

Developing a Food Experience Scale for Wellness Tourism in Island Destinations: A Case Study of Hainan, China

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The Global Surge of Wellness Tourism



Source:
Traveldailymedia

Every Destination Has Something Unique to Offer



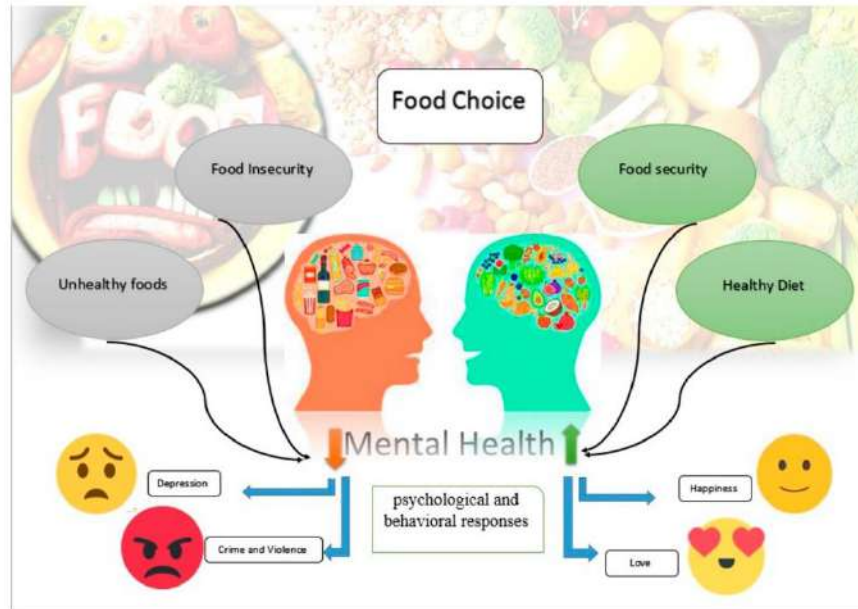
Source: Global Wellness Institute, Global Wellness Tourism Economy, November 2018



Source: Global Wellness Institute

- ✓ Global wellness market size: **\$6.3 trillion in 2023**, representing **6.03% of global GDP** (Global Wellness Economy Monitor 2024).
- ✓ Wellness tourism contributed **\$830.2 billion**, with a projected annual growth rate of **10.2%** (Global Wellness Institute, 2024)
- ✓ Studies focus on visible wellness experiences—such as spa treatments, mindfulness retreats, and natural environments (Forlani et al., 2022 ; Soltani et al., 2020)
- ✓ **Food remains less underexplored yet essential component of wellness**

How Food Becomes a Wellness Experience



