Lekvar Festival is held annually in the predominantly Hungarian village of Hecha, located in the Berehove district of Zakarpattia, near the Hungarian border. Established in 2008, the festival emerged as a local cultural initiative aimed at preserving and revitalizing traditional Hungarian plum jam making—a craft known as lekvar főzés. Over time, it has become both a culinary emblem of minority identity and a regional tourism attraction, integrated into cross-border cultural cooperation programs between Ukraine and Hungary.

Figure 4. "Lekvar Festival" (Hecha village, Zakarpattia Region, Ukraine)
Source: https://tourinform.org.ua/svyato-lekvaryu-u-hechi

The event typically takes place in August, coinciding with the plum harvest season, and lasts for two days. It brings together hundreds of local families, producers, and tourists who participate in the open-air cooking of plum jam in copper cauldrons over wood fires, accompanied by folk music, competitions, and tastings. The festival's symbolic core lies in the transformation of a domestic, familial activity into a public ritual of communal labor and celebration.

Gastronomic Identity. In the interpretive framework of gastronomic identity (Bessière, 2013), the Lekvar Festival performs a dual act of heritage preservation and cultural affirmation. For the Hungarian minority of Transcarpathia—one of the region's largest ethnic communities—the cooking of lekvar represents both a culinary tradition and a symbol of continuity amid social change.

The process itself is slow, sensory, and participatory: ripe plums are boiled for 7 to 30 hours in open copper kettles, constantly stirred with long wooden paddles (lapát). Families guard their own recipes, debating the ideal consistency, sweetness, and thickness, yet the act of cooking together supersedes competition. The collective preparation transforms the village square into an ethnographic theatre, where local language, music, and customs become performative expressions of belonging.

Women traditionally lead the cooking process, reflecting the gendered dimension of culinary transmission.

Their role reinforces intergenerational learning: mothers teaching daughters, grandmothers passing down gestures rather than written recipes. In this sense, the festival acts as a living museum of intangible cultural heritage, sustaining a craft that is simultaneously domestic and communal, private and public. Through this ritualized labor, the Hungarian community in Hecha asserts its cultural presence within the multicultural mosaic of Transcarpathia.

Gastronomic Image. While Chervene Vyno and Hutsul Bryndza embody the professionalization and institutionalization of regional brands, the Lekvar Festival projects a grassroots ethnic image, grounded in authenticity and emotional resonance. Its visual and symbolic vocabulary is deeply Hungarian: red-white-green flags, traditional embroidery, and wooden signage in both Ukrainian and Hungarian languages.

Media coverage emphasizes the "sweet unity of peoples" narrative, portraying the event as a bridge between communities rather than an enclave of difference. Local authorities and Hungarian cultural foundations (e.g., Bethlen Gábor Fund) support the festival as part of cross-border cultural diplomacy, enhancing its visibility in both countries.

The central symbol—the cauldron of lekvar—operates as a metaphor of cohesion: a shared pot that binds individuals and families into a collective identity. Photographs of villagers stirring the thick jam have become iconic images in regional tourism brochures, often captioned as "the taste of Berehivshchyna." This imagery reinforces a positive gastronomic image of Transcarpathia as a region where ethnic diversity translates into culinary abundance.

Unlike the standardized wine or GI-certified cheese sectors, the Lekvar Festival's authenticity stems from non-commercial purity: the jam is homemade, unbranded, and sold in small jars labeled by hand. This unmediated simplicity becomes a branding strategy in itself—an aesthetic of sincerity that appeals to urban visitors seeking "real" experiences and emotional connection with local culture.

Gastronomic Tourism. From a gastronomic tourism perspective, the Lekvar Festival functions as a participatory and relational event that fuses cultural experience with micro-economy.

Visitors can join in stirring the jam, taste the fresh product straight from the kettle, and purchase jars as souvenirs. Alongside plum jam, local producers offer honey, wines, brandies (palinka), smoked meats, and pastries—creating a dense Short Food Supply Chain (SFSC) environment based on direct exchange between producer and consumer.

The festival stimulates seasonal tourism in the Berehove district, complementing the area's spa and wine tourism infrastructure. Its proximity to the Berehove thermal baths and border crossing with Hungary enables itinerary bundling for both domestic and foreign visitors. Guesthouses and small hotels report full occupancy during the event, while local vendors benefit from increased sales of agricultural products and crafts.

Beyond economic benefits, the festival performs a cultural integration function: Ukrainian and Hungarian visitors cook, eat, and celebrate together, embodying the principles of intercultural dialogue promoted in EU regional cohesion policy. The participatory cooking format transforms food preparation into a medium of communication that transcends linguistic boundaries.

With the research hypotheses in mind, it can be maintained that the Lekvar Festival demonstrates a high degree of heritage depth, rooted in family-based transmission and gendered labor practices. The continuity of recipes, tools, and rituals sustains Hungarian cultural identity while simultaneously integrating it into Transcarpathia's plural regional narrative. Moreover, the festival's image is crafted through ethnic authenticity and cross-border symbolism. Its aesthetic coherence—language, costumes, visual motifs—creates a distinctive ethnic micro-brand that complements the region's composite gastronomic image. Despite lacking formal quality certification, it projects credibility through visual sincerity and community ownership. The event generates tangible tourism flows and commercial benefits for local households. Its SFSC density and proximity to Berehove's spa infrastructure create strong multiplier effects, illustrating how small-scale heritage events can contribute to sustainable regional tourism. Innovation manifests not through technology or regulation, but through social creativity: transforming a domestic craft into a collective celebration and a cross-border cultural product. The festival's inclusive ethos—inviting visitors to participate in the process—modernizes tradition without commodifying it.

Within the triadic logic of identity → image → tourism, the Lekvar Festival embodies the ethnic and communal dimension of Transcarpathia′s gastronomic landscape. It:

- anchors identity in Hungarian culinary heritage and intergenerational practice;
- constructs an image of cross-border authenticity and multicultural coexistence; and
- generates tourism value through participatory experiences and localized economic circulation.

By converting collective labor into shared festivity, the festival performs a form of cultural cohesion through food, where culinary heritage becomes both a symbol of ethnic continuity and a tool for intercultural dialogue.

In contrast to the urban professionalization of Chervene Vyno or the institutionalization of Hutsul Bryndza, Lekvar represents cultural economy from below: a community-driven, emotion-rich, and socially integrative model of heritage tourism. It exemplifies how everyday domestic practices can evolve into resilient cultural assets, contributing to Transcarpathia's image as a region where authenticity, diversity, and hospitality converge.

2.4 Discussion

Taken together, the four Transcarpathian festivals—Chervene Vyno, Berlybaskyi Banosh, Hutsul Bryndza, and the Lekvar Festival—compose a multifaceted panorama of how gastronomic identity, image, and tourism intersect within the region's evolving cultural economy. Though differing in scale, institutionalization, and market orientation, they collectively demonstrate that food-centered events operate as dynamic mediators between heritage and development, transforming localized cultural practices into regionally and internationally legible experiences.

Chervene Vyno epitomizes the professionalized and standardized end of the spectrum: an urban, economically mature event where ritualized heritage is paired with global quality norms (OIV standards, digital scoring). Its strength lies in institutional credibility—turning Transcarpathian winemaking into a competitive European brand while sustaining traditional enological symbolism.

Berlybaskyi Banosh, by contrast, embodies the ritual-communal model. Rooted in the seasonal rhythms of Hutsul pastoral life, it transforms everyday subsistence into a participatory spectacle. Its authenticity is experiential rather than certified; identity is enacted through embodied performance, and tourism arises organically from the warmth of inclusion and narrative of belonging.

Hutsul Bryndza occupies an intermediate position—a hybrid model that merges heritage authenticity with legal protection through geographical indication (GI). It institutionalizes mountain identity within a European regulatory framework, converting artisanal practice into codified heritage. The result is both economic empowerment and image amplification: a festival that simultaneously teaches, brands, and sells authenticity.

Finally, the Lekvar Festival represents the grassroots, minority-driven dimension of Transcarpathian gastronomy. Celebrating Hungarian culinary heritage through collective jam making, it highlights food's power to foster ethnic cohesion and cross-border communication. Its strength lies not in scale or formal recognition, but in emotional resonance and participatory intimacy—demonstrating that even domestic crafts can evolve into effective vehicles of cultural diplomacy and local tourism.

Across all four cases, several unifying patterns emerge. Each festival anchors identity in tangible craft practices and sensory heritage, constructs an image through a mix of symbolism, storytelling, and quality cues, and generates tourism value via experiential engagement and dense Short Food Supply Chains (SFSCs) that connect producers directly with visitors. Collectively, they validate the study's interpretive–constructivist thesis: gastronomic festivals are not mere celebrations, but cultural-economic systems where meanings, identities, and markets co-produce one another.

At the same time, the cases illustrate a continuum of professionalization—from ritual (Banosh) and domestic craft (Lekvar) to regulated heritage (Bryndza) and standardized competition (Chervene Vyno). This gradient underscores Transcarpathia's adaptive capacity: its ability to preserve authenticity while gradually integrating into broader European cultural and economic frameworks.

In sum, the four festivals collectively articulate Transcarpathia's gastronomic identity as plural, layered, and resilient—rooted in diversity, strengthened by innovation, and sustained by the everyday labor of communities who transform food into culture and culture into livelihood.

CONCLUSIONS

The analysis of Transcarpathian craft gastronomy—encompassing both artisanal production and the performative sphere of gastronomic festivals—demonstrates that food is not merely a material resource but a multidimensional medium through which local communities negotiate identity, resilience, and economic renewal. As a borderland region where multiple cultural influences converge, Transcarpathia transforms its diversity into an asset, converting traditional know-how into symbolic and economic capital within the logic of the European cultural economy.

At the empirical level, the study has revealed a coherent system of interlinked practices. The sectors of cheese-making, brewing, winemaking, charcuterie, confectionery, and apiculture form the productive foundation of the regional gastronomic landscape. Their social and symbolic reproduction is mirrored in the festival network, which collectively projects a regional image of authenticity, creativity, and hospitality. Together, they illustrate how craft gastronomy operates as a circular cultural economy, where local resources are converted into experiences, and experiences, in turn, reinforce the value of place and community.

In the context of European integration, Transcarpathian craft gastronomy aligns closely with EU principles of sustainable rural development, cultural diversity, and cross-border cooperation. The emergence of geographical indications (GIs), eco-certifications, and cluster initiatives reflects a gradual harmonization with European quality frameworks. This integration creates tangible prospects for market access, tourism diversification, and regional branding within the broader Carpathian microregion. The recognition of Hutsul Bryndza as Ukraine's first EU-recognized GI product marks a symbolic turning point—demonstrating that heritage-based industries can meet European standards while maintaining authenticity.

Expanding this approach to other products (e.g., wines, honey, charcuterie) would strengthen Transcarpathia's participation in European cultural and economic networks.

In the post-war recovery context, craft gastronomy emerges as a strategic sector of low-capital, high-resilience development. Its reliance on local materials, family labor, and community organization makes it particularly adaptive in crisis conditions. Small-scale producers and festivals already contribute to social cohesion, employment, and morale—especially among displaced persons, women, and veterans. Policy measures should therefore prioritize micro-grants, preferential credit, and vocational programs targeting these groups, recognizing food heritage as both an economic and psychosocial recovery tool. Integrating craft gastronomy into Ukraine's National Recovery Plan and EU cohesion instruments (e.g., Interreg, Creative Europe, Horizon Europe) would facilitate sustainable and inclusive regeneration at the regional level.

From a policy standpoint, several directions emerge:

- *Institutionalization and Quality Assurance*. Establishing a Craft and Gastronomy Cluster of Transcarpathia would formalize cooperation among producers, tourism operators, and cultural institutions. Certification schemes (organic, HACCP, GI) should be expanded and aligned with EU standards to enhance credibility and export readiness.

- *Infrastructure and Marketing*. Developing thematic routes—Cheese Route, Wine Route, Honey Trail—and integrating them with digital tourism platforms would strengthen the region's visibility. Investment in rural hospitality, signage, and small logistics infrastructure would further extend tourist stays and spending.

- *Cross-Border and Regional Cooperation*. Partnerships with Slovakia, Hungary, Romania, and Poland can consolidate a Carpathian Gastronomic Corridor—a transnational network promoting shared heritage, mobility, and innovation. Joint training, fairs, and EU-funded projects deepen economic and cultural linkages.

- *Education and Research Integration*. Universities, vocational schools, and research centers should develop programs in gastronomic entrepreneurship, food design, and heritage management. Collaboration

between academia and producers can sustain innovation while preserving local knowledge.

- *Cultural Diplomacy and Branding*. Transcarpathian gastronomy, through its festivals and cross-cultural narratives, can serve as a soft-power instrument of Ukrainian cultural diplomacy in Europe. Promoting "Taste of Transcarpathia" as a unifying brand would communicate the values of diversity, sustainability, and creativity that define both the region and modern Ukraine.

Ultimately, the Transcarpathian case demonstrates that craft gastronomy functions as a bridge between recovery and modernization. It offers a development model grounded in cultural sustainability rather than extractive growth—one that transforms vulnerability into creativity, and peripherality into connectivity. By integrating local food systems into European policy frameworks and post-war rebuilding strategies, Ukraine can position its borderland regions not as margins, but as laboratories of inclusive and resilient development.

In this sense, craft gastronomy is more than an economic sector—it is a cultural project of reconstruction, capable of uniting people, regenerating places, and articulating Ukraine's European future through the language of taste.

The implications of this research extend beyond the regional scale. Conceptually, it contributes to the emerging discourse on cultural economies of food, demonstrating how craft-based production and heritage events can be analyzed within a single integrative model. Methodologically, it provides a replicable framework—the triadic interaction of identity, image, and tourism—that can be applied to other borderland or post-crisis regions. Practically, it offers evidence-based guidance for policymakers, development agencies, and local stakeholders seeking to link cultural heritage with sustainable recovery. The Transcarpathian example illustrates that investing in craft gastronomy is not only a matter of economic revitalization but also a pathway to social healing, cultural diplomacy, and European convergence.

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CHAPTER 7
BALANCING FLAVOR AND HEALTH:
CHALLENGES IN MENU DESIGN

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INTRODUCTION

Problem Statement: The Flavor Health Dilemma

The challenge of balancing flavor with health remains underexplored within its proper gastronomic context. While research often frames the issue primarily in terms of nutrition and public health, it tends to overlook the critical role of culinary practice, menu innovation, and gastronomic culture in shaping consumer choices. Flavor, crafted through culinary creativity and sensory design, continues to be the dominant determinant of food preference (Prescott, 2017). However, the very elements that enhance palatability such as salt, sugar, refined carbohydrates, and fats are strongly implicated in the rising incidence of chronic diet-related diseases including obesity, hypertension, type 2 diabetes, and cardiovascular disorders (WHO, 2022; Afshin et al., 2019). Conversely, health driven menus often sacrifice indulgence, leaving a gap between nutritional ideals and gastronomic satisfaction. This unresolved tension positions the dilemma not only as a public health concern but also as a pressing challenge for chefs, restaurateurs, and culinary innovators who must reconcile wellness with pleasure.

Significance of the Issue

The significance of resolving this dilemma is underscored by global health data. Poor diet is now the leading risk factor for premature mortality worldwide, contributing to nearly 11 million deaths annually (Global Burden of Disease [GBD] Study, 2019). Governments and international bodies from the FAO's sustainability guidelines to the WHO's sugar reduction strategies have prioritized reforming diets to mitigate chronic disease burdens (FAO, 2023; WHO, 2022). At the same time, the foodservice industry faces commercial imperatives: dining is increasingly about multisensory experience and cultural identity, amplified by social media platforms that valorize indulgent imagery (Johnston & Baumann, 2022). Thus, reconciling pleasure with health is no longer a niche aspiration but a professional and societal necessity.

Rationale for the Chapter

While abundant research exists in both nutrition science and gastronomy, the two bodies of knowledge often remain siloed. Nutritional studies frequently emphasize nutrient density, caloric intake, and long-term health outcomes, while culinary literature focuses on creativity, sensory satisfaction, and cultural meaning (Mouritsen & Styrbæk, 2018). Few scholarly works attempt to systematically integrate these domains into a unified framework that practitioners can apply to real-world menu development. This chapter addresses this gap by synthesizing insights from food chemistry, sensory science, cultural gastronomy, and nutrition policy to examine how flavor and health can be balanced in menu design.

Objectives and Scope

The overarching aim of this chapter is to critically explore how the tension between flavor and health can be managed in professional foodservice contexts. Specifically, it seeks to:

- Explore the physiological and cultural foundations of flavor perception, highlighting how biological predispositions and regional traditions shape taste expectations.
- Investigate the operational and psychological tensions between indulgence driven preferences and health oriented reformulations.
- Evaluate evidence based culinary strategies such as umami enhancement, smart substitutions, portion control, and sensory marketing that harmonize taste with nutrition.
- Analyze global case studies across fine dining, fast casual, culturally authentic kitchens, and public policy interventions to illustrate practical models.
- Forecast emerging trends, including artificial intelligence in recipe design, personalized nutrition, and sustainability driven gastronomy.

Transition to Framework

To systematically analyze this dilemma, the following section develops a conceptual framework that integrates insights from flavor chemistry, nutrition science, cultural anthropology, and food economics.

This framework serves as the lens through which strategies and case studies will be evaluated throughout the chapter.

1. FOUNDATIONS OF FLAVOR IN CULINARY SCIENCE
1.1 Defining Flavor Beyond Taste

Flavor in culinary science cannot be reduced to a preliminary account of taste alone; rather, it must be understood as a richly layered, multisensory phenomenon that integrates physiology, cognition, and culture. Defined not merely by gustatory modalities but also by volatile and nonvolatile compounds, somatosensory signals, and neurocognitive interpretation, flavor represents the convergence of chemical, sensory, and symbolic dimensions (Auvray & Spence, 2008). Beyond this physiological complexity, flavor is also embedded in gastronomic and cultural practices shaped by culinary traditions, social rituals, and personal memory (Prescott, 2017). Such a perspective moves beyond a thin or source-limited definition, situating flavor simultaneously as a biological construct and as a cultural practice. Within this framework, flavor emerges as both embodied perception and gastronomic expression, providing a robust foundation for analytical inquiry in culinary science and menu innovation.

1.2 Biological Basis of Flavor Preferences

Humans are evolutionarily predisposed to favor energy dense flavors. Sweetness signals the presence of caloric carbohydrates, while salt enhances palatability and supports electrolyte balance. Fats not only provide a desirable mouthfeel but also act as solvents for aroma molecules, amplifying flavor complexity (Drewnowski, 1997). In contrast, bitterness often functions as a warning cue for potential toxicity, eliciting avoidance responses. These biological predispositions explain the widespread appeal of foods high in sugar, sodium, and saturated fats, despite their adverse health consequences. Yet, taste preferences are far from fixed. Exposure, cultural reinforcement, and conditioned learning enable the gradual acceptance of flavors initially perceived as aversive for example, the acquired appreciation of bitter yet health-promoting foods such as coffee, green tea, or cruciferous vegetables (Rozin & Vollmecke, 1986).

Recognizing the interplay between innate predispositions and learned preferences creates a crucial bridge between evolutionary explanation and applied relevance, underscoring how chefs and nutritionists can leverage both dynamics in designing menus that satisfy sensory expectations while promoting health.

1.3 Flavor Chemistry and Culinary Techniques in Gastronomy

The chemistry of flavor arises not only from the Maillard reaction and lipid oxidation but from a broader range of transformations and culinary practices. The Maillard reaction, occurring between amino acids and reducing sugars during processes such as roasting, grilling, or baking, produces hundreds of heterocyclic compounds that deliver the savory, roasted, and caramel like notes central to many cuisines (Mottram, 1998). Alongside this, lipid oxidation and enzymatic pathways release volatile aldehydes, ketones, and alcohols that contribute to aroma diversity. Equally important are caramelization, fermentation, and smoking, which generate distinctive flavor signatures through thermal degradation of sugars, microbial metabolism, and pyrolysis, respectively. Spices and herbs enrich this chemical foundation with terpenoids, phenolics, and alkaloids that not only heighten sensory complexity but also provide cultural meaning and functional benefits such as antioxidant and antimicrobial activity (Shahidi & Ambigaipalan, 2015). In contemporary gastronomy, these insights extend beyond chemistry to menu innovation: chefs strategically apply molecular principles to enhance palatability while reformulating dishes for health. For example, umami-rich ingredients like mushrooms, tomatoes, and seaweed can replicate savory depth without reliance on excessive sodium, demonstrating how culinary science bridges biochemistry, culture, and nutrition.

1.4 Cultural and Psychological Dimensions of Flavor

Flavor is not only a biochemical product of chemical reactions and sensory perception but also a cultural and psychological construct deeply embedded in human experience. Culinary traditions encode memory, symbolism, and identity, shaping what is considered pleasurable or acceptable at the table (Mintz, 1996).

In Nigeria, the cultural valorization of pungency aligns with the widespread use of *Capsicum* species, reflecting both agricultural availability and social preference for spiciness (Adebola & Afolabi, 2019). In East Asia, umami rich broths prepared with seaweed, fermented sauces, or dried fish embody notions of nourishment, comfort, and wellness (Kawamura, 2017). Beyond cultural patterns, psychological studies confirm that context, presentation, and expectation significantly shape flavor perception. For instance, visual cues, ambient soundscapes, and evocative menu descriptions have been shown to alter perceived taste intensity and hedonic value (Spence, 2015; Piqueras-Fiszman & Spence, 2012). Acknowledging these dimensions provides a smoother conceptual link between cultural taste systems and sensory psychology, highlighting how chefs and menu designers can strategically employ sensory marketing and cultural familiarity to enhance the appeal of healthier dishes without disrupting traditional flavor identities.

1.5 Implications for Menu Design within the Flavor Health Framework

The challenge of reconciling sensory pleasure with nutritional health is both biological and cultural. Evolutionary predispositions orient consumers toward energy dense flavors, while culinary chemistry and gastronomic traditions reinforce these preferences. At the same time, these very mechanisms open pathways for innovation. Empirical research on umami enhancement, texture manipulation, and multisensory framing demonstrates that chefs can amplify flavor intensity and consumer satisfaction without relying excessively on salt, sugar, or fat (Spence & Piqueras-Fiszman, 2014; Mouritsen & Styrbæk, 2017). Case studies from professional kitchens illustrate how umami rich ingredients such as mushrooms, seaweed, or fermented sauces, as well as techniques like layering textures, create indulgent flavor experiences aligned with health goals. Integrating cultural taste anchors ensures that nutrient dense foods are introduced within familiar matrices, making reformulations feel authentic rather than imposed. Furthermore, insights from neurogastronomy and sensory marketing reveal that menu descriptions, visual presentation, and contextual cues can reshape consumer expectations, positioning healthier dishes as pleasurable rather than restrictive (Shepherd, 2012; Spence, 2015).

Together, these strategies highlight how contemporary menu design can operationalize the science and culture of flavor to harmonize indulgence with wellbeing.

2. THE TENSION BETWEEN FLAVOR AND HEALTH
2.1 Flavor as the Primary Driver of Food Choice

Flavor remains the most influential factor guiding food selection, frequently surpassing health concerns, cost, and convenience in shaping consumer decisions (Glanz et al., 1998; Prescott, 2017). Rather than considering nutrient composition or caloric values, individuals typically respond to the hedonic appeal of taste, aroma, and texture. This reliance on sensory pleasure introduces a persistent contradiction within contemporary food systems: public health initiatives prioritize nutrient adequacy and disease prevention, yet the profitability of restaurants and packaged food industries depends largely on maximizing flavor enjoyment. The resulting tension between consumer expectations and nutritional objectives lies at the heart of challenges in food design and policy.

2.2 The Nutritional Burden of Flavor Enhancement

The ingredients most effective at enhancing flavor are frequently those linked to negative health outcomes. Salt intensifies palatability but is a major contributor to hypertension and cardiovascular disease when consumed in excess (He et al, 2020). Sugar provides sweetness and desirable mouthfeel yet is implicated in obesity and type 2 diabetes epidemics (Malik & Hu, 2015). Saturated and trans fats improve texture and richness but elevate risks of dyslipidemia and coronary heart disease (Mozaffarian et al, 2006). These compounds are firmly entrenched in both traditional and contemporary cuisines, which makes efforts at reformulation particularly challenging. The paradox lies in the fact that the very attributes enhancing short-term palatability often contribute to long-term metabolic risks. This tension underscores the need for menu design strategies that balance sensory appeal with nutritional responsibility.

2.3 Psychological Resistance to "Healthy" Foods

Consumer psychology compounds the flavor health tension. Health oriented labeling often triggers perceptions of reduced taste quality, regardless of the actual sensory profile of the food (Raghunathan et al, 2006). Phrases such as "low fat" or "sugar free" may connote blandness or compromise, dissuading consumers from choosing such items. Conversely, indulgent descriptors such as "rich," "creamy," or "decadent" increase taste expectations and willingness to pay, even when the product is nutritionally identical. This phenomenon underscores the symbolic dimension of food choice, where health and flavor operate not only as biochemical realities but also as cultural constructs shaped through language, marketing, and consumer expectations.

2.4 Structural Challenges in Foodservice

In professional kitchens and foodservice establishments, reconciling flavor and health is not solely a matter of ingredient substitution but also of economic and operational feasibility. High quality nutrient dense ingredients such as fresh vegetables, whole grains, and lean proteins may be more costly and perishable compared to processed or high fat options (Drewnowski & Specter, 2004). Menu reformulation thus risks increasing overhead costs or reducing profit margins. Furthermore, chefs often face time constraints and customer pressure, incentivizing the use of flavor enhancers such as butter, salt, and sugar to quickly achieve desired sensory effects. These structural challenges explain why health promoting menu innovation is frequently slow to scale, even when culinary science provides viable alternatives.

2.5 The Dual Imperative in Contemporary Menu Design

Together, these dynamics highlight the dual imperative confronting food professionals: the need to deliver flavors that ensure consumer satisfaction while also fostering dietary patterns that support long-term health. Overlooking health imperatives risks deepening the global burden of noncommunicable diseases, whereas disregarding flavor compromises consumer acceptance and commercial success.

Meeting this challenge requires integrated strategies that move beyond simple nutrient reduction toward approaches that optimize flavor chemistry, draw on cultural eating practices, and incorporate psychological insights to position healthy eating as both pleasurable and indulgent. This integrative lens establishes the basis for the conceptual framework presented in the following section, which maps practical pathways for reconciling flavor with health in menu design.

3. CONCEPTUAL FRAMEWORK FOR BALANCING FLAVOR AND HEALTH

3.1 Purpose of the Framework

The complexity of reconciling flavor and health requires more than isolated strategies such as ingredient substitution or consumer education. A unifying conceptual framework is needed to integrate insights from food chemistry, sensory science, consumer psychology, cultural gastronomy, and public health policy. The model proposed here conceptualizes flavor and health not as binary opposites but as overlapping domains that can be harmonized through deliberate design choices. It positions menu design as a dynamic process shaped by biological predispositions, cultural traditions, economic realities, and evolving health priorities.

3.2 Core Dimensions of the Model

The conceptual framework proposed in this chapter rests on four interrelated dimensions biochemical, psychological and cultural, economic and operational, and policy and health. Together, they provide a multidimensional lens for understanding how flavor and health can be harmonized in food design, culinary practice, and dietary innovation. Each dimension contributes unique explanatory power, but their strength lies in integration.

Biochemical Dimension

At its foundation, the flavor health nexus is mediated by the molecular and physiological processes that govern sensory perception. Flavor is not a singular input but a composite of gustatory, olfactory, and somatosensory cues processed through complex neural pathways (Prescott, 2012).

The gustatory system detects five primary tastes sweet, sour, salty, bitter, and umami while olfaction contributes thousands of volatile aromatic signatures that enrich the culinary experience. Texture, temperature, and chemesthetic sensations (e.g., pungency from capsaicin or cooling from menthol) further shape the hedonic profile of food.

From a culinary science perspective, biochemical processes such as the Maillard reaction, caramelization, and lipid oxidation are central to flavor development (Mottram, 1998). These processes generate compounds that intensify palatability but can also introduce nutritional trade-offs, such as acrylamide formation or excess reliance on refined sugars and fats (Nursten, 2005). A health sensitive approach thus requires leveraging biochemical tools to maximize flavor without exacerbating risk. Strategies include enhancing umami through glutamates and nucleotides, applying fermentation to increase depth of taste, or deploying salt enhancers to reduce sodium without compromising palatability (Mouritsen & Styrbæk, 2014).

The biochemical dimension is thus not limited to molecular mechanics but extends to their practical application in designing foods that are simultaneously health-promoting and sensorially appealing. Knowledge of processes such as the Maillard reaction, caramelization, and lipid oxidation provides a scientific basis for tailoring flavor while moderating harmful by-products (Mottram, 1998; Martins et al., 2001; Patel et al., 2021). In this context, the capacity to "engineer flavor" responsibly emerges as a critical strategy for reconciling the enjoyment of taste with the imperatives of nutritional well-being (Spence, 2020; van der Heijden et al., 2022).

Psychological and Cultural Dimension

While biochemical processes establish the material basis of flavor, they are interpreted through the psychological and cultural filters that give food meaning. Taste preferences are shaped by early-life exposures, familial practices, and cultural narratives that assign symbolic value to food (Rozin, 2006). Sweetness may universally signal energy, but the degree of tolerance for bitterness, sourness, or spiciness is often culturally conditioned (Prescott, 2017; Rozin, 1996).

For example, Nigerian cuisines valorize pungency and bitterness in dishes prepared with *Vernonia amygdalina* (bitter leaf) (Farombi & Owoeye, 2011; Oboh, 2006), while Japanese food culture elevates umami as a marker of authenticity and depth (Ikeda, 2002; Kumazawa & Kurihara, 2010).

At the psychological level, food choice is influenced by memory, expectation, and hedonic response. Sensory marketing research shows that descriptive menu language, cultural familiarity, and emotional framing significantly increase acceptance of reformulated dishes (Wansink et al., 2005). Thus, even nutritionally improved options require cultural resonance to achieve adoption (Rozin, 2007; van der Heijden et al., 2022). A low sodium soup framed as "heritage broth" rooted in traditional cooking may be more acceptable than the same product marketed with overt health claims.

This dimension underscores that reformulation cannot succeed by chemistry alone. For flavor health strategies to thrive, they must align with identity, tradition, and cultural pride, ensuring that consumers perceive them not as restrictions but as continuations of valued food practices.

Economic and Operational Dimension

Efforts to innovate at the intersection of flavor and health are inevitably shaped by the economic and operational realities of both household food systems and professional kitchens. Ingredient cost, supply chain stability, workforce training, and pricing strategies all determine whether reformulations are sustainable in practice. While the inclusion of premium superfoods or rare spices may enhance nutritional value, such substitutions often prove economically unviable, especially in resource-constrained settings. By contrast, leveraging culturally familiar, locally available staples such as legumes, millet, and fermented grains supports both affordability and dietary continuity (FAO, 2019; WHO, 2020).

Operational feasibility extends beyond ingredient costs to encompass workflow efficiency. Restaurants, catering operations, and institutional kitchens require reformulations that integrate seamlessly into existing preparation routines without adding undue complexity or waste.

Staff training for new culinary practices such as controlled fermentation, low-oil cooking, or portion redesign demands time and financial investment, which must be carefully balanced against profit margins (Drewnowski, 2018; Traynor et al., 2020). In this way, operational pragmatism becomes central rather than peripheral to the implementation of flavor–health strategies.

At the same time, food industry actors operate within competitive market dynamics where consumer demand, branding opportunities, and pricing parity shape adoption. Products and menus that successfully align health benefits with pleasurable flavor, while maintaining affordability, are more likely to achieve market penetration than those requiring significant trade-offs (Spence, 2020; van der Heijden et al., 2022). This economic and operational dimension underscores the necessity of embedding culinary innovations within viable, culturally resonant, and economically sustainable models.

Policy and Health Dimension

Flavor health strategies operate within the broader architecture of nutrition policy, regulatory frameworks, and public health initiatives. In response to the global rise in obesity and diet related noncommunicable diseases, governments worldwide have enacted measures such as trans-fat bans, sugar sweetened beverage taxes, and front of pack nutrition labeling (WHO, 2018; Taillie et al., 2020). These interventions simultaneously constrain and incentivize innovation among food producers and service providers.

For instance, sugar taxes have encouraged beverage manufacturers to reformulate with nonnutritive sweeteners and natural flavor enhancers, while mandatory calorie and nutrient labeling in restaurants has increased transparency and consumer awareness (Bleich et al., 2017). Likewise, sustainability goals such as policies advocating reduced red meat consumption to mitigate environmental impacts reinforce reformulation strategies that highlight plant based proteins and diversify protein sources (Springmann et al., 2018).

The policy dimension therefore functions as both an external driver and a legitimizing force.

Foodservice establishments that anticipate regulatory shifts and proactively align menu design with evolving public health priorities can position themselves as socially responsible actors, strengthening consumer trust and securing long term competitive advantage.

3.3 Integrative Intersections

The model gains explanatory power not from its individual dimensions but from the ways they intersect. These intersections highlight the synergies and tensions that emerge when multiple forces converge.

- **Biochemical Psychological Intersection:** Molecular innovation (e.g., umami enhancers) achieves uptake when paired with framing strategies that appeal to memory, tradition, or novelty. A sodium-reduced broth that leverages glutamates succeeds when framed as "authentic" rather than "health improved."
- **Psychological Cultural Economic Intersection:** Culturally familiar substitutions, such as replacing imported wheat with local sorghum in Nigeria, not only reduce costs but also maintain trust and continuity.
- **Policy Economic Intersection:** Compliance with sodium reduction targets or trans-fat bans can be reframed as branding opportunities when marketed as evidence of responsibility and innovation.

By analyzing these intersections, the framework emphasizes that balancing flavor and health requires dynamic negotiation across multiple domains rather than linear solutions.

3.4 Visualizing the Model

The framework can be visualized as a four circle Venn diagram, with the dimensions of biochemistry, psychology and culture, economics, and policy overlapping around a central zone labeled Flavor Health Synergy. Each overlapping area represents practical strategies: biochemical innovation, cultural adaptation, operational feasibility, and policy alignment.

This visualization reinforces two insights. First, flavor and health are not opposing poles but dynamic variables mediated by multiple interacting forces.

Second, the most successful interventions occur at the center where all dimensions align where food is palatable, culturally resonant, economically viable, and policy compliant.

3.5 Application of the Framework

In practice, the framework functions as both an analytic tool and a strategic guide. It allows researchers, policy makers, chefs, and food industry actors to map interventions across dimensions and anticipate points of friction or synergy.

- **Umami based salt reduction:** Demonstrates the biochemical and psychological dimensions, showing how molecular mechanisms of flavor can be harnessed alongside consumer acceptance strategies.
- **Nigerian vegetablevenriched stews:** Illustrate cultural and economic alignment, using local crops to balance health with affordability.
- **Sugar tax and beverage reformulation:** Highlight the policy economic dimension, showing how regulatory pressure drives innovation that can also create competitive advantage.

By situating these case studies within the framework, the chapter moves beyond descriptive accounts to offer a systematic model for evaluating and designing interventions. This model is adaptable across contexts, scalable from households to institutions, and sensitive to the interplay of molecular science, cultural meaning, economic logic, and policy imperatives.

4. CASE STUDIES AND APPLIED STRATEGIES

The conceptual framework outlined above gains explanatory power when applied to real-world contexts where the interplay between flavor, health, and cultural identity is negotiated in tangible ways. Case studies illustrate how culinary systems, policies, and innovations attempt to reconcile the apparent tension between palatability and health imperatives. The following section examines applied strategies across four domains traditional cuisines, public health interventions, food industry innovation, and consumer driven practices while demonstrating how these align with the proposed tripartite model.

Traditional Cuisines as Embedded Strategies

Traditional food cultures demonstrate how health and flavor can be seamlessly integrated through ecological adaptation and cultural knowledge. The Mediterranean diet, for instance, emphasizes the use of olive oil and aromatic herbs such as oregano, basil, and rosemary, enhancing palatability while reducing dependence on saturated fats (Bach-Faig et al., 2011). Likewise, Nigerian savanna cuisines combine spices like ginger and cloves, valued for both flavor and antimicrobial properties, with legumes and starchy staples that sustain energy balance (Oloyede et al., 2021). In these traditions, flavor and health are not competing objectives but complementary outcomes achieved through culinary heritage passed across generations. This underscores the cultural foundation of the framework, where practices of taste inherently serve nutritional and health goals.

Public Health Campaigns and Policy Interventions

Governments and international agencies have attempted to address the health–flavor tension by promoting dietary guidelines that minimize sugar, salt, and fat intake. However, many initiatives fail when they neglect the sensory satisfaction consumers demand (Nestle, 2013). More recent programs, such as the United Kingdom's sugar reduction reformulation strategy, demonstrate greater success by coupling gradual ingredient modification with culinary innovation, ensuring flavor continuity even as health metrics improve (Public Health England, 2020). These examples highlight the institutional pillar of the framework, where policy must be harmonized with cultural taste expectations to reduce consumer resistance and foster long-term adoption.

Food Industry Innovation

The food industry occupies a pivotal role in reconciling flavor and health, often leveraging advances in sensory science and food technology. Strategies include the use of natural flavor enhancers such as umami-rich compounds, fat mimetics, and plant based protein texturizers (Mouritsen & Styrbæk, 2014). For instance, Japanese food technology has pioneered the integration of kombu derived glutamates to reduce sodium while maintaining savory depth.

Similarly, Nigerian beverage companies have developed malt drinks enriched with vitamins and herbs, marketed as both flavorful and health-promoting (Oshodi et al., 2020). These illustrate the economic pillar of the framework, where market innovation mediates between consumer desire and nutritional imperatives.

Consumer Driven Culinary Practices

At the individual level, consumers increasingly experiment with strategies such as "flavor layering" with spices, the use of plant-based proteins, or "mindful eating" practices that emphasize savoring flavors while reducing portion sizes (Rozin, 2006; Cohen & Farley, 2008). Food bloggers, chefs, and influencers promote recipes that replace cream with avocado or sugar with dates, illustrating a bottom-up movement where culinary creativity addresses the health flavor dialectic. These practices embody the agency dimension of the framework, where consumers and communities co-produce solutions aligned with both health goals and taste satisfaction.

Synthesis and Implications

Taken together, these case studies underscore that balancing flavor and health requires multilevel strategies spanning cultural continuity, policy design, industrial innovation, and individual creativity. The unifying model finds practical expression in these examples: traditional cuisines illustrate cultural embedding, policy interventions highlight institutional negotiation, industry innovation demonstrates economic adaptation, and consumer practices reflect personal agency. Such an integrated reading suggests that the health flavor tension is best addressed not by framing flavor as an obstacle to health but by recognizing it as a cultural and sensory bridge toward sustainable dietary change.

Comparative Mapping of Case Studies to the Conceptual Framework

To further clarify the relationship between practice and theory, Table 1 maps each case study onto the pillars of the proposed conceptual framework.

This comparative view demonstrates how different domains operationalize cultural, institutional, economic, and agency dimensions in balancing flavor and health.

Table 1. Comparative mapping of flavor health strategies to the conceptual framework

Case Study Domain	Cultural Pillar (Taste Tradition Nexus)	Institutional Pillar (Policy & Governance)	Economic Pillar (Market & Innovation)	Agency Dimension (Individual & Community Action)
Traditional Cuisines	Embedded use of herbs, spices, and culinary wisdom linking flavor and wellness (e.g., Mediterranean, Nigerian savanna cuisines)	Indirect, through food culture recognition in national dietary guidelines	Minimal direct role, except in local food economies	Strong: intergenerational transmission of knowledge and daily cooking practices
Public Health Interventions	Often underutilized; cultural taste preferences can clash with "top down" reforms	Central role through guidelines, taxes, and reformulation mandates (e.g., UK sugar strategy)	Moderate: food manufacturers adapt to policy pressures	Weak moderate: compliance varies, cultural resistance possible
Food Industry Innovation	Leveraging umami, natural enhancers, and plant-based substitutes to align with flavor traditions	Indirect: shaped by regulation (labeling, reformulation)	Strongest role: R&D, product design, branding for health and taste	oderate: consumer uptake depends on trust and affordability
Consumer Culinary Practices	High: reworking traditional recipes with modern health ideals (e.g., sugar swaps, portion control)	Minimal: few formal institutional drivers	Low moderate: adoption often outside corporate structures	Strongest: individual creativity, social media influence, grassroots food movements

This table strengthens the analytical link between the unifying model and applied realities, showing that successful strategies often emerge when multiple pillars are activated simultaneously (e.g., Mediterranean diet aligns cultural and agency pillars, UK sugar reduction aligns institutional and economic pillars).

Expanded Discussion of Comparative Mapping

The comparative mapping presented in Table 1 underscores that balancing flavor and health is neither a uniform process nor a purely technical one. Instead, it is mediated by different configurations of cultural, institutional, economic, and agency driven forces. Examining these case studies comparatively highlights several critical insights.

First, cultural embedding is a consistent anchor across strategies; Traditional cuisines demonstrate how flavor and health can be seamlessly interwoven when culinary practices are guided by ecological knowledge and intergenerational transmission. This is evident in the widespread acceptance of Mediterranean dietary principles and in the Nigerian savanna's reliance on spice-herb combinations that enhance palatability while delivering pharmacological benefits. Even consumer-driven practices, such as recipe adaptation or mindful eating, show how cultural values and sensory expectations shape dietary decisions. This highlights that interventions which neglect cultural taste traditions often risk rejection, regardless of their scientific merit.

Second, institutional interventions function most effectively when attuned to cultural and economic realities; Public health reforms that adopt abrupt or prescriptive measures often face resistance because they fail to accommodate entrenched sensory preferences. By contrast, policies that pursue gradual reformulation (as in the UK sugar reduction strategy) or actively engage with culinary heritage have greater chances of success. Institutions, therefore, act not only as regulators but also as cultural translators, tasked with aligning public health goals with local foodways.

Third, the economic pillar emerges as both a constraint and an enabler; The food industry's capacity for innovation makes it a central player in harmonizing flavor and health. Advances in flavor science such as umami intensifiers, fat mimetics, and plant based texturizers demonstrate the economic system's responsiveness to both regulatory pressures and consumer demand. However, affordability and accessibility remain pressing concerns, particularly in low- and middle-income settings, where healthier but reformulated products often carry higher price tags. Without economic alignment, even the most culturally resonant and institutionally supported initiatives risk limited uptake.

Fourth, agency at the individual and community level is indispensable for sustainability; Consumers are not passive recipients of food systems but active agents experimenting with new culinary strategies. From household recipe adjustments to the rise of grassroots food movements on digital platforms, agency provides the micro-level dynamism that ensures health conscious practices gain traction. Importantly, consumer driven innovations often feed back into industry trends and policy shifts, creating a cyclical influence within the broader system.

Finally, the comparative synthesis reveals the importance of activating multiple pillars simultaneously; Single pillar interventions tend to be fragile: policies without cultural resonance fail, industry innovations without affordability stall, and consumer agency without institutional support lacks scale. The most effective strategies emerge when cultural traditions, institutional policies, economic innovations, and individual agency converge. This multi-pillar synergy reflects the strength of the proposed conceptual framework, positioning flavor not as an obstacle to health but as a bridge for sustainable dietary transformation.

The comparative insights outlined above point toward a larger synthesis: efforts to balance flavor and health cannot be reduced to isolated interventions but require the alignment of cultural, institutional, economic, and individual forces. This recognition underscores the value of a unifying conceptual framework that treats flavor not as an adversary of health but as a mediator of sustainable dietary change. Having examined the foundations, tensions, and applied strategies through case studies, the next step is to reflect on the broader implications.

The conclusion therefore draws together these strands, highlighting differentiated contributions, outlining future trajectories, and proposing how the model can inform research, policy, and practice in global and local contexts.

5. LIMITATIONS

Despite these contributions, the study is not without limitations. First, the analysis relies primarily on secondary literature and illustrative case studies, which provide conceptual depth but lack the granularity of ethnographic or clinical data. Empirical validation of the proposed framework through large-scale, cross-cultural studies remains necessary. Second, while examples were drawn from diverse contexts including Mediterranean, Nigerian, and Japanese culinary systems the selection is not exhaustive and may not fully capture the variety of global food practices. Third, the framework emphasizes cultural, institutional, economic, and agency dimensions, yet environmental and technological factors such as climate change, agricultural practices, or digital food platforms were only partially addressed. Finally, the study prioritizes the interplay of flavor and health at a conceptual level, leaving open the question of how these dynamics unfold in everyday practices shaped by socioeconomic inequities and structural determinants of health. These limitations do not undermine the central argument but rather point to avenues for further empirical and interdisciplinary investigation.

6. FUTURE DIRECTIONS

Future directions follow logically from these contributions. Scholars may deepen the empirical base of the framework by conducting cross cultural comparative studies that test its applicability beyond the Mediterranean, Nigerian, or Japanese contexts explored here. Policy makers are encouraged to design interventions that integrate sensory science with public health goals, ensuring that reformulations are both nutritionally sound and palatably acceptable. Industry actors should prioritize inclusive innovation by investing in affordable flavor health solutions, particularly in resource limited settings. At the community level, there is a need for educational initiatives that empower consumers with the skills to creatively adapt recipes without compromising either taste or well-being.

Looking ahead, three trends stand out as especially promising. The first is the rise of precision nutrition, where genomic and metabolomic data can inform personalized diets that optimize both flavor satisfaction and health outcomes. The second is the growing interest in sustainable food systems, where plant-based proteins, climate resilient crops, and indigenous food ways are likely to reshape how flavor and health are balanced. The third is the digital mediation of culinary culture, as social media, artificial intelligence, and online communities accelerate the dissemination of flavor health strategies across diverse populations.

In conclusion, addressing the tension between flavor and health requires a multi-pillar strategy that activates cultural, institutional, economic, and agency dimensions simultaneously. The proposed conceptual framework offers one pathway for aligning these domains, but its real value lies in its adaptability to diverse contexts and scales. By embracing flavor as a partner rather than a rival to health, researchers, policy makers, industry leaders, and consumers alike can contribute to the creation of food systems that are not only nutritionally adequate but also culturally resonant and sensorially rewarding.

CONCLUSION

The analysis undertaken in this study highlights that the tension between flavor and health is neither inevitable nor insurmountable. Rather, it is a socially constructed dilemma shaped by cultural expectations, institutional policies, economic structures, and individual agency. The expanded conceptual framework developed here reframes flavor not as an obstacle to health but as a cultural and sensory bridge toward sustainable dietary transformation. By situating flavor at the center of dietary discourse, this framework provides a more holistic approach to understanding how food systems evolve in response to competing pressures. Several differentiated contributions emerge from this inquiry. First, it demonstrates that traditional cuisines are repositories of wisdom in which flavor and health are mutually reinforcing, a finding that challenges the binary framing often seen in nutritional science. Second, it underscores the limitations of policy interventions that neglect cultural tastes, while highlighting the potential of gradual reformulation strategies that respect consumer palates.

Third, it draws attention to the food industry's dual role as innovator and gatekeeper, showing both the promise of technological advances in flavor science and the risks of inequity posed by cost barriers. Finally, it foregrounds consumer agency as a critical driver of sustainable change, reminding us that individual practices can scale into broader systemic shifts. Together, these insights clarify the distinctiveness of the framework and its contribution to advancing scholarship at the intersection of flavor, health, and food systems.

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CHAPTER 8

BOTANICAL COMPOSITION OF GBANUNU: AN ETHNOBOTANICAL STUDY OF A TRADITIONAL ONDO, NIGERIA SOUP

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INTRODUCTION

Indigenous Ethno Botanical Knowledge

The usage of plants for various purposes by indigenous or local
communities comprises of traditional ethno botanical knowledge (Kumar et al.,
2021). There had been a long history of the use of plants for foods, shelter,
medicine, decorations, constructions and clothing by indigenous and local
communities. These constitute the indigenous knowledge of ethno botanicals.
They were passed from one generation to the other orally. Luo et al. (2024)
noted that plants serve as foods for ethnic groups and communities i.e. means
of sustenance during faming to ensure food security. They further pointed out
the need for their study, conservation and the traditional knowledge associated
with them because this will help us to understand and utilize the biodiversity.
The uses of whole plants and or parts of the plant for food, health maintenance,
and treatment of ailments by communities constitute the indigenous knowledge
of an area.

Traditional or indigenous ethno botanical knowledge gives insight into
the use of plants by a group of people. The group is delineated by boundaries
which separate them from other groups, having common or similar language
and culture as well close ancestral origins. Foods commonly consumed by well
delineated groups are called traditional foods or diets.

Traditional Food Systems

Traditional food systems are place based food systems where foods are
sourced from the surrounding natural environment. Kumar et al. (2021)
characterized traditional foods as those grown and consumed locally, suited to
local ecosystems, easily available, not affected by the global physical
disruptions; less exposed to external shocks, least affected by general inflation,
increase in price do not affect their availability and relatively cheap. Luo et al.
(2019) described traditional food as place based, procured from the natural
environment and are part of cultural heritage and are linked with identity and
health of the people.

GASTRONOMY HERITAGE, HEALTH ORIENTATIONS, AND EVOLVING FOOD CULTURES: PERSPECTIVES IN GASTRONOMY RESEARCH

Traditional foods are those associated with a particular culture, consumed and handed down from generation to generation via knowledge, techniques in preparation and the choice of their materials that are used which are locally sourced (Kristbergsson and Oliveria, 2016; Rocillo-Aquino *et al.*, 2021). These are foods consumed by indigenous communities which have history of uses and preparations. Inta et al. (2025) noted that for a product to be described as traditional it must be tied to a territory, and part of the tradition, continuing over time, and the species preserve families, local traditions and add variety to the daily diets. They contribute and will continue to contribute to food security, nutrition and health in communities. Prevention of diseases and promotion of health are crucial aspects of traditional food systems. Traditional food systems support economic dimension of sustainability by providing a non-market source of diverse food without financial cost (Luo et al., 2024).

Traditional foods are associated with balanced diets and dietary health, cultural integrity and resilient agriculture (Deaconu, et al., 2021). According to Ghosh et al. (2023) traditional food provide a sustainable nutritious and culturally rich path towards a future where everyone has access to the nourishment that are required for healthy and fulfilling life.

Traditional Food and Cultural Identity

Ejueyetsi et al. (2022) noted that traditional foods serve as symbol of heritage, trademark; important to cultural identities and ethnic groups; originated from a bioregion and the use is concurrent to introduced foods. According to Amodu et al. 2024 traditional dishes are ancient and deeply ingrained in African culture. Ghosh et al. (2023) noted that foods are not just for sustenance; they carry with them stories and memories and also create a sense of belonging. Ghosh et al. (2023) further pointed out that traditional foods are rooted in centuries of culinary traditions and hold a special place in the cultural fabric of societies across the globe. They are deeply embedded in the customs, rituals and histories of communities which pass down their knowledge from one generation to the next. Traditional foods are characterized by their diversity, locally adapted ingredients unique preparation methods, making them a treasure trove of culinary heritage.

Hussain et al. (2023) noted that biological and ethno-botanical diversity has resulted in rich bio-cultural heritage and ethno-botanical knowledge. Inta et al. (2025) pointed that traditional foods play the cultural roles i.e. part of rituals and daily lives of members of the community. Stalline (2024) reported that indigenous foods are not only a source of nutrition but also a living legacy of cultural identity, environmental stewardship and traditional knowledge.

Traditional Foods and Health

Traditional food system according to Ding et al. (2022) is a safety buffer providing the indigenous people with natural energy source and extra nutrition in daily life against the consequences caused by disasters. According to Deaconu et al. (2021) traditional food are associated with balance diet, dietary health, cultural integrity and resilient agricultural systems. Plants are rich in phytonutrients, minerals, phytochemicals; these contribute to the high antioxidant properties of most of them. Based on these constituents, traditional foods which are plant based have been successfully used in disease prevention and treatment. Ghosh et al. (2023) noted that traditional foods provide access to sustainable nutritious meals that ensure healthy and fulfilling lives. Liu et al. (2019) reported that most indigenous communities responded to food and medicinal shortages during the Covid-19 pandemic by depending on traditional foods because they believed that plant sourced foods help to resist virus and boost immunity.

Traditional Soups

Soups are the basis of nutrition in different cultures and societies. Soup is a liquid food made from the combination of meat or fish, vegetables and seasonings. Soups add varieties and improve the nutritional value associated with the monotony of starchy foods in most African countries (Omah et al., 2015; Lawal et al., 2018). Otolowo et al. (2023) described traditional soups as local soups, indigenous, and associated with a particular ethnic and cultural society especially in the mode of preparation and are linked to a territory, historical depth and constellation of associated knowledge, meanings, values and practices (Obi and Davidson, 2022).

Soups have religious, cultural and medicinal uses. The use of soups for their medicinal or therapeutic values resulted from their rich constituents of phytochemicals (Mustapha, 2018; Gbadamosi and Kalejaye, 2020). Maseko et al. (2018) pointed out that soup is a whole meal which offers sustainable means of mixing several food ingredients to give dietary diversity with unique flavour, taste and aroma. Luo et al. (2019) described the preparation and consumption of the most typical dish made of medicinal plants for health promotion and disease prevention and management by the Hakka people of China. Plants used included shrubs, trees, herbs and plant parts used are roots, stems, leaves, flowers, seeds, rhizomes, stem pith and whole plants. The soup is consumed in households and also supplied to restaurants (Ding et al., 2022). Ding et al. (2022) described the soup as safe, effective for the treatment of ailments and important feature of Hakka dietary culture.

Nigeria consists of diverse cultural societies with different traditional soups which are indigenous to different ethnic groups and tribes (Tchokouaha et al. 2015; Otolowo *et al.*, 2023).). In Nigeria, there are varieties of traditional soups as there are tribes. Ahaotu and Jim (2022) noted that traditional soups are integral part of different ethnic cultures in Nigeria and that they also provide good supplies of minerals, vitamins, proximate constituents which contribute to healthy living and disease prevention. They further listed soups belonging to different ethnic groups in Nigeria; ukashi (associated with three ethnic groups namely, Ogba, Edema and Ndomi in River State; Afang (consumed by Ibos) and Okasi consumed by the Efik. Rocillo-Aquino *et al.* (2021) noted that traditional soups are the basis of nutrition in our cultural societies. Olugbuyi et al. (2023) reported that plants that are precursors of traditional soups contain valuable nutritional properties, antioxidant activities and therapeutic values. Ogwu et al. (2024) reported that in Afenmai land of Southern Nigeria, roots, leaves, stems or other plants parts are used for household consumption and economic and medicinal uses. Oluwajuyigbe and Ige (2025) noted that leaves, fruits, seeds, roots, bulbs, barks are used in preparing soups for fertility and delivery enhancement.

Traditional soups are frequently explored because their constituents are inexpensive as most of them are sourced from the neighborhood (wild in waste places), cultivated in home gardens or farms.

The plant constituents of traditional soups are available all the year round making traditional soups easily accessible to consumers. Nigerian foods vary significantly from region to region and consist of grains and starchy staples (Petrikova et al., 2023) food recipes of local plants differ from village to village as the same plant can be cooked in different ways (Hussain et al., 2023). The sauce or the soup is made from a number of ingredients such as tomatoes, pepper, onions and other vegetables. Traditional soups include ewedu (jute mellow soup), efo riro (cooked vegetable made from spinach), mujan kuka (stew with dried baobab leaves and edikang ikong (made of fluted pumpkin with water leaf).The use of plants varies with each locality and constitutes part of the local or indigenous knowledge.

There has been gradual increase of interest with respect to the use of various plants in the preparation of soups and foods because of their good medicinal properties (Ifesan *et al*. 2021). The interest in traditional food has been sustained over the years because they are indigenous, dynamically integrated into the local agricultural system and regional food culture and well accepted. Having the understanding of the variability and peculiarity of plants use in traditional soups within a given historical context, cultural society, and process is very important. Olanipekun et al. (2022) pointed out that the knowledge and experience of the indigenous people in the successful use of plants are yet to be validated and well documented. Mbhenyane (2017) and Gilbetic et al. (2018) suggested that documentation of information is important for sustenance indigenous knowledge. Stalline (2024) pointed out the need to revitalize and preserve indigenous foods because they are more resilient, sustainable system than the modern food system that are facing the challenges of climate change, resource depletion and health crises.

However the traditional food systems are faced with a number of challenges:

1. Competition with other food systems (imported/ continental dishes). Despite the increasing interest in traditional food by the older folks, the younger generations are largely dependent on canned foods or continental dishes.

2. Loss of plant diversity: we are rapidly losing these plants to monoculture which alters or disrupts the ecosystem and the use of chemical herbicides resulting in their loss.

3. Plants from which traditional foods are derived receive poor attention from research activities and development. The poor attention given to this group of plants has contributed to poor understanding of their dynamics.

These call for urgent attention with regards to traditional foods because of the roles they play in different communities.

'Gbanunu' meaning stomach washer or detoxifier is a traditional soup that cleanses the stomach and the intestines of unwanted materials. It is often translated as Black soup in Nigeria due to the dark colour from chlorophyll contents of the component botanicals. 'Gbanunu' is associated with the people of Ondo and its environs and consumed by indigenes and non-indigenes. It is often used in households as part of daily diet and consumed whenever people feel stressed or feverish or recovering from illness. Documented information on Gbanunu soup is very limited except for a few online resources. Mustapha (2018) reported that 'Gbanunu' is consumed in Okitipupa, Akoko and Okeigbo in Ondo State for the treatment of postpartum hemorrhage and constipation.

Consumption of 'Gbanunu' increases whenever there is scanty and exorbitant cost of tomatoes, pepper and onions; families resort to cooking 'Gbanunu' because of fewer requirements for the culinary; less of tomatoes, pepper and onions. The soup serves as means to food security in many families during lean periods. 'Gbanunu' though well accepted and consumed in the area but the botanical composition varies from individuals, families and communities. The soup is important because it is cheap, easily accessed, tasty, nutritious, medicinal and therapeutic. Use of herbicides in most farms resulted in plants loss and some contaminated, over exploration by gatherers is leading to diminishing resources as well as disturbance of their habitats. These challenges have contributed to scarcity of some plant species that are needed for the soup or incomplete ingredients and the lack of these ingredients may reduce the efficacy of the soup as well as the flavor and the taste. Presently the ethno botanical knowledge of the soup is not available.

Access to the Ethno botanical knowledge will fill the knowledge gaps about traditional soup in the study area and create opportunities for research on the botanicals. This study will also explore need for conservation of the botanicals. A comprehensive lists of plants used for this soup are yet to be documented and the ethno botanical information of users/consumers is unavailable, thus the need for the study. This information will be needed for biodiversity identification and conservation in the area of study.

Therefore, the aims of this study are to: Collect and carry out a comprehensive identification; explore the cultural significance of 'Gbanunu' and documentation of botanicals that are used in 'Gbanunu' preparation in the study area.

1. MATERIALS AND METHODS

Sampling Procedure and Data Collection

This research was carried out between November 2024 and March, 2025. Multi-stage sampling technique was used.

1. The first stage is the purposive selection of towns.
2. The second stage is the selection of eight towns per senatorial district. This was done by balloting. All the towns in the senatorial districts were written on pieces of paper, rolled and put in ballot boxes and eight persons were asked to pick from the boxes. Towns that were picked were written down as places where the survey was carried out.
3. The third stage is the random selection of 100 respondents in each of the towns in the senatorial districts. One hundred well-structured questionnaires were taken to each community and were administered randomly to matured males and females in the communities. Visits were made to these areas between 4.00 and 6.00 p.m. on the day of visit. This is to cater for respondents who would have been in their places work all day or market/shops.

Semi Structured Interviews

This was divided into five sections which were:

1. Back ground information and preparation- experience with 'Gbanunu' soup, , frequency of preparation, main ingredients,
2. Botanical composition- what are the plants and plant parts used (leaves, stems, roots, flowers, seeds); how do you identify them, their local names, specific plants used, combinations, and proportions.
3. Ethno-botanical significance- what are the cultural of traditional significance of 'Gbanunu'; how is the soup prepared for special occasions; what are the medicinal benefits of the soup.
4. Plant sourcing and availability- where do you source the plants for 'Gbanunu' (wild, cultivated markets and are changes in the availability of the plants or use of plants for 'Gbanunu'.
5. Knowledge transmission: how is the knowledge of the botanical components and the preparation transmitted, are there being attempt to document or preserve the traditional knowledge and practices of 'Gbanunu' and could this information be preserved for future generations.

Ethno Botanical Survey

Well-structured questionnaires were distributed to each respondent to answer but in situations where the respondents found it difficult to understand or figure out the question, it was interpreted in Yoruba language or in the dialect of the area or Pidgin English where the respondents are non-Yoruba. In some situations, the respondents were assisted to put their responses down. Survey assistants who are well versed in local knowledge of each of the areas were employed. Information was also be derived from the Community heads and head of households.

Plant Collection and Identification

With the assistance of the local people plants were collected and identified using local names or Yoruba. The botanical names and families were determined using books such as Flora of West Tropical Africa (Hutchinson and Dalziel, 1958); Vernacular names of Nigerian plants (Gbile 1984);

A Handbook of West African Weeds (Akobundu and Agyakwa, 1998); The Useful Plants of West Tropical Africa (Burkill, 2000), Outline and pictures of medicinal plants from Nigeria (Odugbemi and Akinsulire 2006) and online apps. The researchers' knowledge of botanicals also played significant role in plant identification.

Herbarium samples of the plants collected was made and stored appropriately.

2. DATA ANALYSIS

Data collected were analyzed using simple descriptive statistics; frequency and percentage frequency.

2.1 Results

Study Areas

The communities constituting the Senatorial districts of Ondo State Nigeria were located in the Forest zone of Nigeria. The communities are majorly rural and there is high dependence on plant products. The people of the area of study speak Ondo dialect with variation among the localities. Areas of study were part of Ondo Province, Nigeria. Use of common dialect despite is variations and use nearly the same botanicals showed that these areas are likely to have a common origin. This is in line with the assertion of Obi and Davidson (2022) that traditional soups are linked to a territory, historical depth and constellation of associated knowledge, meanings, values and practices.

Results are presented in Tables 1-5. Table 1 showed the social economic parameter with most of the respondents being females (64.1%); the women between 65-70 years (30.95%); married (54.96%); Christians (66.91%); civil servants made of 50. 91% of the respondents; qualification of most respondents was B.Sc./HND (26.89%). Most families were nuclear (52.83%) and household size was majorly 1-5 members (56.77%).

Table 1: Socio economic profile of respondents

Socio economic Parameters	Frequency	Percentages%
Gender		
Male	336	35.9
Female	601	64.1
Total	937	100
Age		
20-34	150	16.01
35-49	206	21.99
50-64	262	27.96
65- 70	290	30.95
>71	29	3.09
Total	937	100
Religion		
Christianity	627	66.91
Islam	300	32.02
Traditional	10	1.07
Total	937	100
Marital status		
Single	287	30.63
Married	515	54.96
Divorced	40	4.27
widowed	68	7.26
separated	27	2.88
Total	937	100
Occupation		
Farming	143	15.26
Artisans	121	12.91
Traders	196	20.92
Civil servants	477	50.91
Total	937	100
House Size range		
1-5	532	56.77
6-10	281	30
11-15	112	11.95
15 and above	12	1.28
Total	937	100%
Family type		
Nuclear	495	52.83
Polygamy	307	32.76
Extended family (living with other members of the family)	135	14.41
Total	937	100
Qualification		
Primary Certificate	158	16.86

O' Level / G.C.E	171	18.25
Grade II	103	10.99
N.C.E	227	24.23
HND/B.SC/B.ED	252	26.89
M.SC/M.A/M.ED	26	2.78
Total	100	100%

Source: Field survey, January 2025.

The study showed that majority of the women is between 35 - 70 years, retailers, civil servants, neighborhood petty traders and public servants. The soup cuts across socio-economic groups and consumed by indigenes and non-indigenes. Table 2 showed the uses of the soup. The use as party delicacy had the highest frequency (95. 94%), followed by as detoxifier (91.99%) while postpartum treatment for new mothers (86.98%); used during recuperating from illness (71.93); used as appetizer (86.66%0; as pepper soup (67.98%) while its use for malaria treatment was 42.90%.

Table 2: Respondents' perception of the uses of 'Gbanunu' soup

Uses	Frequency	Percentage frequency
Postpartum	815	86.98
Detoxifier	862	91.99
Malaria treatment	402	42.90
Pepper soup	637	67.98
Party delicacies	899	95.94
For recuperating after sickness	674	71.93
Appetizers	812	86.66

Multiple choices allowed
Source: Field survey, January 2025.

The important and commonly used plants are listed in Table 3. *Clerodendron volubile, Piper guinensis, Ocimum bacillicum, Ocimum gratisissmum, Euphorbia hirta, Ageratum conyzoides and Curcuma longa* were noted by the respondents as the major plants used for the soup. Others were considered additions and that if they are not available they can still go ahead with the making of 'Gbanunu'.

The presence of the additional plants enhances the contents of the soup. The determinant of the soup composition is based on its use (Table 2).

Table 3: Respondents perception of most commonly used plants for Gbanunu

Commonly used plants	Frequency	% Frequency
Clerodendron volubile	937	100
Palisota hirsuta	912	97.33
Zingiber officinale	357	38.10
Ocimum bacillicum	897	95.73
Ocimum gratissimum	901	96.16
Alchornea taracifolia	429	45.78
Dennetia tripetala	589	62.86
Piper nigrum	143	15.26
Piper guinensis	937	100
Curcuma longa	913	97.44
Ageratum conyzoides	923	98.50
Euphorbia hirta	901	96.58
Heterotis rodunfolia	887	95
Philox paniculatum	930	99.3

Multiple choices allowed
Source: Field survey, January 2025.

Table 4 showed the source of botanicals. Farm sourced constituted 85.59%; neighbourhood 76.63%; home gardens 90.39% while market sourced 98.83%. Retailers noted that plants were sourced from farms in neighbouring villages and were brought to them. Farmers gathered plants from their farms, waste places in their villages, and head of households noted that they got from their surroundings and a times compliment them by buying from the market retailers especially when they need to make large portions.

Table 4: Source of Botanicals

Source	Frequency	Percentage frequency
Farms	802	85.59
Neighborhood	718	76.63
Home gardens	847	90.39
Market	926	98.83

Source: Field survey, January 2025.

Multiple choices allowed.

Table 4 showed the source of botanicals. Eighty-five point fifty-nine percent of respondents noted that the plant components of 'Gbanunu' is sourced from the farms, 76.63% got them from their neighborhoods ; 90.39 got theirs from home gardens while 98.63% bought from the markets. Most respondents got from markets. Market women noted that they buy directly from farmers, those that grow in their gardens that bring the excess for sale especially *Clerodendron*, *Philox paniculata*, *O. gratissimum*, *O. bacillicum* and C. *longa*. *E. hirta*, *Chromolaena odorata*, *Emilia coccineae*, *Alchornia taraxifolia*, *Ageratum conyzoides*, *Piperomia*, are sourced from the neighbourhood. These plants are located in waste places, road sides (ruderals). Some of plants were sold to the market by plant gatherers. Plants gathered from farms (especially cocoa, palm and kolanut farms) and forested areas include *Pilosa hirsuta*, *Piper guinensis*, *Piper nigrum*, *Heterotis rotundifolia, Phyllatus muelleianus*.

Thirty-two plants were identified (Table 5). They were classified into seventeen families. Euphorbiaceae consists of five members and it is the family with the highest, followed by Asteraceae and Piperaceae with three members each, while Annonaceae, Lamiaceae, Malvaceae, Rubiaceae and Zingiberaceae consisted of two members each. Other families such as Boranginaceae, Commelinaceae, Fabaceae, Liliaceae, Melatomaceae, Moraceae, Moranginaceae, Poaceae, Polemoniaceae and Verbenaceae consisted of one member each. Three plants were identified using the local names but the botanical names could not be verified. This study showed that plants belonging to different families are blended together to make 'Gbanunu soup'.

Table 5 also showed the health benefits of the botanicals; ranging from pain relieving, anti-bacteria, anti-fungal, treatments of hemorrhoids, prevention of abortion and so on.

This study showed that all the botanicals are useful for the treatment of ailments or diseases. The Table also showed that some of the botanicals were cultivated while some occurred in the wild. Forty-six point nine percent (46.9%) of the plants have been domesticated and cultivated while 53.1% of the plants still exist in the wild; suggesting the need for domestication and conservation.

Table 5: List and parts of plants used for 'Gbanunu' soup

S/N	Bot. Name	CN	LN	PU	Fam.	Use	AS	Hab.
1.	*Ocimum grassitimum* Linn.	Scent Leaf	Oromaba / efirin aja	Leaves	Lamiaceae	Used for intestinal disorders diarrhea, dysentery, anti-bacteria; anti-sickling	Cultivated	Shrub
2.	*Ocimum bacillicum* Linn.	Scent leaf	Efirin wewe	Leaves	Lamiaceae	Used for intestinal disorders-diarrhea, dysentery, anti-bacteria; anti-sickling	Cultivated	Shrub
3.	*Chromolaena odoratum* (L.). R.M. King & Robinson (L.).	Siam weed	Akintola	Young leaves	Asteraceae	Stoppage of bleeding in fresh wounds; boiled and used to bath children with anemia.	Wild	Shrub
4.	*Dennetia tripetala* G.Baker	Pepper fruit	Igbere	Leaves	Annonaceae	Treatment of cough, fever, tooth ache, diabetics , nausea in pregnant women, hepato-protective, antimicrobial,	Cultivated	Shrub
5.	*Piper guineense* Schumach and Thonn	African black pepperAshanti pepper	Ewe iyere	Leaves	Piperaceae	Used for intestinal disorders-diarrhea, dysentery, anti-bacteria; anti-sickling	Mostly wild	Climber
6.	*Piper nigrum Linn*	Black pepper		Fruits – spices	Piperaceaea	Anti-inflammatory, analgesic, anti-bacterial, treatment of fevers, malaria, diabetes,	Mostly wild	Climber
7.	*Palisota hirsuta* (Thunb) K. Schum		Ijangbo nkun/ jangbor okun	Leaves	Commelinaceae	Pain killers, anti-arthritic, anti-inflammation	Mostly Wild/cu	Shrub by/ weeding

							Itivated	
8.	*Diodia sarmentosa* Swartz (*Diodia scandens* Sw)	Tropical button weed or itching grass	Ewe opaeyin or ewe ohaigbo or irawo ile	Leaves	Rubiaceae	Anti-inflammation; treatment of diarrhea, peptic ulcers, eczema, oedema, management of uterine fibroids.	Wild	Creeper
9.	*Pterocarpus osun* Craib	Black camwood	Ewe osun dudu or Gbingbin	Bark	Fabaceae/Leguminosae-Papilionoidae	Anti-microbial, anti-inflammatory, anti-rashes, skin infections, dislocated joints	Cultivated/wild	Tree
10.	*Mallotus oppositifolius* (Geisel) Mull. Arg.	Indian kamila	Oju-Eja or Arowoso or ipa or iya dudu Gbegbe	Leaves, stems	Euphorbiaceae	Food thickener, Anti-fungal, anti-bacteria, anti-malaria, anti-inflammatory, hemorrhages, pains, swellings, tumors.	Wild	Shrub
11.	*Alchornea laxiflora* (Benth)Pax & K. hoffm	Lowveld bead string or three veined bead string or cane stick	Pepe, ijan, ijandu, ijanfunfun	Young Leaves	Euphorbiaceae	Anti-inflammation, antimalarial, prevention of preterm birth in Edo-State, anti-fungal,	Wild	Shrub
12.	*Annona myristica or Monodora myristica* Gaertn. Dunal	African nutmeg	Aiho	Seeds	Annonaceae	Spices; hemorrhoids, rheumatism, anti-inflammatory, anti-bacterial	Cultivated	Tree
13.	*Peperomia pellucida* (Piperacae) (L) H.B. & Kunth.	Shinny bush plant or pepper elder	Ewe erinrin	Leaves and the succulent stems	Piperaceae	Anti-inflammatory, treatment of pains, acne, swellings	Wild	Herb
14.	*Heliotropum indicum* Linn.	Cock's comb	Ogbe ori akuko or Agogo igun	Leaves	Boraginaceae	Treatment of rashes, vericose ulcerations, antibacterial, anti-septic, anti-infertility, wound healing,	Cultivated/wild	Herb
15.	*Gossypium barbadensis* Linn.	Egyptian Cotton	Ewe owu	Leaves	Malvaceae	Uterotonic, menstrual regulator, anti-hemorrhagic, uterine anti-inflammatory,	Cultivated	Shrub

						pain reliever, treatment of earaches, fever, strokes		
16.	*Gossypium hirsutum* Linn.	Mexican Cotton	Ewe owu	Leaves	Malvaceae	Used for digestive disorders, diarrhea, dysentery; reproductive health;	Cultivated	Shrub
17.	*Zingiber officinale*	Red ginger (Roscoe	Aje funfun or atale	Rhizome	Zingiberaceae	Supports immune system, reduces inflammation, relieve pains, alleviates nausea and vomiting, arthritis, treat malaria and yellow fever.	Cultivated	Underground stem
18.	*Curcuma longa* Linn.	Turmeric	Aje pupa or atale pupa	Rhizome and/or the leaves	Zingiberaceae	Treatment of jaundice, menstrual disorders, abdominal pain, urinary tract infection, asthma, anti-inflammatory	Cultivated	Underground stem
19.	*Cymbopogon citratus*	Lemon grass	Kooko oba	Leaves	Gramineae /poaceae	Anti-obesity, antibacterial, antifungal, anti-diarrhea, anti-inflammatory, anti-stress, anti-malaria,	Cultivated	Herb
20.	*Euphobia hirta* Linn.	Asthma plant	Emi-ile, irawole, akun esan	Leaves	Euphobiaceae	Treatment of urinary tract infection, cough, respiratory issues,	Wild	Herb procumbent
21.	*Ageratum conyzoides* Linn.	Billy Goat weed	Loi funfun Or Imi-eshu	Leaves	Asteraceae	Wound healing, treatment of diarrhea, dysentery, skin diseases, antifungal	Wild	Herb, erect
22.	*Ficus exasperata* Vahl.	Sand paper	Epin	Young foliage	Moraceae	Treat wounds, treatment of diarrhea, dysentery, skin diseases, and analgesic, anti-arthritic, anti-parasitic, treatment of hemorrhoids, anti-microbial, insecticidal and pesticidal.	Wild	Tree
23.	*Phyllatus muelleianus* (Kuntze) Excell.		Ogungun eja	Leaves	Euphorbiaceae		Wild	Shrub

24.	*Clerodendrum volubile* P. Beauv	White butterfly	Marugbo, eweta, Luku (Ondo)	Leaves and soft stem	Lamiaceae/ Verbenaceae	Treatment of arthritis, diabetes, rheumatism, swellings, anti-viral, antimicrobial, antidiabetic, anti-hypertensive, hepato protective,	Cultivated	Shrub
25.	*Philox paniculata*	Garden phlox	Leun /lerun	Leaves and soft stem	Polemoniaceae		Cultivated	Shrub
26.	*Mitracarpus villosus* (Sw)DC.	Tropical girdle pod/ Wild spinach		Leaves and soft stem	Rubiaceae		Cultivated	Herb
27.	*Allium ascalonicum* Linn.	Shallot or spring onions	Alubosa elewe	Leaves and bulbs	Liliaceae	Treatment of diabetes, anti-inflammatory, anti-cancer, anti-fungal	Cultivated	Herb
28.	*Moringa oleifera*		Ewe odudu danguro, isiyin,lapalap	Leaves	Moringaceae	Treatment of diabetes, asthma, digestive disorders, anti-inflammation, hypertension,	Cultivated	Tree
29.	*Emilia coccinea* (Sim) G. (Don)		Odundun odo/odundun olokun/ odundun	Leaves	Asteraceae	Treat wounds, fevers, gastro intestinal problems, skin infections, anti inflammatory, antibacterial, analgesic	Wild	Herb
30.	*Jatropha curcas*		Lapalapa	Young foliage	Euphorbiaceae		Cultivated	Shrub
31.	*Manihot esculentum* Linn.		Gbaguda /ege	Young foliage	Euphorbiaceae	Fertility enhancer,	Cultivated	Shrub
32.	*Heterotis rotundifolia* (SW) Jacq.-Fel		Ajagun morasin / Dogunrasin	Leaf and the stem	Melastomataceae	Used for the Rheumatism, diarrhea, coughs, conjunctivitis, bilharzia, tuberculosis, and prevents abortion.	Wild	Trailer

Source: Field survey, January 2025.

3. DISCUSSION

The study areas were mostly rural and agrarian; they share similar environment, climate therefore similar plant distribution and livelihood. Most of the respondents are educated with most of the respondents being NCE and First degree holders. Most of the respondents were mainly women, married and Christians. The culinary roles of women; providing for house hold food security and the dietary needs of the family are well documented in literature (Senyolo *et al*. 2019 and Necula *et al*. 2020). The respondents were educated and could have been the reason for having small household; polygamy was 32.76% and 14. 41% were into extended family type. Due to the declining economy of the Nation most families are cutting their coats according to the yards of the materials. Reduced household size is a wise decision to militate against economic hardship.

Most the respondents were elders which indicated that they have lived long to have good knowledge of plants in their environment and their uses and would be able to share the knowledge to the younger ones. Respondents noted that knowledge of plants was acquired through consistent observance, use and instruction; generations acquired the knowledge of 'Gbanunu' through observation and practice. This study confirms the report of Olanipekun (2022) that the transmission of knowledge of plants' use in our societies was done orally.

'Gbanunu' is well accepted in the study area but the botanical constituents vary from individuals, families and communities. Adesiyan (2017) listed nine botanicals used to prepare the soup, but the study identified thirty-two plants. The most commonly mentioned were *Clerodendron volubile*, *Philox paniculata*, *Ageratum conyzoides*, *Piper nigrum, Ocimum bacillicum*, *Ocimum gratissimum*, *Heterotis rotundifolia*. *Clerodendron volubile* was mentioned in all the study areas. Lawal et al. (2018) reported that *Clerodendron volubile* is the chief component that is blended with other vegetables. Amodu et al. (2024) also reported the use *Clerodendron volubile*, *Piper guinensis, Ocimum basilicum*, *Ocimum gratissimum*, *Gossypium herbaceum*, *Curcuma longa*, *Alium sativum* for 'Obe ogun' (medicinal soup) in Owo Local Government, Ondo State. One of the elderly women noted that any edible plant can be incorporated into the soup.

She mentioned the leaves of *Annona senegalensis*. Aigbogan et al. (2018) listed *Vernonia amygdalina*, *Ocimum gratissimum, Piper guinensis, Murrya koenigii* as components of black soup. This study confirms the report of Petrikova et al. (2023) that the Nigerian foods vary significantly from one region to the other. The variation observed is most likely due to plants found within and around the communities.

Life forms of botanicals documented included climbers, herbs, shrubs and trees. This study supports the assertion of van Buren et al. (2019) that most indigenous diets contain herbs and spices. Mustapha (2019) noted that a mixture of varieties of indigenous leafy vegetables, natural herbs and spices and other ingredients but the most prominent is *Clerodendron volubile*. Spicy species included *Piper nigrum* and *Annona myristica*. Nwokeke et al. 2019 listed over twenty-five herbs and spices that have been integral to daily diet of people of Rain forest zones of Nigeria. In China Luo et al. (2019) listed 42 plants from 25 families and 41 genera were used for soup and these were gotten from local markets and the wild and reported that multiple plant parts were used. Stalline (2024) also noted that traditional diets often consist of herbs and roots that are natural remedies for various ailments.

Some of the elders noted that there were a number of challenges associated with the botanicals such as habitat destruction from weeding, use of herbicides and construction. They observed that plants may not be found where they were collected earlier and in such cases intensive search for the plants has to be done. So they make use of what are available for the soup. This factor may account for differences observed in botanical composition of 'Gbanunu'. This information supports the assertion of Obi and Davidson (2022) that the natural habitats of the plants have been subjected to increasing pressure from development, conservation exclusion and agricultural expansion.

The use of 'Gbanunu' for malaria and postpartum management in women aligns with the report of Mustapha (2018). Other uses of the soup as reported in this study included detoxifier, recuperating assistance, appetizers, pepper soup and party delicacy. Medicinal importance of constituent botanicals was outlined in Table 5. Botanicals were majorly antibacterial, antiviral, antifungal and anti-inflammatory.

Some were used in the treatment of stomach disorders, diarrhea, peptic ulcers, skin infection, rashes, and eczema; fevers, painkillers, stoppage of bleeding and management of uterine fibroids.

Black soup in Ondo is called 'Gbanunu', Bini's call the soup 'obenete' and the Owo's refer to it as 'obeogun' show close similarities in botanical compositions with modifications associated to the different cultural settings. The similarities in botanical compositions of 'Gbanunu', 'obenete' and 'obeogun' suggest close cultural practices with respect to dietary composition. The similarity in botanical composition of the three soups could have resulted from the fact that the ethnic groups are found in the Nigerian forest zone which signifies similar vegetation from which edible botanicals could be accessed. All the towns selected for study were in the forest zone cook black soup and dialect which suggest a common heritage. This study supports the assertion of Ejueyetsi et al. (2022) that traditional foods symbolizes heritage, trademark cultural identities of ethnic groups.

The Potential of "Gbanunu' For Gastronomic Tourism

Inta et al. (2025) pointed out that wild plants are very important to traditional gastronomy because of their appearances in local dishes and contributing to the cultural identity of certain region, present a pathway to developing a healthy diet and add variety to the daily diet as well as offer significant economic opportunity for local gatherers and communities. Food tourism or gastronomy enable tourists or visitors the opportunity to explore local food cultures, products and activities resulting in both economic and environmental benefits (Naderi et al., 2024).

'Gbanunu' is an integral part of Ondo culinary culture and well accepted among indigenes and non-indigenes and as a result of its great acceptance; it possesses gastronomic potential. The soup apart from meeting household food security needs also has economic value from the sales of botanicals in local markets. The economic value of the soup and its gastronomic potential can be increased. Tourists' interest in its consumption can be aroused in a number of ways;

- Soup fair should be organized during festivals or events such as Ogun carnival, Ekimogun day, Opepe or any cultural events, 'Gbanunu' and other local soups can be displayed and sold at such events. During cultural days in primary and post-primary schools students should be encouraged to bring for their mid-day meals local dishes and soups. Celebration and revival of traditional foods or soups such as 'Gbanunu' will help to reconnect with ones roots, bolster cultural pride and strengthen social bonds (Ghosh et al., 2023).

- Perceived risks should be reduced and the knowledge attitude and confidence should be improved on. To improve consumption, calorie information level should be displayed on menu, on food ordering online platforms restaurant webpages, social media and advertising campaigns.

- Technology that will enhance preparation and preservation; information provision, communication should be developed. This will improve overall quality and accessibility of the soup.

- Labeling and transparent packaging are very important factors that influence consumers' perception, trust and satisfaction with the products. Packaging of soup ingredient should be transparent, which will make for positive image and reputation. Transparent packaging allows for competition and profitability among producers and destinations at the global markets.

- Awareness of the health and therapeutic benefits of 'Gbanunu' should be created on different platforms such as social medial, food journals and other outlets. This publicity is necessary for the outside world to know more on the indigenous soup.

Policy Intervention

Policy intervention will involve all stake holders; the communities, government (Ministries of Agriculture &Natural Resources; Health and Industries) and food industries (both local and national) and hospitality agents.

- Communities should ensure proper identification of botanicals to prevent adulteration which could lead to wrong harvest of botanicals; resulting in poisoning and other negative health implications. The communities should also not allow for over exploitation.

- Plants should be conserved both *in-situ* and *ex-situ*. The Ministry of Natural resources through the Agricultural extension agents should teach communities on how to conserve these through in home gardens and designated areas.
- The government especially the Ministry of Natural resources should enact policies that encourage the sustainable use of non-timber forest plants. As there are laws that were promulgated against illegal mining, the same should go for plants to ensure they are not indiscriminately harvested. The Health Ministry in conjunction with relevant food agencies should ensure that traditional foods are well prepared and preserved in compliance with safety standards.
- Both Local and National industries should be encouraged to invest in the production of traditional foods. Most traditional medicines are now well bottled, labeled and have passed through the scrutiny of standard organizations that ensured their safe consumption. Traditional foods such as 'Gbanunu' should also be made to go through such processes.
- Hospitality agents such as hotels, bars and restaurants should introduce the soup to their customers with the calorie contents well displayed. Hotels and other tourism sectors should display local cuisine and their attractions

CONCLUSION

This study provided a comprehensive list of plants used for preparation of 'Gbanunu' and highlighted the cultural significance as well as the potential medicinal values of the soup. The study has contributed to a deeper understanding of the Ondo soup. By documenting the traditional knowledge of plants and uses of 'Gbanunu', the preservation of cultural heritage and sustainable use of plant resources are being promoted. There are gaps that need to be filled as exposed by the study. Researches on the nutritional, phytochemical and antioxidants properties of these plants should be conducted to confirm the postpartum, detoxification, and recuperating uses of the soup. Microbial activities of soup also need to be confirmed using laboratory studies.

'Gbanunu' has great gastronomic potential because of its wide acceptance but there must be synergy among the stakeholders so that the potentials can be achieved. The study also constitutes a baseline or groundwork for further research in pharmacological properties and potential applications in food tourism. This work is contributing to our knowledge of indigenous use of botanicals which will provide the basis for further research activities.

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CHAPTER 9
THE FAMILY TABLE: A FAMILY MEDICINE APPROACH TO EATING BEHAVIOR

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INTRODUCTION

The field of gastronomy, once confined to the culinary arts, now recognizes eating behavior as a complex interplay of psychological, social, and cultural factors. Concurrently, global health faces the dual challenges of rising obesity and eating disorders, revealing the limitations of a purely biomedical approach. While medical literature often simplifies nutrition to caloric equations, this chapter argues that a family medicine perspective offers a crucial, holistic lens for understanding and addressing these challenges. The central problem we address is the research gap in the literature: a lack of a cohesive, interdisciplinary framework that integrates the clinical insights of family medicine with the broader contexts of gastronomy, sociology, and psychology.

This chapter proposes an integrated Biopsychosocial-Gastronomy (BSG) Model as a conceptual framework to bridge this gap. This model expands upon the traditional biopsychosocial approach by explicitly incorporating elements of food culture and identity from gastronomy. Our primary objectives are to:

1. Define a new conceptual model: The BSG Model, which systematically integrates biological, psychological, social, and cultural factors shaping eating behavior.
2. Provide a methodological roadmap: Outline a conceptual review of the literature, drawing on sources from medicine, psychology, sociology, and gastronomy to support the model.
3. Propose a practical framework: Translate the BSG Model into an evidence-based clinical guide for family physicians, incorporating validated screening tools (e.g., SCOFF, DSM-5) and ethical considerations.
4. Discuss interdisciplinary applications: Illustrate how this model can inform clinical practice, public health policy, and gastronomic initiatives. This study's contribution is three-fold:

To the literature: We introduce a novel conceptual model that extends the biopsychosocial framework to explicitly address gastronomy.

1. To clinical practice: We provide family physicians with a structured, patient-centered approach to eating behavior that moves beyond a singular focus on weight.

2. To future research: We identify key areas for systematic investigation, including cross-cultural validity of our framework and the impact of digital media on food behavior.

We will proceed by first outlining the theoretical foundations of our BSG Model, followed by a discussion of its interdisciplinary components. We will then provide concrete recommendations for its application in clinical settings while addressing potential ethical issues and limitations, such as the risk of over-pathologizing everyday eating habits. Finally, we will conclude by summarizing our key findings and setting a future research agenda that fully integrates clinical and gastronomic perspectives.

The post-pandemic period has generated profound changes in nutritional behaviour and health outcomes, necessitating a renewed conceptual framework for understanding the complex interactions between diet, health, and society. Evidence indicates that the COVID-19 pandemic was associated with increased snacking, emotional eating, and reduced physical activity, while a significant proportion of affected individuals also experienced persistent sensory alterations such as anosmia and ageusia, with direct implications for dietary intake and nutritional status (Balderas-Cejudo, 2025).

In parallel, obesity has emerged as a global public health priority. Current estimates suggest that more than one billion individuals are living with obesity, and projections indicate that by 2050, over half of the world's adult population and nearly one third of children and adolescents will be overweight or obese. This epidemiological transition coexists with persistent undernutrition and micronutrient deficiencies, reflecting the "double burden" of malnutrition that characterises many regions worldwide (Ng et al., 2025).

Concurrently, the rapid expansion of tele-health and telenutrition services during the pandemic has demonstrated both feasibility and efficacy in the remote delivery of dietary counselling, behavioural support, and lifestyle interventions (Mehta,2020).

Such digital approaches have been associated with improvements in diet quality, modest reductions in body weight and waist circumference, and positive effects on psychological well-being, although challenges regarding accessibility, engagement, and equity remain unresolved.

1. CONCEPTUAL CLARIFICATION: EATING BEHAVIOUR

In the context of the renewed Biopsychosocial-Gastronomy (BSG) Model, it is essential to establish a clear academic definition of *eating behaviour*. Broadly, eating behaviour may be defined as: the observable actions, choices, and patterns through which individuals select, consume, and regulate food intake, shaped by biological, psychological, and sociocultural determinants (Dubois, 2022). This definition emphasizes that eating behaviour precedes the onset of clinical conditions such as obesity, eating disorders, or metabolic syndrome, and functions as a primary domain for preventive interventions.

From a psychological perspective, eating behaviour has been conceptualized as a set of habitual and situational responses that reflect both conscious decision-making (e.g., meal planning, dietary restraint) and automatic processes (e.g., impulsive eating, conditioned responses to food cues) (Heward, 2022). Within behavioural medicine, eating behaviour is often operationalised as a modifiable risk factor that mediates the relationship between environmental exposures and health outcomes (Gahagan, 2012).

Operational Definitions

For the purposes of empirical analysis, *eating behaviour* may be operationally defined along three complementary dimensions:

- Quantitative patterns: frequency of meals, portion sizes, caloric intake, and macronutrient distribution.
- Qualitative aspects: dietary diversity, consumption of ultra-processed versus whole foods, adherence to dietary patterns (e.g., Mediterranean diet).

- Psychological and behavioural dimensions: emotional eating, external eating (in response to external food cues), restrained eating, and mindful versus mindless eating practices.

These operational definitions provide a foundation for measurable indicators, enabling the systematic study of eating behaviour in both clinical and non-clinical populations (Chae, 2023).

Indicators and Psychometric Tools for Analyzing Eating Behaviour

The analysis of eating behaviour requires robust and validated indicators. Recent citations for indicators and psychometric tools for analyzing eating behavior include studies on the Addiction-Like Eating Behavior Scale (AEBS) (Rossi et al., 2023), the Eating and Food Literacy Behaviors Questionnaire (EFLBQ) (Rhea et al., 2025), and the Eating Behavior Assessment for Obesity (EBA-O) (Oteri et al., 2024). These tools offer various approaches to analyzing food-related behaviors, from assessing food addiction characteristics to evaluating functional food literacy and the severity of eating disorders. These may be grouped into self-reported, objective, contextual, and psychological categories:

- Self-reported indicators: dietary recall, food frequency questionnaires, ecological momentary assessment of eating contexts.
- Objective indicators: anthropometric measures (BMI, waist circumference), biomarkers of nutritional status (serum glucose, lipids, micronutrients), and digital tracking data from mobile health applications or wearable devices.
- Contextual indicators: household food security, availability and affordability of healthy foods, exposure to food marketing, and cultural practices surrounding meals.
- Psychological indicators: validated psychometric tools that assess dimensions of eating behaviour. The most frequently applied instruments include:

Table 1. Psychometric instruments for the assessment of eating behaviour

Instrument	Dimensions Assessed	Validated Populations	Main Applications
Dutch Eating Behavior Questionnaire (DEBQ)	Emotional eating, External eating, Restrained eating	Adults and adolescents across clinical and community settings; validated in multiple languages	Identifying maladaptive eating patterns; studying obesity, stress-related eating, and diet adherence (11)
Three-Factor Eating Questionnaire (TFEQ / TFEQ-R18)	Cognitive restraint, Uncontrolled eating, Emotional eating	Adults, adolescents, clinical and general populations; widely used in epidemiological studies	Assessment of restraint and disinhibition; monitoring outcomes in weight-loss and behavioural interventions (12)
Emotional Eating Scale (EES)	Urge to eat in response to negative emotions (anxiety, anger, depression)	Primarily adults; adapted versions for adolescents	Clinical evaluation of emotional eating triggers; targeted therapy and intervention planning
Mindful Eating Questionnaire (MEQ)	Awareness, Distraction, Emotional response, Disinhibition	Adults in both community and clinical contexts	Measuring mindfulness in eating; evaluating interventions aimed at promoting mindful eating practices (13)
Yale Food Addiction Scale (YFAS)	Addictive-like eating behaviours based on DSM substance-use criteria (tolerance, withdrawal, loss of control)	Adults and adolescents; clinical and population-based samples	Studying compulsive eating, ultra-processed food dependence; identifying subgroups at risk for food addiction (14)

Together, these tools provide both quantitative and qualitative insights into the psychological and behavioural drivers of food intake, allowing researchers and clinicians to identify risk patterns that precede the development of obesity, disordered eating, or other nutrition-related pathologies.

2. INTERPRETATION AND CONTEXTUALISATION OF PSYCHOMETRIC TOOLS

Psychometric instruments for assessing eating behaviour have been validated across a range of target groups, including children, adolescents, university students, adults, and clinical populations. Particular attention has been directed toward younger cohorts, where maladaptive eating behaviours often emerge prior to the development of overt clinical conditions. Screening in school and community settings has therefore become increasingly relevant for the early identification of at-risk individuals.

An important feature of these tools is their demonstrated cross-cultural validity. Instruments such as the DEBQ and TFEQ have undergone extensive translation and cultural adaptation, enabling their use in diverse geographical and linguistic contexts (Carr, 2025). Nevertheless, cultural norms surrounding food, body image, and emotional expression may influence response patterns, underscoring the need for careful interpretation when applying these measures in multicultural or non-Western populations.

The use of screening tools in diverse contexts—including community health programmes, tele-health interventions, and primary care—offers practical advantages by enabling large-scale monitoring of eating behaviour. However, such applications raise several ethical considerations. These include the risk of misdiagnosis, the potential for over-pathologisation of behaviours that may reflect cultural practices rather than psychopathology, and the inadvertent stigmatisation of individuals identified as "at risk." Ethical deployment of these measures therefore requires clear communication of their purpose, voluntary participation, and the provision of appropriate referral pathways for participants flagged by screening outcomes.

It is equally important to acknowledge limitations and contextual boundaries in the application of psychometric tools. Self-report measures are inherently susceptible to recall bias, social desirability effects, and under- or over-estimation of actual behaviours. Moreover, psychometric tools are primarily designed for screening and research purposes rather than for definitive diagnosis. Their results must therefore be interpreted in conjunction with clinical interviews, nutritional assessments, and, where appropriate, biochemical or anthropometric data.

While validated questionnaires provide a valuable means of operationalising eating behaviour across age groups and cultural settings, their interpretation requires careful attention to context, ethics, and methodological limitations. Acknowledging these constraints enhances the scientific rigor of the Biopsychosocial-Gastronomy (BSG) Model and prevents reductionist or pathologising applications that might undermine its holistic intent.

2.1 Toward a Renewed BSG Model

Taken together, these developments underscore the necessity of advancing the Biopsychosocial-Gastronomy (BSG) Model.

By integrating biological, psychological, and social determinants with the gastronomic dimensions of food and eating, the renewed model offers a comprehensive framework for addressing the multifactorial drivers of nutrition-related diseases. Moreover, the systematic use of operational definitions and validated psychometric indicators of eating behaviour enhances the model's applicability in both research and practice, ensuring that the cultural and sensory value of gastronomy is preserved while health promotion remains evidence-based and preventive in scope.
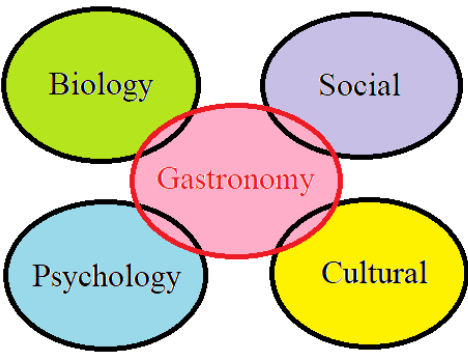

Fig, 1 Interference between domains of the BSG Model and Gastronomy

2.2 The Biopsychosocial-Gastronomy (BSG) Model

The family table, a cornerstone of daily life in many cultures, serves as a powerful nexus where health, relationships, and identity converge. It is far more than a simple setting for nourishment; it is a dynamic environment where eating behaviors are learned, social bonds are forged, and cultural values are transmitted across generations. In contemporary society, however, the traditional family meal is under threat from the demands of busy lives and the isolating influence of digital technologies, leading to a decline in communal eating. This phenomenon presents a critical public health challenge, as studies show that regular family meals are a protective factor against disordered eating, obesity, and other health issues.

The formulated search query used in scientific databases like PubMed, Scopus, or Web of Science was: ("family practice" OR ("family"[All Fields] AND "practice"[All Fields]) OR "family practice"[All Fields] OR ("family"[All Fields] AND "medicine"[All Fields]) OR "family medicine"[All Fields]) AND ("eating behaviour"[All Fields] OR "feeding behavior" OR ("feeding"[All Fields] AND "behavior"[All Fields]) OR "feeding behavior"[All Fields] OR ("eating"[All Fields] AND "behavior"[All Fields]) OR "eating behavior"[All Fields]) AND ("gastronomy"[All Fields])

This returned a number of 4,292 scientific articles, reviews and books, in recent literature (as shown in the folowing graph).
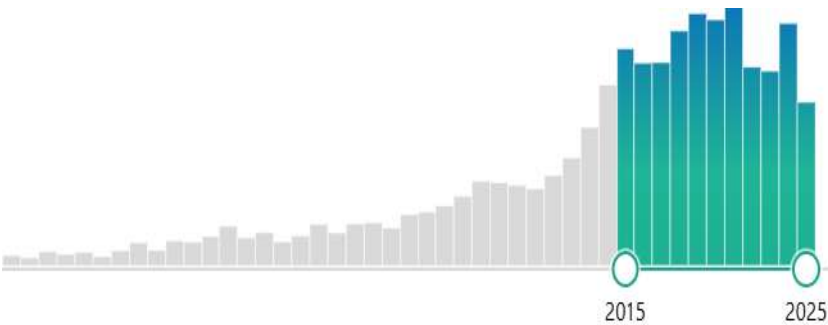
Graph 1. Documents over time in the researched fields

We can observe that the number of scientific publications in this field has increased especially in the last 10 years (except for a small inflection during the pandemic period and a subsequent explainable revival), which corresponds to the activation of the interest of the academic community.

To address this complexity, a framework that transcends a purely biological or psychological view of eating is necessary. This report proposes and elaborates on the Biopsychosocial-Gastronomy (BSG) Model.

This conceptual framework is an evolution of the widely influential Biopsychosocial (BPS) Model, adapted specifically for the domain of eating behavior. By integrating a distinct "Gastronomy" dimension, the BSG model provides a comprehensive, multi-layered lens for understanding how biological predispositions, psychological states, social environments, and the sensory experience of food itself interact to shape health outcomes. This chapter aims to define the BSG model and apply it through the lens of family medicine, demonstrating how this framework can be used to develop pragmatic, family-centered interventions that foster healthier eating behaviors and enhance overall well-being.
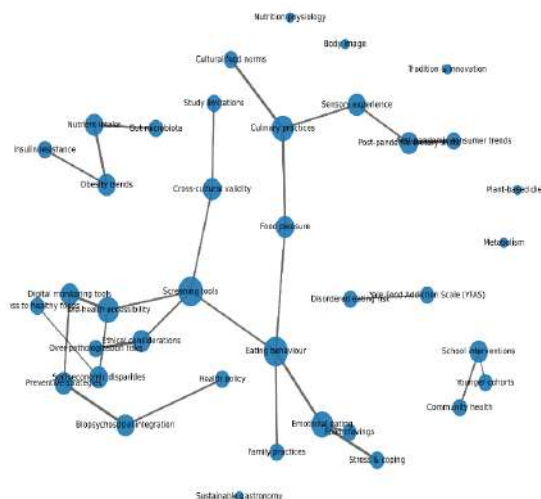

Fig 2. Conceptual Network Map BSG

The graph is centered around major hubs, which represent core concepts in the study of food and health:

1. Eating Behaviour and its Determinants

The concept of Eating behaviour is a major central node, indicating it is a critical intersection for many research areas. It is directly linked to:

- Food pleasure and Sensory experience, acknowledging the hedonic and experiential drivers of what and how we eat.
- Emotional eating and Food cravings, which connect it to psychological and affective states, further linking to Stress & coping.
- Family practices, underscoring the role of the social environment in shaping habits.

2. Biological and Physiological Links

A significant cluster focuses on the molecular and physiological consequences of diet:

- Obesity trends are strongly linked to Insulin resistance and Nutrient intake, representing the metabolic and dietary factors driving the global obesity epidemic.
- Gut microbiota is shown as an independent concept linked to Nutrient intake, reflecting the growing recognition of the gut-brain axis and its role in metabolic health and appetite regulation.
- Physiology and Metabolism are foundational concepts in this sphere.

3. Disordered Eating and Addiction

A distinct cluster addresses maladaptive eating patterns:

- Disordered eating risk is a central node in this cluster, directly linked to Eating behaviour.
- It is specifically connected to the Yale Food Addiction Scale (YFAS), a validated clinical tool for identifying signs of food addiction, highlighting the research overlap between substance use models and hyperpalatable food consumption.

4. Public Health, Policy, and Access

This area shows the translational and societal dimensions of food science:

- Health policy is a link between the individual (Eating behaviour, Biopsychosocial integration) and population-level issues.
- A crucial, highly interconnected cluster includes Access to healthy foods/health accessibility, Socioeconomic disparities, Preventive strategies, Screening tools, and Digital monitoring tools. This highlights a focus on equity and the use of technology for intervention and monitoring in diverse populations.
- Ethical considerations are appropriately linked to the use of technology and screening/monitoring tools, pointing to the necessary responsible implementation of health interventions.

5. Social, Cultural, and Future Trends

This cluster addresses the broader context of food choices:

- Culinary practices and Cultural food norms represent the anthropological and sociological aspects influencing diet.
- Concepts like Post-pandemic consumer trends and Plant-based diet reflect current, evolving, and global shifts in food consumption.
- Sustainable gastronomy is mentioned, connecting diet with environmental and ecological concerns, which is a major area of future research.

Scientific Interpretation of Node Links

The thickness of the lines (edges) suggests the strength or frequency of co-occurrence in research. For example:

- The strong connection between Culinary practices and Cultural food norms is expected, as they are intrinsically linked.
- The strong links connecting Screening tools to Digital monitoring tools and Health accessibility suggest that current research is focused on developing and evaluating practical, technology-based methods to address population health.

- The connection between Cross-cultural validity and Study limitations suggests a critical awareness in the field that instruments and findings developed in one culture may not be accurately applied or generalized to another.

This network graph depicts a sophisticated, multidimensional field of study. It moves beyond simple nutrition to integrate biology, psychology, sociology, culture, technology, and public policy, reflecting a biopsychosocial model for understanding and treating issues related to food and health.

3. CONCEPTUAL FOUNDATIONS OF THE BIOPSYCHOSOCIAL-GASTRONOMY (BSG) MODEL

3.1 The Original Biopsychosocial Model: A Critique of Reductionism

The origins of the Biopsychosocial (BPS) Model can be traced to George Engel's seminal work in 1977 (16) , which was a direct philosophical and practical opposition to the prevailing biomedical model. The biomedical model, rooted in mind-body dualism, separated mental and physical health and focused exclusively on objective, measurable biological factors, often to the neglect of a patient's subjective experience. Engel argued that this reductionist approach was flawed and dehumanizing, as it failed to account for the complex interplay between biological, psychological, and social dimensions of health and illness.

The core principles of the BPS model assert that health and disease are not merely the result of biochemical processes but are shaped by a dynamic interaction among multiple levels of organization, from the societal to the molecular. This holistic perspective views the patient as a "nested system," with the person's own subjective experience at the "primary frame of reference". Engel's framework endorsed a complexity view, in which different levels could interact, creating "emergent properties" that are not reducible to the sum of their parts (Borrell-Carrió, 2004).

Despite its significant influence on medical practice and education, the BPS model has faced recurrent criticism. A key critique is its lack of operationalization and vague definition, which makes it difficult to implement effectively in a busy clinical setting.

Critics have noted that Engel's model was primarily descriptive, not action-oriented, and was introduced without the pragmatic tools needed to translate its insights into a clear, day-to-day clinical practice. This ambiguity can lead to an overwhelming scope of loosely related data and a lack of clear criteria for prioritizing different levels of analysis (Bolton, 2019). The proposed BSG model is designed to address these limitations by offering a more pragmatic, specialized, and action-oriented framework specifically for the context of eating behavior and family medicine. By adding the distinct "gastronomy" dimension and focusing on the tangible setting of the "family table," the BSG model provides a structured solution to the vagueness critique, moving from a broad philosophical concept to a tool for clinical praxis.

3.2 The Biological Dimension: The Body's Blueprint for Eating

Eating behavior is deeply rooted in physiological and genetic underpinnings that form the body's internal blueprint for hunger, satiety, and food preference. Key neurochemical and hormonal systems are responsible for regulating appetite and energy metabolism. The brainstem, for example, receives neuronal inputs from the digestive tract, while the hypothalamus processes hormonal and nutritional signals from the bloodstream to control appetite. These systems are intricately linked with the brain's reward and motivation pathways, which are activated by pleasurable or "palatable" foods (Rezaieg, 2025) . Neurotransmitters like dopamine play a central role in this reward response, influencing food-seeking behavior and food choices (Calpos, 2022). There exists also an intricate, bidirectional communication network known as the gut-brain axis (GBA). This system, involving the central nervous system and the enteric nervous system, plays a critical role in regulating appetite, satiety, and food cravings (Appleton, 2018). The key neurohormones involved are ghrelin (the "hunger hormone") and leptin (the "satiety hormone"), and their balance can be disrupted by factors like chronic stress, poor sleep, and a diet high in processed foods (Vijayashankar, 2024). The family environment can directly influence these biological processes; for example, a chaotic mealtime routine can elevate stress hormones, impacting satiety signals and potentially leading to overeating (Fulkerson, 2019).

Genetic predispositions also play a significant role. Research indicates that between 50 and 90 percent of weight differences between individuals can be attributed to genetic influences. Many of the genes linked to obesity and weight susceptibility affect the neurobiology of appetite regulation (McPherson, 2023). These genetic factors can prime some individuals to overeat in response to environmental triggers, such as stress or the presence of tempting food, or can influence their ability to recognize when they are full. A significant focus is placed on the gut microbiome, the trillions of microorganisms living in our digestive tract. There is a growing body of evidence linking the composition of the microbiome to an individual's metabolism, immune function, and even mental health. Family dietary habits, especially early in life, can shape the development of a healthy or unhealthy microbiome (Zhang, 2022).

While an individual's genetic makeup can influence factors like metabolic rate and food preferences, genes are not destiny. Instead, epigenetics, the study of how environmental factors, including diet, can turn genes "on" or "off", can influence us (Al Aboud, 2023). Family-level factors, such as shared dietary habits and stress levels, can exert epigenetic influences across generations. For example, parental obesity can predispose a child to weight gain, not just through shared habits, but also through epigenetic changes passed down.

This biological blueprint does not operate in isolation; it interacts with the environment in a complex, bidirectional manner. A person's biological vulnerability (for example, a dopamine system that is less stable or easily sensitized) can be triggered by environmental factors, creating a "perfect storm" that leads to disordered eating. Triggers such as a busy schedule leading to skipped meals, or holidays with an abundance of food, can alter a person's brain biology. For example, in individuals with anorexia nervosa (AN), a vulnerable dopamine system might become overly sensitized to food restriction, leading to a perception of excessive stimulation even from minimal eating (Di Lodovico, 2024). Similarly, in bulimia nervosa (BN), a desensitized dopamine system may override cognitive control, driving the urge to binge to seek stimulation (Yu, 2022).

The resulting eating behavior then reinforces the biological changes, creating a self-perpetuating feedback loop that can make the condition chronic. This underscores the crucial point that a clinical approach must not only address the disordered behavior itself but also understand the underlying biological vulnerabilities and the environmental triggers that fuel the cycle.

3.3 The Psychological Dimension: Mind, Mood, and Meal

Psychological factors serve as a critical intermediary between biological drives and external influences, modulating how and what a person eats (Hopkins, 2022). Cognitive processes, emotions, and past experiences shape an individual's perception and enjoyment of food, often overriding innate biological predispositions (Wehling, 2019). For example, an individual's mood can significantly impact their eating habits; stress and negative emotions can lead to emotional overeating or undereating, while positive emotions might lead to increased consumption of celebratory foods. Self-defeating thought patterns and lack of self-awareness can also undermine efforts to eat healthier and manage weight.

For individuals with eating disorders, the psychological dimension often manifests as a powerful, self-reinforcing feedback loop. The "doing AN mode," for instance, is a conceptual state of mind proposed to dominate the experience of individuals with anorexia nervosa (Park, 2011). In this mode, the individual is sustained by repetitive cognitive and physiological inputs, such as rumination and preoccupation with calorie counting and exercise. This cognitive strategy serves as an emotional avoidance mechanism, perpetuating the eating problem by distancing the individual from their emotional and bodily experiences. The individual's primary awareness is of their intellectual preoccupations with food and control, while their feelings and physical sensations remain outside their focal awareness.

The relationship between the psychological and biological domains is not linear. The psychological state of rumination, preoccupation, and emotional avoidance reinforces the physiological state of starvation (Aldao, 2014). This mutually reinforcing cycle is a key characteristic of the condition. From a clinical perspective, this complex relationship illustrates why simply providing nutritional education is often insufficient to remedy poor dietary habits.

To break the psychological-biological feedback loop, interventions must also focus on developing emotional regulation and coping strategies. A comprehensive family medicine approach must address this psychological detachment from bodily experiences and emotions to facilitate genuine, long-term change (Menefee, 2022).

3.4 The Social and Cultural Dimension: From Family to Community

Eating is one of the most social of human activities, and the social and cultural contexts in which we dine have a profound impact on our eating behaviors (Gerber, 2022). People tend to mimic the eating habits of their friends, families, and communities, a phenomenon known as social facilitation. Parental modeling is particularly influential, with studies showing that children are more likely to accept and enjoy novel foods when repeatedly exposed to them by a familiar adult (Ravikumar, 2022). Families that consistently eat meals together tend to foster healthier dietary habits in their children (Czarniecka-Skubinam 2023).

The family serves as a microcosm where these social dynamics are most potent. Family dynamics, communication patterns, and attitudes toward food and body image act as both protective and risk factors for disordered eating and obesity. While no single factor or family dynamic can "cause" an eating disorder, certain parenting styles—such as overly strict or controlling behavior, a lack of emotional warmth, or high demands with low flexibility—are associated with an increased risk of disordered eating. Conversely, a supportive family environment with open communication and compassionate boundaries can be a powerful catalyst for recovery. The family table, in this context, functions as a classroom for cultural values. It is where children learn what is considered "acceptable, desirable, and even taboo" in their culture. Cultural norms dictate everything from meal times and food hierarchies to the significance of certain dishes (Harte, 2019). While these traditions are vital for cultural identity and social cohesion, they can also have unintended health consequences. For example, in some cultures, large portions are a sign of hospitality and love, a norm that, while socially beneficial, can inadvertently contribute to overeating and long-term health issues (Buksh, 2022).

Understanding the family table as a cultural classroom reveals a potential conflict between deeply ingrained social traditions and modern health goals. A successful family medicine approach must be culturally sensitive, acknowledging the value of these traditions while helping families navigate how to adapt them to promote healthier habits. This requires a nuanced understanding of how to preserve the social and cultural benefits of shared meals while modifying the specific behaviors that may be detrimental to health.

3.5 Integrating Gastronomy: The Sensory and Experiential Layer

While the original BPS model provides a robust foundation, it often subsumes the sensory and experiential dimensions of food within the psychological or biological categories. The BSG model proposes that "Gastronomy" should be recognized as a distinct, interactive layer that profoundly influences eating behavior. This dimension encompasses not only the sensory properties of food: taste, smell, texture, and temperature, but also the method of preparation, the variety of foods available, and the aesthetic presentation of the meal. These elements are powerful determinants of eating behavior, often overriding a person's physiological need for energy (Sonderen, 2023).

The gastronomic layer is a primary driver of the brain's reward system. Palatable and delicious foods activate key brain regions and release dopamine, which reinforces food consumption. This is a fundamental biological response, but it is heavily mediated by experience. For instance, the phenomenon of "sensory-specific satiety" demonstrates how interest in a particular food diminishes as consumption continues, while the reward response remains high for other foods (Havermans, 2008). This is one reason why having a variety of foods available can lead to increased consumption.

The gastronomic experience is inextricably linked to the social and psychological dimensions of the BSG model. For example, the pleasant experience of a meal is a psychological reward that can reinforce healthy habits, a phenomenon observed in those who report enhanced taste perception from dietary changes like time-restricted eating. Furthermore, the gastronomic experience is amplified or muted by the social context (Kovalenko, 2023).

Eating a well-prepared, delicious meal in a warm, relaxed atmosphere with family can create powerful positive memories and reinforce the act of communal dining itself. In this way, the family table becomes a crucible where the gastronomic layer (the food and its preparation) and the social layer (the people and atmosphere) converge to create a holistic experience that promotes physical and mental well-being (Chen, 2025).

Elevating gastronomy to its own dimension provides a valuable, actionable tool for family medicine. Instead of just focusing on calories or nutrients, a clinician can guide families to improve the quality of their food preparation, the presentation of meals, and the rituals surrounding them. This approach acknowledges that the sensory and experiential aspects of eating are not trivial; they are powerful drivers of behavior that can be leveraged for positive health outcomes (Vasques, 2024).

The BSG model can be summarized as a dynamic framework with four interacting dimensions.

Table 2: The Biopsychosocial-Gastronomy (BSG) Model of Eating Behavior

Dimension	Description	Specific Factors and Examples
Biological	The physiological and genetic underpinnings that regulate appetite, metabolism, and food preferences.	Genetics (predisposition to obesity), neurochemistry (dopamine, satiety signals), physical health (chronic illness, medication effects), physiological feedback loops (hunger, satiety)
Psychological	The cognitive, emotional, and behavioral factors that shape an individual's relationship with food.	Mood and emotions (stress, anxiety, depression), learned behaviors (habits, associations, emotional eating), cognitive processes (thoughts, self-defeating patterns), past experiences (childhood trauma)
Social	The interpersonal and community influences on eating behavior.	Family dynamics (parenting styles, communication, sibling modeling), social facilitation (eating with others), cultural norms (traditions, food hierarchies, religious beliefs), social support systems
Gastronomy	The sensory and experiential aspects of food and the mealtime environment.	Sensory properties (taste, smell, texture), food preparation (homemade vs. pre-prepared), mealtime rituals (time of day, location, tableware), food variety and presentation

3.6 Complementary Health Behavior and Family Systems Theories

To more deeply understand the dynamics within the BSG model, it is helpful to look at it through the lens of other established theories of health behavior and family systems. While the BSG model provides a comprehensive framework, these complementary theories offer specific tools for analyzing and intervening in the individual and family-level processes that shape eating habits.

The **Health Belief Model (HBM)**, focuses on an individual's perceptions of health threats and their decisions to act to mitigate those threats. Its core constructs—perceived susceptibility, perceived severity, perceived benefits, and perceived barriers—help to explain why a person might or might not change their eating behavior. A person may recognize their risk of developing a chronic disease (high perceived susceptibility and severity) but might not change their diet if the perceived barriers (e.g., cost, time, inconvenience) outweigh the perceived benefits. A crucial addition to the model, self-efficacy (the confidence in one's ability to act), is considered one of the strongest predictors of adopting healthy eating behaviors (Alyafei, 2025).

The **Theory of Planned Behavior (TPB)** offers a different lens, positing that a person's behavioral intention is the most important predictor of their actual behavior (Bosnjak,2020). This intention is, in turn, shaped by three core components: attitudes toward the behavior (positive or negative evaluation), subjective norms (perceived social pressure from others), and perceived behavioral control (the perceived ease or difficulty of performing the behavior). For eating behaviors, studies show that TPB can successfully predict intentions and behaviors, such as the consumption of fruits and vegetables (Brouwer, 2015). However, some research suggests that for behaviors like fast-food consumption, habitual automaticity can be a stronger predictor than the TPB's traditional constructs, highlighting the powerful role of routines and environmental cues (Kokthi, 2025).

Finally, the principles of **Family Systems Theory** provide a strong foundation for the BSG model's emphasis on the family unit. This perspective views the family not as a collection of individuals but as an interconnected system.

A change in one member's behavior can have a ripple effect on the entire system, as seen in the reciprocal influence between parental dietary habits and children's consumption patterns. This theoretical perspective also highlights how a family's internal "subtypes," such as "Perfectionist" or "Overprotective" dynamics, can be linked to the development of disordered eating. Conversely, open communication, a lack of criticism, and emotional warmth can act as protective factors, reinforcing the idea that the family environment is a powerful determinant of individual health outcomes.

4. THE FAMILY TABLE AS A CLINICAL SYSTEM
4.1 The Family as a Microcosm of the BSG Model

Within the BSG framework, the family unit serves as a microcosm where the four dimensions converge and interact in a highly potent manner. The family is not a collection of independent individuals but a system characterized by "mutually influencing patterns" that dictate health behaviors. In this system, a change in one family member's behavior can have a ripple effect on the entire unit. For instance, a parent's dietary habits and preferences significantly impact the types of food available in the home, which in turn affects their children's consumption patterns and long-term health. This dynamic underscores the critical role of the home food environment, which includes the availability, accessibility, and cost of food, as a modifiable factor directly under the family's control. Research suggests that, for children, the immediate home food environment and parental influences are more critical determinants of dietary habits than the broader neighborhood food environment.

This systemic perspective provides the rationale for family-based interventions, which recognize that targeting the individual in isolation is often insufficient for creating lasting change. By working with the entire family, clinicians can leverage the power of the family system to shape and reinforce new, healthier behaviors on a daily basis. This approach positions family members as key resources and agents of change, addressing not just a person's behavior but the complex system of which they are a part.

4.2 Empirical Evidence from Family-Based Interventions (FBI)

The BSG model is not merely a theoretical construct; its principles are validated by empirical evidence from successful family-based interventions for both eating disorders and obesity. We can find scientific evidence related to this model in connection with gastronomic advice in numerous academic journals belonging to different research fields.

Fig. 3 Analytics of the type of publications by domain

Family-Based Treatment (FBT) for Eating Disorders

Family-Based Treatment (FBT), also known as the **Maudsley Approach, is a gold-standard**, evidence-based intervention for adolescent eating disorders. It operates on the core principle that parents are the most capable and valuable resource for helping their child recover. The central philosophy is to "externalize" the illness, framing the eating disorder as a separate, external force that the entire family can unite against, thus reducing shame and blame.

FBT is structured in three phases, typically spanning approximately 20 weekly sessions:

Phase 1: Parental Management and Weight Restoration. This is the most intensive phase, lasting about 10 to 12 sessions. The primary goal is to re-nourish the child, as the symptoms of the eating disorder—such as low mood, isolation, and compulsivity—are believed to be largely caused by starvation.

Parents take full control of meal planning, preparation, and portioning, acting as compassionate but firm enforcers of the meal plan. The clinician serves as a coach, guiding parents on how to calmly enforce boundaries and ensure their child eats.

Phase 2: Gradual Return of Control. As the child's weight is restored and their behaviors stabilize, the adolescent begins to take back limited control over their eating. This phase, which lasts five or six sessions, involves a slow, step-by-step process of reintroducing age-appropriate autonomy while monitoring for any signs of backsliding.

Phase 3: Establishing Healthy Independence. The final sessions focus on supporting the adolescent in returning to their normal daily life, free from the eating disorder. The therapist helps the family transition their relationships away from being centered on the illness and focuses on relapse prevention and fostering a healthy adolescent identity.

Family-Based Interventions for Childhood Obesity

In the context of childhood obesity, family-based interventions have also shown significant promise. Research indicates that including families in treatment is more effective in producing sustainable weight loss in children than targeting children alone. Studies, many utilizing the "Stoplight Diet" developed by Epstein and colleagues(Epstein, 1978), have shown a moderate to large effect size for changes in a child's BMI. This diet incorporates nutritional and physical activity education, parent skills training, and behavioral monitoring (Vorland, 2022).

The principles of the BSG model are evident in these interventions. They recognize that obesity is not simply an issue of energy imbalance but is influenced by a complex interaction of biological, psychological, and social factors. As such, effective family-based interventions go beyond simple prescriptions of "eat less, exercise more" and provide families with practical tools to modify their home food environment and establish healthier routines. For example, the Centers for Disease Control and Prevention (CDC) recommends that families "model a healthy eating pattern," "move more as a family," and "set consistent sleep routines".

These recommendations directly target the psychological (routines), social (modeling), and biological (sleep, physical activity) dimensions of the BSG model, demonstrating its practical application in a public health context.

Table 3: Family-Based Interventions: Empirical Findings

Intervention Type	Primary Outcomes (Weight)	Secondary Outcomes (Behavior)	Key Principles
FBT (Eating Disorders)	-Quicker return to a healthy weight. -Higher percentage of remission at follow-up.	-Decreased eating disorder behaviors. -Improved client and family mood. -Decreased generalized anxiety.	-Parents as agents of change. -Externalizing the illness. -Renourishment as the first priority. -Three-phase treatment model (parental management, gradual return of control, healthy independence)
FBT (Obesity)	-Moderate to large effect size for short -term BMI change. -Sustainable long-term BMI change, with smaller effect sizes.	-Increased physical activity. -Decreased sugary drink consumption. -Increased fruit and vegetable intake.	-Targeting the family system for greater, more sustainable change. -Use of tools like the "Stoplight Diet" (nutritional education, parent skills training, behavioral monitoring). - Parental modeling of healthy behaviors

5. TOWARDS A PRACTICAL FAMILY MEDICINE APPROACH

5.1 Operationalizing the BSG Model in Clinical Practice

A family physician, equipped with the BSG model, can move beyond a narrow, biomedical diagnosis to a more holistic and humanistic approach to eating behavior. This approach necessitates attending simultaneously to the patient's biological, psychological, and social dimensions of illness and suffering. It requires the clinician to adopt a "biopsychosocial-oriented clinical practice" grounded in principles that promote a deeper understanding of the patient's subjective experience. Core tenets of this practice include:

- Cultivating Curiosity: An empathetic and curious approach allows the clinician to explore the full context of a patient's eating behavior, including their typical mood, stress coping mechanisms, and thoughts around food.
- Creating Trust: Establishing a trusting relationship with both the patient and the family is essential, as addressing issues of eating behavior often involves sensitive topics related to control, body image, and personal history.
- Recognizing Bias and Educating Emotions: Clinicians must be self-aware of their own biases and emotional responses to avoid judgment and to maintain a stance of "pure objectivity". This is particularly important given the stigma and misinformation surrounding conditions like eating disorders.

By adopting these principles, a family physician can effectively operationalize the BSG model, creating a space for open dialogue and collaborative problem-solving. This is the practical solution to the BPS model's critique of being too vague and difficult to implement; it is a shift from a descriptive framework to an action-oriented clinical philosophy.

5.2 Case Study Synthesis and Clinical Application

The application of the BSG model can be illustrated through a distinct clinical scenario.

Case: The Family Struggling with Childhood Obesity A family presents with a child (12 years old) diagnosed with obesity. A biomedical perspective might focus on a low-calorie diet and increased physical activity. The BSG model, however, guides the family physician to explore a broader set of factors. The clinician would investigate the biological dimension, assessing for any genetic predispositions or underlying medical conditions. They would then explore the psychological dimension, asking about the child's emotional state, coping mechanisms, and their relationship with food. The social dimension would be examined by looking at parental modeling, the family's dinner routines, and the availability of healthy food at home.

Finally, the gastronomic dimension would be addressed by discussing the types of foods consumed (vegetables), how they are prepared, and the overall mealtime environment.

Methodological Clarification of the Structural Equation Model

The structural equation model (SEM) presented in Figure 4 was developed as a conceptual synthesis rather than as an empirical test based on a single dataset. No primary data collection was performed; rather, the model serves as a theoretical integration tool, aligning empirical evidence with the family medicine perspective on eating behaviour. It integrates evidence drawn from prior studies on adolescent nutrition and psychosocial determinants of eating behaviour (e.g., Brouwer 2015; Kokthi 2025; Czarniecka-Skubinam 2023) and translates these findings into the operational language of the Biopsychosocial-Gastronomy (BSG) framework. Each latent construct—social self-efficacy, peer belonging, peer approval, and vegetable preference—was selected because of its demonstrated predictive value for healthy dietary patterns in adolescent populations.

The model was designed using the logic of confirmatory path analysis, where directional arrows represent hypothesised causal relationships inferred from previous empirical work. Standardised coefficients displayed in the figure reflect the strength and significance of these associations as reported in representative studies. In this context, the SEM functions as a conceptual bridge between theory and practice: it visualises the interdependence of psychological and social drivers of food choice while positioning them within a family-medicine perspective that privileges system-level understanding over isolated variables.
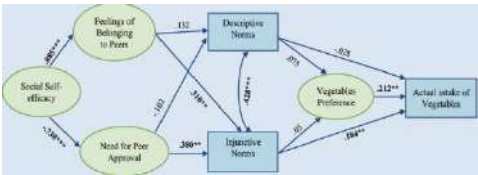

Fig. 4 Structural equation model (SEM) of the relationships between hypothesized factors and vegetables intake patterns (standardized estimates) ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

5.3 Integrating the Gastronomic Dimension

Although the structural model focuses on psychosocial variables, its interpretation is explicitly anchored in gastronomy. Preferences for vegetables, normative pressures, and peer dynamics are not abstract determinants; they are shaped by the concrete sensory and cultural experiences of food—its flavour, texture, and the social context of its preparation and sharing. Within the BSG framework, culinary experience operates as both an antecedent and a moderator of behavioural outcomes: repeated exposure to diverse tastes enhances acceptance of healthy foods, while collective cooking and aesthetically pleasant meals strengthen positive associations with nutritious choices.

Future empirical applications of this model could incorporate direct gastronomic indicators—such as taste education, cooking participation, and mealtime ambience—to quantify how culinary and sensory engagement mediate psychosocial influences on eating behaviour. In doing so, the SEM becomes not merely a psychological diagram but a gastronomic systems map, aligning methodological precision with the sensory and cultural essence of the volume's focus.

The diagram presents a conceptual model that links several psychosocial factors to "Actual intake of Vegetables." With the breakdown of the elements and their relationships:

Latent Variables (in ovals) -these are abstract concepts that cannot be measured directly.

- Social Self-efficacy: A teenager's confidence in their ability to interact socially. The arrow from here indicates a causal relationship with other variables.
- Feelings of Belonging to Peers: The extent to which a teenager feels they are a part of their peer group.
- Need for Peer Approval: A teenager's desire to be accepted and liked by their peers.
- Vegetables Preference: The teenager's subjective attitude toward vegetables.

Measured Variables (in rectangles) - these are direct measurements of specific concepts.

- Descriptive Norms: A teenager's perception of what others do (e.g., "All my friends eat vegetables").
- Injunctive Norms: A teenager's perception of what they should do (e.g., "My friends think I should eat vegetables").
- Actual intake of Vegetables: The final outcome, the quantity of vegetables consumed.

The arrows indicate the direction of influence. The numbers on the arrows are standardized regression coefficients, showing the strength and direction of the relationship. Asterisks (*, **, ***) indicate statistical significance: ** $p < 0.05$, *** $p < 0.001$

From a family physician's perspective, this diagram is highly relevant. It confirms what we often see in practice: food choices in teenagers are about far more than just nutritional knowledge. They are deeply rooted in their social and psychological context. Although this structural model primarily illustrates psychosocial determinants of vegetable intake, its interpretation is gastronomically grounded. Preferences for vegetables, peer norms, and family practices can be directly influenced by culinary exposure, sensory education, and shared meal contexts—core dimensions of gastronomy. Thus, this model operationalizes the interface between psychosocial dynamics and gastronomic experience.

There are some key observations we can draw from this model, which are useful for counseling adolescent patients:

- The Major Role of "Need for Peer Approval": The .380*** coefficient is the strongest direct predictor of "Injunctive Norms" (what one should eat). This means that for teenagers, the desire to be accepted is a powerful motivational force that shapes their perception of what is "right" or "good" to eat. When we talk to a teenager, we should not just focus on "what is healthy," but on "what is perceived as cool or normal" within their group.
- The Dual Influence of Norms:
- Injunctive Norms influence both the preference for vegetables (.05) and actual consumption (.184**). This suggests that a teenager will eat vegetables because they feel social pressure to do so.

- Descriptive Norms (what they believe others do) have a direct but statistically insignificant negative influence (-.028) on actual vegetable intake. However, they are related to vegetable preference (.075) and are strongly influenced by the "Feelings of Belonging" (.132).
- The Contradiction between Self-Efficacy and Need for Approval: The arrow with a value of -.738*** is particularly notable. It shows that the more a teenager feels socially competent (Social Self-efficacy), the less they need peer approval. This is a key point for medical intervention:
- Counseling should not just tell the teenager to eat vegetables but should focus on helping them develop self-confidence and autonomy. A teenager who feels secure in their own skin will be less influenced by peer pressure and will make choices based on their own values, including their preference for vegetables.
- The Link Between Preference and Consumption: The .212** coefficient confirms that if a teenager likes vegetables, they are more likely to eat them. This seems obvious but is important to validate. It suggests that we should explore ways to increase this preference, such as involving them in meal preparation or exposing them to a variety of vegetables cooked in different ways.

This diagram demonstrates that an effective approach to adolescent nutrition must be holistic. It is not enough to simply provide nutritional information. We must:

- Identify and address the social dynamics in the teenager's life.
- Encourage the development of "social self-efficacy" to allow the teenager to resist negative pressures.
- Leverage "injunctive norms" to motivate them by helping them perceive vegetable consumption as a positive behavior within their group.
- Recognize the role of preferences and work on building them.

Based on this holistic assessment, the physician can recommend a multifaceted, family-wide intervention. For example, they might recommend implementing a program like the "Stoplight Diet," which includes nutritional education and behavioral monitoring. They could encourage the family to "rethink their drink" by replacing sugary beverages with water and to engage in "active chores" or family bike rides.

This approach empowers the family to collectively make changes to their home food environment and daily routines, recognizing that a sustainable solution requires a systemic, not just an individual, effort.

Addressing the Critiques: The Pragmatism of the BSG Model

The BSG model directly addresses the critiques leveled against the original BPS model. By specializing its application to eating behavior and the family table, it provides a clear, actionable framework that is both "pragmatic and implementable". The FBT and childhood obesity interventions serve as powerful, evidence-based examples of how the BSG model can be operationalized, proving that the model is not merely a vague philosophical concept.

Furthermore, the BSG model provides a lens for identifying and mitigating the unintended consequences that can arise from single-focus interventions. For example, a diet plan based purely on biological principles, such as time-restricted eating (TRE), might be metabolically effective but could unintentionally disrupt social interactions and family meal dynamics, potentially leading to social isolation (Regmi, 2020). A physician using the BSG model would anticipate this conflict and guide the family in finding a balance, for example, by suggesting that occasional exceptions for social gatherings are permissible and do not derail long-term progress. The BSG model's multi-layered approach ensures that health is defined not just by an absence of disease but by the holistic well-being of the individual within their family and social system. Future iterations of this model may integrate gastronomic variables—such as taste exposure, meal aesthetics, and cooking participation—as moderators between psychological and behavioural outcomes, allowing quantitative exploration of how culinary experiences shape healthy eating within family systems.

A schematic of the family medicine approach to gastronomy, based on the Biopsychosocial-Gastronomy (BSG) model

This is conceptual tool helps a clinician understand and address eating behaviors holistically. It illustrates how various factors influence a person's relationship with food and how they interact in a dynamic system.

The schematic work can be visualized as a model with four interconnected, central domains:

1. **Biological:** This domain represents the physiological and genetic underpinnings of eating behavior. It includes a person's genetics, neurochemistry (such as the role of dopamine in the brain's reward system), hormonal signals that regulate appetite, and physical health conditions. The model recognizes that a person's biological vulnerability can be triggered by environmental factors, creating a "perfect storm" for disordered eating.

2. **Psychological:** This domain includes cognitive, emotional, and behavioral factors that shape an individual's relationship with food. This involves a person's mood, stress levels, learned coping mechanisms, and self-defeating thought patterns. For example, the model highlights the self-reinforcing feedback loop in anorexia nervosa, where repetitive rumination about calorie counting and exercise reinforces the physiological state of starvation.

3. **Social:** This dimension encompasses the interpersonal and community influences on eating behavior. It acknowledges that eating is a deeply social activity. Factors include family dynamics, peer influences, and cultural norms around food and mealtimes. The schematic emphasizes that a family is a system where "mutually influencing patterns" dictate health behaviors, making it a critical focus for interventions.

4. **Gastronomy:** This is the distinct, interactive layer that focuses on the sensory and experiential aspects of food and the mealtime environment. It includes the taste, smell, and texture of food, as well as the variety of dishes, method of preparation, and the overall aesthetic of the meal. This dimension is a primary driver of the brain's reward system and can be a powerful determinant of a person's food choices, often overriding their physiological need for energy.

The Family Medicine Approach in Practice

Within this schematic, the family physician's role is to operate as a guide, or coach, who understands that health and illness are a result of the dynamic interaction among these four levels. This approach requires the clinician to move beyond a narrow, biomedical focus to a more holistic practice.
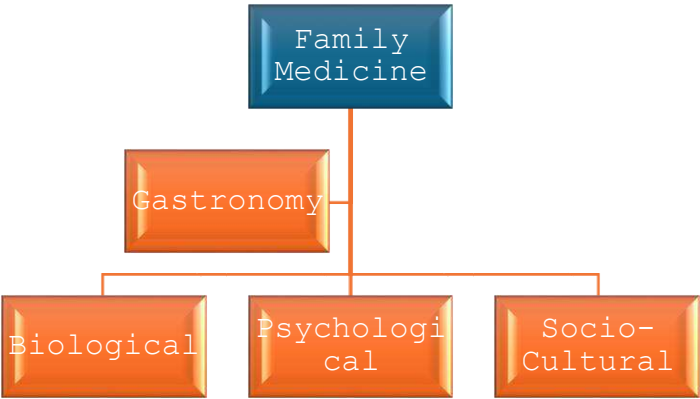
The schematic's work is made pragmatic through key clinical applications:

Holistic Assessment: The physician cultivates curiosity and trust to explore all four domains simultaneously. For instance, when a family presents with a child diagnosed with obesity, the clinician would not only assess for a genetic predisposition (Biological) but also ask about the child's emotional state (Psychological), parental modeling and dinner routines (Social) touched by cultural strains, and the types of foods consumed at home/outside (Gastronomy).

Systemic Intervention: Instead of treating the individual in isolation, the physician leverages the family as a resource to create lasting change. The schematic supports family-based interventions, which empower parents to become the primary agents of change.

This is evident in Family-Based Treatment (FBT) for eating disorders, where the focus is on re-nourishing the child (Biological) by coaching the family to enforce meal plans (Social), thus allowing the child to think more clearly and eventually work on psychological issues.

Bidirectional Feedback: The schematic highlights how the dimensions reinforce one another. For example, a successful, pleasant family meal (Social) can create powerful positive memories, which reinforces the sensory and experiential enjoyment of the food (Gastronomy), ultimately promoting the act of communal dining and healthy eating behaviors.

6. FUTURE DIRECTIONS

The Biopsychosocial-Gastronomy (BSG) Model offers a necessary and actionable framework for a family medicine approach to eating behavior. By building upon the foundational principles of George Engel's work and explicitly integrating the critical, distinct dimension of gastronomy, the model provides a comprehensive, multi-layered view of why and how we eat. It moves beyond a reductionist focus on singular causes to embrace a systems-based understanding of the complex, bidirectional feedback loops between biological predispositions, psychological states, social influences, and the sensory experience of food.

The evidence from Family-Based Treatment for eating disorders and family-based interventions for childhood obesity strongly supports this model. These successful interventions demonstrate that the family table is a powerful setting for promoting health, and that parents can be empowered to become the primary agents of change. By focusing on the family as a cohesive system and addressing the biological need for nourishment first, clinicians can create the conditions necessary for subsequent psychological and social healing.

While this report synthesizes a vast amount of existing research, it also highlights the need for continued exploration. Future studies should employ the BSG model to investigate the complex feedback loops between its four dimensions, particularly the causal pathways between the gastronomic experience and its psychological, social, and biological outcomes. The development of new, pragmatic family-centered interventions that are culturally sensitive and technologically informed is essential.

By embracing the BSG model, family medicine can ensure that the family table remains a cornerstone of not only physical health but also emotional well-being and social cohesion.

Future Directions for the Biopsychosocial-Gastronomy (BSG) Model in the Multimedia Society

The Biopsychosocial-Gastronomy (BSG) model, which examines the intricate interplay between biological, psychological, and social factors in relation to food and eating behavior, is ripe for expansion in our multimedia society. The widespread use of digital technologies and social media platforms presents both challenges and opportunities for the BSG model. To remain relevant and comprehensive, its future directions must account for the digitalization of gastronomy.

The BSG model needs to formally incorporate the influence of digital and media factors as a fourth, distinct domain, or as a pervasive force that shapes the existing three. This new dimension would focus on how digital food media impacts our perception, acquisition, and consumption of food. For example, the biopsychosocial aspects of food photography could be explored. The visual appeal of food in images (biological/sensory), the psychological desire to create and share "perfect" food content (psychological), and the social validation sought through "likes" and comments (social) all converge in this digital space. Future research should investigate how algorithms on platforms like Instagram and TikTok, which curate food content, influence our food choices and eating habits. The model should also account for the rise of food-related influencers and their role in shaping public attitudes and behaviors toward food trends and diets.

The psychological component of the BSG model must be expanded to address the unique pressures and anxieties created by the online food landscape. The fear of missing out (FOMO) on popular food trends and the pressure to conform to idealized body images promoted on social media are significant psychological stressors. Furthermore, the model should explore the link between digital food consumption and disordered eating behaviors.

For instance, the constant exposure to meticulously curated food content can lead to body dissatisfaction and may contribute to orthorexia nervosa, a condition characterized by an unhealthy obsession with eating "pure" or "healthy" foods. Future research could utilize digital ethnography to analyze online forums and communities dedicated to specific diets, providing insights into the psychological dynamics at play

Finally, the BSG model should be a framework for developing technology-driven interventions that promote healthier and more sustainable food practices. Personalized nutrition and gastronomy apps that consider a user's biological needs, psychological state, and social environment (e.g., family meals, cultural traditions) represent a promising application. The model could also guide the development of gamified educational tools to teach children about food literacy and sustainable agriculture in a fun and engaging way. In a globalized world, the multimedia society provides a unique opportunity to use the BSG model to bridge cultural divides by celebrating diverse culinary traditions and promoting cross-cultural understanding through shared digital platforms. This approach could foster collective gastronomic identity and encourage food choices that benefit both individual health and planetary well-being.

CONCLUSION

This chapter has demonstrated that a reductionist, biomedical approach is inadequate for capturing the complexity of modern eating behaviour. By integrating insights from family medicine, psychology, sociology, and gastronomy, the proposed Biopsychosocial-Gastronomy (BSG) Model provides a structured, interdisciplinary framework for understanding food-related health within its lived, sensory, and social contexts.

The inclusion of a structural equation model (SEM) within this framework serves a dual purpose. Conceptually, it translates multifactorial theoretical relationships into a visual, testable system that highlights how social self-efficacy, peer belonging, and affective food preferences interact to shape eating choices.

Methodologically, it demonstrates that even abstract psychosocial determinants can be articulated through the analytic precision of structural modelling—thereby bridging qualitative and quantitative traditions in family medicine research.

Equally important, the SEM is not an isolated psychological diagram but a gastronomic synthesis. Each pathway represented—whether through preferences, social norms, or self-efficacy—finds expression at the table, in the textures and rituals of everyday meals. Culinary participation, taste education, and the aesthetics of shared food experiences are powerful mediators of these psychosocial mechanisms. Thus, gastronomy is not peripheral but constitutive of behavioural health: it transforms abstract determinants into lived, sensory experiences that sustain well-being.

The BSG Model therefore achieves what Engel's original biopsychosocial proposal could only foreshadow: a pragmatic, clinically applicable model that unites scientific rigour with cultural and sensory depth. By embracing gastronomy as both method and meaning, family medicine can re-establish the family table as a site of preventive care, empathy, and health promotion—where everyday eating becomes both a medical and a cultural act.From a medical standpoint, the family table is a primary environment for shaping lifelong dietary patterns, influencing both physical and psychological health. Within Family Medicine, eating behavior is viewed not merely as a nutritional determinant, but as a complex biopsychosocial phenomenon involving metabolic regulation, emotional well-being, and sociocultural context. The act of eating together—regular, structured, and socially cohesive—has been shown to improve dietary quality, reduce the risk of obesity and metabolic disorders, and strengthen family communication, all of which are central to preventive care in the community.

Integrating the science of gastronomy into the principles of Family Medicine provides a broader framework for understanding the determinants of health. Gastronomy contributes knowledge on sensory perception, food preparation, and cultural meaning, while Family Medicine applies this understanding to clinical prevention and patient education.

This interdisciplinary dialogue enables physicians to promote not only balanced nutrition, but also sustainable and pleasurable eating practices that respect individual and cultural diversity.

Ultimately, the connection between Family Medicine and gastronomy reinforces the concept of food as a therapeutic tool. By guiding families toward conscious eating habits, encouraging shared meals, and addressing the psychosocial dimensions of diet, the family physician can effectively translate culinary culture into clinical benefit. In doing so, the family table becomes a site of preventive medicine—where daily choices support long-term health, resilience, and wellbeing across generations.

In a world where food is a central part of our identity and social lives, our approach expands the conversation beyond simple nutrition. The family physician, with their unique role at the nexus of individual and family health, is perfectly positioned to lead this change. We encourage future research to explore collaborative partnerships with dietitians, psychologists, and gastronomy experts to develop and refine this model. Ultimately, by connecting the clinical and culinary worlds, we can foster a more comprehensive understanding of eating behavior that is both scientifically rigorous and deeply human.

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CHAPTER 10
EVALUATION OF EXTENSION OF LOCAL FOOD SOURCES AND IODIZED SALT IN MACCINI BAJI VILLAGE, TAKALAR DISTRICT

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INTRODUCTION

Based on the results of Basic Health Research (RISKESDAS) in 2013, there is an increasing trend in the percentage of households in Indonesia that consume salt containing sufficient iodine content, reaching 77.1%, compared to RISKESDAS in 2007 which was only 62.3%. This condition shows an increase in awareness of the Indonesian people in meeting the body's iodine needs. However, RISKESDAS in 2013 also reported that 14.8% of the Indonesian population still experienced iodine deficiency and 8.1% did not consume iodine at all (Ministry of Health RI, 2013). At the national level, the target is that at least 90% of households in Indonesia will consume salt containing sufficient iodine levels by 2022. This target is in line with the government's efforts to improve public health and nutrition. In order to achieve this target, the performance indicator of development activities from 2020 to 2025 is to reach 86% coverage of households that consume salt containing iodine in Indonesia. (WHO, UNICEF, 2014; Ministry of Health of the Republic of Indonesia, 2020). Although several national programs have promoted iodized salt use, few studies have assessed the effectiveness of community-based education integrating local food culture as a vehicle for sustainable nutrition improvement.

Iodine deficiency is still a public health and nutrition problem in Indonesia, one of the causes is the lack of public knowledge about iodine deficiency disease (GAKY) (Mutalazimah et al., 2021). One of the most significant issues in public health is GAKY, because its consequences can have an impact on the survival and quality of human resources (Damanik, 2019). If the intake of iodine consumed is less than the recommended amount, then iodine deficiency can occur (WHO, 2001).

GAKY, or disorders due to iodine deficiency, refers to a series of symptoms that appear in the body due to lack of iodine intake in the body. GAKY can occur at any age, from fetus to adult (Mutalazimah et al., 2021). According to data (WHO, 2003), iodine deficiency affects about 1.9 billion individuals from 192 countries spread around the world. This condition is also experienced by 36.5% of all school-age children (6-12 years) in the world.

The highest prevalence of iodine deficiency was recorded in Europe, reaching 59.9%, while in America the prevalence was recorded at the lowest, at 10.1%. While in the Southeast Asian region, the iodine deficiency rate reached 39.9%. Iodine is an essential nutrient for the body because it plays a role in the formation of thyroid hormones, namely tetraiodothyronine (T4) or thyroxine and triiodothyronine (T3). This hormone functions to regulate body temperature, growth, and metabolism. Thus, iodine is essential for maintaining the health and normal functioning of the thyroid gland and ensuring optimal growth and development in children and adolescents (Nurhayati et al., 2021).

Iodine Deficiency Disorder (GAKY) is a series of conditions caused by iodine deficiency in the body. GAKY is one of the biggest nutritional problems in Indonesia. In general, this problem is more prevalent in mountainous regions, where the food consumed relies heavily on food production from local crops grown in iodine-poor soils. This is a serious problem given its association with impaired mental and intellectual development that can degrade it. Social groups that are particularly vulnerable to iodine deficiency are women of childbearing age (WUS), pregnant women, young children, and school-age children. If more than 10% of mumps is found in an area, then the area is declared an IDD area and IDD action must be taken (Kusmita &; Mandagi, 2021).

From the analysis of secondary data obtained from the first study in Maccini Baji Hamlet, Takalar Regency, it can be seen that the percentage of people who use iodized salt is still very low. Only about 35.6% of the 135 RTs used iodine-legged salt, while the remaining 64.4% used salt without added iodine. Therefore, a second study was carried out, namely interventions in the form of direct and door to door counseling to increase community knowledge, attitudes, and actions on the importance of local food sources and iodized salt and to improve the degree of public health. The aim of the intervention is to educate the public and collect data through questionnaires to assess the level of knowledge, attitudes and actions of the community towards iodized salt and local food sources. This is important because lack of iodine consumption can lead to impaired growth of the thyroid gland, impaired physical growth, and impaired mental function that have a major impact on the life and quality of human resources.

With this effort, it is expected to increase the number of people who use iodine-leble salt, so as to minimize the risk of iodine deficiency in the human body.

Evaluation can be defined as an action or process to evaluate the value or quality of an object, activity, or program. Evaluation is usually carried out systematically using planned methods to collect relevant data and information, then the data is analyzed and compared to predetermined standards or benchmarks. The purpose of evaluation is to obtain conclusions or recommendations related to the object being evaluated, as well as to provide input for future improvement and development (Anwar, 2021). Based on the above background, the purpose of this study is to evaluate whether previous local food source and iodized salt extension interventions can improve community knowledge, attitudes, and actions related to the importance of local food sources and iodized salt in Maccini Baji Hamlet, Takalar Regency. This study will also look at whether there is a significant increase in people's knowledge, attitudes, and actions after intervening within 3 months. This is important to do because good public knowledge, attitudes, and actions related to iodine and iodized salt consumption can improve public health and prevent growth disorders and thyroid gland function that have an impact on the quality of human resources (Afifa et al., 2020). Previous studies have focused primarily on knowledge gains after health counseling (Afifa et al., 2020; Nurhayati et al., 2021), but few have explored long-term retention of behavior change or culturally grounded communication strategies in rural coastal settings. Promoting the use of local iodine-rich foods aligns with sustainable gastronomy principles by valuing indigenous food sources, reducing dependence on imported fortification, and preserving local dietary heritage. This study is grounded in the Health Belief Model (HBM) and Diffusion of Innovations Theory, which emphasize perceived benefits, barriers, and communication channels influencing behavioral adoption.

1. RESEARCH METHODS

This research is a quantitative research that uses purposive sampling techniques. In-depth observations and interviews were conducted to collect data related to several input indicators, such as the quality of poster media, the language used, and the way the material is presented in the poster. In addition, several process indicators, such as planning, processes, and constraints in conducting counseling, were also considered in this study. This data was collected on March 12, 2023.

The sample in this study is a community in Maccini Baji Hamlet, Takalar Regency which is a producer of food from the sea as many as 30 people. This study applied descriptive analytical methods using the Friedman test and Wilcoxon test. Given the non-normal distribution of ordinal data, non-parametric tests (Friedman and Wilcoxon) were employed to detect changes across time points with a small sample. Both tests were used to evaluate significant differences between variables of knowledge, attitudes, and actions before and after the intervention of extension of local food sources and iodized salt with poster media. Although limited to 30 participants, the sample represents a homogeneous coastal community typical of many iodine-deficient areas in South Sulawesi, providing exploratory insights rather than generalizable conclusions.

The research instrument used in this study was he questionnaire was adapted from Sepa (2017) and validated by two public health experts. Internal consistency was assessed using KR-20 with a reliability coefficient of 0.82, using the *Guttman scale*. In this *Guttman scale*, each respondent will be given a score of 1 if the answer given is correct, and a score of 0 if the answer given is wrong or does not know. The score is then used to measure community knowledge, attitudes, and actions towards the evaluation of extension services on local food sources and iodized salt with poster media.

The data processing process in this study includes the stages of editing, coding, entry and tabulating. Data analysis begins with conducting descriptive analysis, which is describing objects through data in the sample studied based on variables. Some of the statistics used in this analysis are frequency distribution, minimum, maximum, mean and deviation.

In the pre-requisite analysis test, the data on the independent and dependent variables must be normally distributed and homogeneous. Data normality testing used *Shaphiro Wilks* test.

Normality Test	Total (N)	Significant
Pre-Test Knowledge	30	0.000
Post Test Knowledge	30	0.000
Pre-Test Attitude	30	0.000
Post Test Attitude	30	0.000
Pre-Test Action	30	0.000
Post Test Action	30	0.000

Based on the table above, the test results showed that data from 30 respondents obtained significant values from all normality test results, namely $0.000 < 0.05$. So that it can be concluded that the data is not distributed normally, then the next test is carried out using the Friedman test and *Wilcoxon* test. Because the results of normality testing show that the data are not normally distributed, the Friedman test is used to test for significant differences between more than two groups of interconnected samples.

2. RESULTS AND DISCUSSION
2.1 Result

The study was conducted in Maccini Baji Hamlet, Takalar Regency involving 30 respondents selected by purposive sampling. The respondents had previously been part of data collection in previous intervention studies, and were examined to see the level of knowledge, attitudes, and actions in the use of local food sources and iodized salt.

Input Evaluation

Table 1 presents the results of evaluations of several indicators related to the quality of poster media, language use, and presentation of material in posters. This evaluation was carried out after counseling using poster media was carried out for 3 months in Maccini Baji Hamlet, Takalar Regency.

Table 1. Evaluation of Extension Inputs on the Importance of Local Food Sources and Iodized Salt in Maccini Baji Hamlet, Ujung Baji Village, Sanrobone District, Takalar Regency in 2023

No	Indicators	Valuation
Poster Media Quality		
1.	Attractive design	The design is quite interesting because it is accompanied by images of groups that are susceptible to GAKY and iodine content that can be obtained from local food sources
2.	Clear writing and images	Self-explanatory, but some text is too small to be difficult to read
3.	Use of color (contrast, light dark)	Quite interesting
Language Spoken		
1.	Use of standard language	Posters using standard language
2.	The use of language is easy to understand or communicative	We have tried to use communicative language and even use Makassar when counseling a number of respondents
Presentation of Material in Posters		
1.	Systematics of material presentation	Systematically arranged
2.	Relevance of the material	Relevant according to the priority of the problem, that is, more than half of the households in Maccini Baji Hamlet do not use iodized salt
3.	Completeness of the material	The complete material discusses the definition of iodized salt, the amount of iodine needed per day, the benefits of iodized salt, vulnerable groups and the impact caused by GAKY, good food processing methods, and recommendations for eating seafood containing iodine.

Source: *Primary Data 2023 (Analysis of Interview Results Mrs. S, 63 years old)*

Based on primary data obtained from the evaluation of extension inputs of local food sources and iodized salt using poster media, there are several indicators assessed by respondents. First, related to the quality of poster media, it was assessed that the poster design was quite attractive because it was equipped with images of groups that were vulnerable to GAKY and iodine content that could be obtained from local food sources. In addition, the writing and images on the posters are also considered very clear, although there are some that are too small to be difficult to read. The combination of colors used is also considered quite good.

Then, in the language indicators used, the language used in the poster is considered to use standard and communicative language, easy to understand, and combined with the surrounding regional language (Makassar language) when counseling is carried out to the community. This is so that respondents who do not understand Indonesian can better understand the purpose of the counseling provided.

Finally, in the indicators of material presentation in the poster, it was assessed that the material was arranged systematically with a logical context related to the priority of the existing problem. The material in the poster explains the definition of iodized salt, the amount of iodine needed per day, the benefits of iodized salt, vulnerable groups and the impact caused by GAKY, good food processing methods, and recommendations for eating seafood containing iodine.

Process Evaluation

Table 2 provides an overview of several indicators related to planning, processes, and constraints that occur in the implementation of intervention evaluation in Maccini Baji Hamlet, Takalar Regency.

Table 2. Evaluation of the Extension Process on the Importance of Local Food Sources and Iodized Salt in Maccini Baji Hamlet, Ujung Baji Village, Sanrobone District, Takalar Regency in 2023

No	Indicators	Implementation
Planning		
1.	Place	Residence of the Head of Maccini Baji Hamlet
2.	Extension	Direct and door *to door* counseling
3.	Target goals	The target target is 30 people
Process		
1.	Extension media	Using poster media. The contents of the poster include the definition of iodized salt, the amount of iodine needed per day, the benefits of iodine, vulnerable groups and the impact caused.
2.	Extension tools	The provision of Pre-test and *Post-test* was obtained from the source of research results that have been conducted by Dr. Krenni Sepa, S. Ked entitled "The Effectiveness of Counseling on Knowledge, Attitudes, and Behavior of Mothers Regarding Disorders Due to Iodine Deficiency (GAKY) in the Working Area of the Baturiti Health Center I December 2017"
Constraints		
1.	Material submission	We experienced problems in delivering counseling materials because of the language used. People better understand the regional language (Makassar language) compared to standard Indonesian.
2.	Extension facilities	In conducting counseling, the facilities we use are very limited.
3.	Number of respondents	The number of respondents who attended the counseling directly did not meet the target so we took another alternative by conducting *door-to-door* counseling.

Source: *Primary Data 2023*

The initial plan for the extension activity was to be carried out at the house of the Head of Maccini Baji Hamlet, but the participants who attended did not meet the target target so we took an alternative Door To Door (DTD) counseling to achieve the intervention target. The counseling process went quite smoothly and according to the stages of the counseling process, starting with the provision of pre-tests, then the delivery of counseling materials with poster media, and ending with the provision of *post-tests*. Participants were quite communicative and quite enthusiastic about participating in counseling.

The obstacle in this counseling activity is that there is a lack of confidence in delivering counseling materials because they feel inexperienced and have not mastered the counseling materials. However, after seeing the participants' responses that were quite good, we were again enthusiastic about conducting counseling. In addition, a number of respondents also asked us to check their blood pressure while we only brought counseling materials and did not bring a sphygmomanometer.

Output Evaluation

Evaluation of extension on the importance of local food sources and iodized salt was carried out using questionnaires that measured respondents' knowledge, attitudes, and actions. Here is a table of respondents' characteristics by age, gender, recent education, and occupation.

Table 3. Distribution of respondents based on the characteristics of the community of Maccini Baji Hamlet, Ujung Baji Village, Sanrobone District, Takalar Regency Year 2023

Characteristic	Total (n)	%
Gender		
Man	7	23.3
Woman	23	76.7
Education		
SD	5	16.7
JUNIOR	7	23.3
SMA	13	43.3
D1/D2/D3	3	10.0
S1	2	6.7
Work		
Not Working	1	3.3
School	3	10.0

Civil servants	1	3.3
Private Employees	1	3.3
Self employed	3	10.0
Fisherman	3	10.0
IRT	16	53.3
Teacher Reciting	1	3.3
Village Staff	1	3.3
Total	**30**	**100.0**

Source: *Primary Data 2023*

Based on table 3 above, it is known that the distribution of respondents based on the sex characteristics of 30 respondents was 23 respondents (76.7%) were female and as many as 7 respondents (23.3%) were male.

Based on the education level of 30 respondents, there were 5 (16.7%) who graduated from elementary school, 7 respondents (23.3%) who graduated from junior high school, 13 respondents (43.3%) who graduated from high school, 3 respondents (10.0%) who graduated from D1/D2/D3 and 2 respondents (6.7%) who graduated from undergraduate.

Based on the type of work of 30 respondents, there were 16 respondents (53.5%) who became IRT (Housewives), 3 respondents (10.0%) who became fishermen, 3 respondents (10.0%) who became self-employed, 3 respondents who were still in school, 1 respondent (3.3%) who did not work, 1 respondent (3.3%) who became civil servants, 1 respondent (3.3%) who became private employees, 1 respondent (3.3%) who became a salary teacher, and 1 respondent (3.3%) who is a village staff.

Table 4. Distribution of Respondents Based on Level of Knowledge, Attitudes, and Actions Regarding the Importance of Local Food Sources and Iodized Salt in Maccini Baji Hamlet, Ujung Baji Village, Sanrobone District Takalar County in 2023

Variable	Pre-Test		Post-Test 1		Post-Test 2	
	n	**%**	**n**	**%**	**n**	**%**
Knowledge Enough Less	16 14	53.3 46.7	23 7	76.7 23.3	30 0	100.0 0
Total	**30**	**100.0**	**30**	**100.0**	**30**	**100.0**
Attitude Positive Negative	17 13	56.7 43.3	27 3	90.0 10.0	30 0	100.0 0
Total	**30**	**100.0**	**30**	**100.0**	**30**	**100.0**

Action						
Positive	3	10.0	25	83.3	30	100.0
Negative	27	90.0	5	16.7	0	0
Total	**30**	**100.0**	**30**	**100.0**	**30**	**100.0**

Source: *Primary Data 2023*

From table 4 above, it is known that the level of public knowledge regarding the importance of local food sources and iodized salt which is categorized as sufficient during post-test I was 23 people (76.7%), while post-test II was carried out within 3 months after the intervention there was an increase to 30 people (100%). Conversely, for the level of knowledge that is categorized as less, it decreased from 7 people (23.3%) to 0%.

In the attitude of the community regarding the importance of local food sources and iodized salt which was categorized as positive during post-test I as many as 27 people (90%), while post-test II was carried out within 3 months after the intervention there was an increase to 30 people (100%). Conversely, for negative community attitudes, it decreased from 3 people (10%) to 0%.

Based on community actions or behaviors related to the importance of local food sources and iodized salt which were categorized as positive during post-test I as many as 25 people (83.3%), while post-test II was carried out within 3 months after the intervention there was an increase to 30 people (100%). Conversely, for negative community behavior, it decreased from 5 people (16.7%) to 0%.

Table 5. Friedman Test Results Data on the Level of Knowledge, Attitudes, and Actions Regarding the Importance of Local Food Sources and Iodized Salt in Maccini Baji Hamlet, Ujung Baji Village, Sanrobone District Takalar County in 2023

Variable	Min	Max	Mean	*Sig.*
Knowledge				
Pre-Test	1	12	1.03	
Post-Test 1	10	12	2.88	0.000
Post-Test 2	6	12	2.08	
Attitude				
Pre-Test	1	5	1.20	
Post-Test 1	4	5	2.45	0.000
Post-Test 2	3	5	2.35	
Action				
Pre-Test	2	4	1.03	
Post-Test 1	4	5	2.50	0.000
Post-Test 2	4	5	2.47	

Source: *Primary Data 2023*

The results of the *Friedman* test analysis showed a significance value of 0.000 (p < 0.05) so that it can be concluded that statistically there is a significant difference in the level of knowledge between before and after three months of counseling on the importance of local food sources and iodized salt.

From the results of the *Friedman* test, a significance value of 0.000 (p < 0.05) was obtained so that it can be concluded that statistically there is a significant difference in attitude between before and after three months of counseling on the importance of local food sources and iodized salt.

Based on the results of the Friedman test showed a significance value of 0.000 (p < 0.05) so it can be concluded that statistically there is a significant difference in action between before and after three months of counseling on the importance of local food sources and iodized salt.

Table 6. Wilcoxon Test Results Data on the Level of Knowledge, Attitudes, and Actions Regarding the Importance of Local Food Sources and Iodized Salt in Maccini Baji Hamlet, Ujung Baji Village, Sanrobone District Takalar County in 2023

Variable	Min	Max	Mean	*Sig.*
Knowledge				
Pre-Test	1	12	6.5	0.000
Post-Test 2	6	12	10.2	
Post-Test 1	10	12	11.7	0.000
Post-Test 2	6	12	10.2	
Attitude				
Pre-Test	1	5	3.6	0.000
Post-Test 2	3	5	4.8	
Post-Test 1	4	5	4.9	0.414
Post-Test 2	3	5	4.8	
Action				
Pre-Test	2	4	2.9	0.000
Post-Test 2	4	5	4.8	
Post-Test 1	4	5	4.8	1.000
Post-Test 2	4	5	4.8	

Source: *Primary Data 2023*

The results of the *Wilcoxon* test analysis show a significance value of 0.000 (p < 0.05), meaning that there is a difference in Pre-Test and Post-Test 2 knowledge scores. Similarly, Post-Test 1 and Post-Test 2 knowledge scores with a significant value of 0.000 (p < 0.05) mean that there is a difference.

So it can be concluded that statistically there is a significant difference in the level of knowledge between before and after three months of counseling on the importance of local food sources and iodized salt.

From the results of the *Wilcoxon* test, a significance value of 0.000 (p < 0.05) was obtained, meaning that there was a difference in Pre-Test and Post-Test 2 attitude scores, so it can be concluded that statistically there was a significant difference in attitude between before and after three months of counseling on the importance of local food sources and iodized salt. In contrast, attitude scores on Post-Test 1 and Post-Test 2 with a significant value of 0.414 (p > 0.05), meant that there was no significant difference in attitude between before and after three months of counseling on the importance of local food sources and iodized salt.

Based on the results of the *Wilcoxon* test showed a significance value of 0.000 (p < 0.05), it means that there is a difference in Pre-Test and Post-Test 2 action scores between before and after three months of counseling on the importance of local food sources and iodized salt. In contrast, action scores on Post-Test 1 and Post-Test 2 were significantly 1,000 (p > 0.05), meaning there was no significant difference in action between before and after three months of counseling on the importance of local food sources and iodized salt.

Evaluation is also done with in-depth interviews. The results of in-depth interviews with a number of respondents, it was found that there were some behavioral changes in the use of local food sources well and iodized salt because respondents felt that after the extension intervention was given at the time of the previous study they realized that the use of iodized salt was better than bulk salt / liter and the lack of consumption of iodine-containing foods was very harmful to the health of the body, So respondents decided to pay more attention to nutritious food to meet their iodine needs.

The following is one of the interview excerpts on respondents who had not previously used iodized salt.

"Those of us who used to come home to fetch salt were just as socialized about it. In the past, it was still using literanja salt that I used to buy at a mobile salt seller, but after we asked about it first, so the package was also iodized salt" (Mrs. Y, 50 years old).

Generally, iodized salt has been circulating in the community before counseling. This is in accordance with the phrase of the merchant informant:

"I used to sell it at my stall at my stall before there was socialization and it was better to do it" (Mrs. H, 36 years old).

Other respondents also stated that:

"Iye, son, the salt as soon as I use it continues to cook from the beginning because I don't like it, I am a literal coarse salt. Only when I cook fish or vegetables do I practice at home how to cook salt as we taught before" (Mrs. S, 63 years old).

2.2 Discussion

Counseling on local food sources and iodized salt is an intervention from the lack of awareness of iodized salt and food sources containing high iodine around the community. Evaluation related to extension of local food sources and iodized salt was carried out using questionnaire instruments to measure respondents' knowledge, attitudes, and actions before and after the intervention. The questionnaire contains positive questions and negative questions. This questionnaire was given at the time of the previous study as a form of short-term evaluation and was given again within a span of 3 months for long-term evaluation.

The following are the results of a long-term evaluation conducted by providing an assessment in terms of inputs, processes and outputs on intervention activities that have been carried out three months earlier at the time of the previous study.

Input

The evaluation of extension of local food sources and iodized salt in Maccini Baji Hamlet obtained an assessment of several indicators, namely the first indicator regarding the quality of poster media. The design displayed on the poster is quite interesting because it is accompanied by images of groups that are vulnerable to GAKY and iodine content that can be obtained from local food sources. The writing and images are quite clear, but there are some writings that are too small to read and require close proximity to be read clearly.

Research (Astuti et al., n.d.) states that the font size on the poster for easy legibility should not be smaller than 18 points or 5mm. The use of color (contrast, dark light) on posters uses white, green, red, blue, purple so that it looks varied and is considered to attract the attention of respondents. In accordance with the statement (Huddle, 2000) that a poster must be *eye-catching* in order to make people stop and read it.

In the second indicator, namely language seen from the content of the poster in addition to using standard language, the language of the surrounding area (*Makassar language*) is also used when conducting counseling so that respondents who do not understand Indonesian better understand the purpose of the counseling given. The results of this study are supported by previous research, namely the word in the posyandu poster is considered easy to remember, because it is a colloquial word, namely Sundanese (Astuti et al., n.d.) .

Posters can be said to be good not only in terms of appearance, but also in terms of presentation of the material. In this third indicator, the presentation of the material in the poster is arranged completely and systematically starting from the introduction of iodized salt, the amount of iodine needed per day, the benefits of iodized salt, vulnerable groups and the impact caused by GAKY, good food processing methods, and recommendations for eating seafood containing iodine. In addition, the poster material provided is relevant to the problems that exist in the community that are priority problems. In line with previous research, posters are considered good not only because of the attractive appearance, but also from the content of the message. The completeness of the message is considered sufficient to represent the information needed about the posyandu (Astuti et al., n.d.)

Process

The counseling process is considered to run quite smoothly and according to the stages of the counseling process, which starts with giving a pre-test, then delivering counseling materials with poster media, and ending with giving *a post-test*.

However, please note that there are several obstacles in this activity, namely the participants who attended did not meet the target target so we took alternative counseling on a Door *To Door* (DTD) basis to achieve the intervention target. This is in line with research (Sari, 2013) that the obstacles faced in conducting counseling, namely not all people invited to attend the counseling so that the targeted forum is not achieved. Another obstacle is that in the process of delivering extension materials, they feel less confident because they feel less experienced and have not mastered the extension materials. The success of a health counseling is influenced by extension factors, people who conduct counseling, for example, lack of preparation, lack of mastery of the material to be explained, the language used is less understandable to the target, the appearance is less convincing to the target, the voice is too small so that it cannot be heard by the target, and the delivery of monotonous counseling material (Balqis et al., 2022).

Output

Short-term evaluation shows that there is a significant increase in knowledge, attitudes and actions before and after local food source extension interventions and iodized salt. However, long-term evaluations conducted over a period of 3 months showed no significant difference in attitudes and actions before and after local food source interventions and iodized salt.

The results of the Post-Test 1 and Post-Test 2 knowledge level research with a significant value of 0.000 ($p < 0.05$) which means there are differences. So it can be concluded that statistically there is a significant difference in the level of knowledge between before and after three months of counseling given. In contrast, attitudes in Post-Test 1 and Post-Test 2 with a significant value of 0.414 ($p > 0.05$), meant that there was no significant difference in attitude between before and after three months of counseling. Meanwhile, the action in Post-Test 1 and Post-Test 2 with a significant value of 1,000 ($p > 0.05$) which means that there is no difference in action before and after three months of counseling on the importance of local food sources and iodized salt. The intervention proved effective in improving knowledge but less so in sustaining behavioral changes, underscoring the importance of continuous engagement and culturally grounded nutrition education.

The findings suggest that knowledge improvement did not automatically translate into behavior change, as predicted by the Health Belief Model

These results are in line with research (Miko, 2021) that the implementation of training and application of knowledge on the examination and handling of iodized salt in the Lhoknga District area, as a whole, has a very good influence on changes in knowledge, attitudes and actions of mothers and significantly affects the values of knowledge, attitudes and actions of mothers about iodized salt. Although in the lecture intervention, attitudes have not been significantly improved. Intervention through training on housewives has an impact on deeper curiosity and action regarding the use of iodized salt even after three weeks.

The decline in attitudes and actions related to local food sources and iodized salt was caused by several respondents who had participated in counseling interventions at the time of the previous study were no longer residing in Maccini Baji Hamlet, so there were several respondents represented by other family members or neighbors who did not receive the same exposure to the intervention. Consequently, their level of understanding and internalization of the messages delivered during the counseling was not as strong as that of the original participants, leading to a reduction in the measured attitude and behavioral outcomes. In addition, the absence of follow-up sessions and reinforcement activities during the three-month interval contributed to the decline, as sustained behavioral change requires continuous reminders and environmental support.

CONCLUSION

It can be concluded from the results of the evaluation of extension of local food sources and iodized salt using poster media that:

Input

In general, the evaluation of inputs shows positive results in each indicator assessed by respondents. Poster material is presented with clear, attractive, and easy-to-understand images. The languages used include standard language and Makassar language. The material is arranged systematically and is relevant to the priority issues in society.

Process

There are still several obstacles, such as lack of confidence in delivering material, very limited facilities, and participants who are not in accordance with the target target, so it is necessary to do alternative door-to-door counseling to achieve the target target intervention.

Output

Interventions have proven effective in increasing knowledge, but have been less able to sustain long-term changes in attitudes and practices, highlighting the importance of a sustainable and culturally based educational approach. Evaluation is also done with in-depth interviews. The results of in-depth interviews with a number of respondents, it was found that there were some behavioral changes in the use of local food sources properly and iodized salt because respondents felt that after the counseling intervention was given at the time of PBL II they realized that the use of iodized salt was better than bulk salt / liter and the lack of consumption of iodine-containing foods was very harmful to the health of the body, So respondents decided to pay more attention to nutritious food to meet their iodine needs.

Suggestion

Extension activities carried out to the community in Maccini Baji Hamlet have been able to change the knowledge, attitudes, and actions of the community for the better related to local food sources and iodized salt. Here are some things that need to be done to achieve the national coverage target of 90%. This study contributes to the literature on culturally grounded health communication and behavioral nutrition education.

1. The government needs to increase the number of extension workers conducting socialization by health workers to the public to increase knowledge about the importance of iodine, the risk of GAKY, and the source of iodine.
2. Health workers must be equipped with knowledge and understanding as well as comprehensive counseling techniques so as to increase knowledge and change people's attitudes in a positive direction about the importance of iodine.

3. Building good cooperation and support between cross-sectors and local communities so that the long-term program of the Government, namely iodized salt fortification can improve the quality of life of the community.

4. A local food-based approach has the potential to support food security and the achievement of the 2025 RPJMN by strengthening the consumption of nutritious and sustainable food at the household level.

5. Future research should involve larger and more diverse samples and explore digital-based educational media such as videos or social platforms.

6. The study also supports the applicability of the Health Belief Model in community-based nutrition interventions with cultural adaptation.

Empowering communities through culturally sensitive nutrition education is essential for achieving sustainable behavior change.

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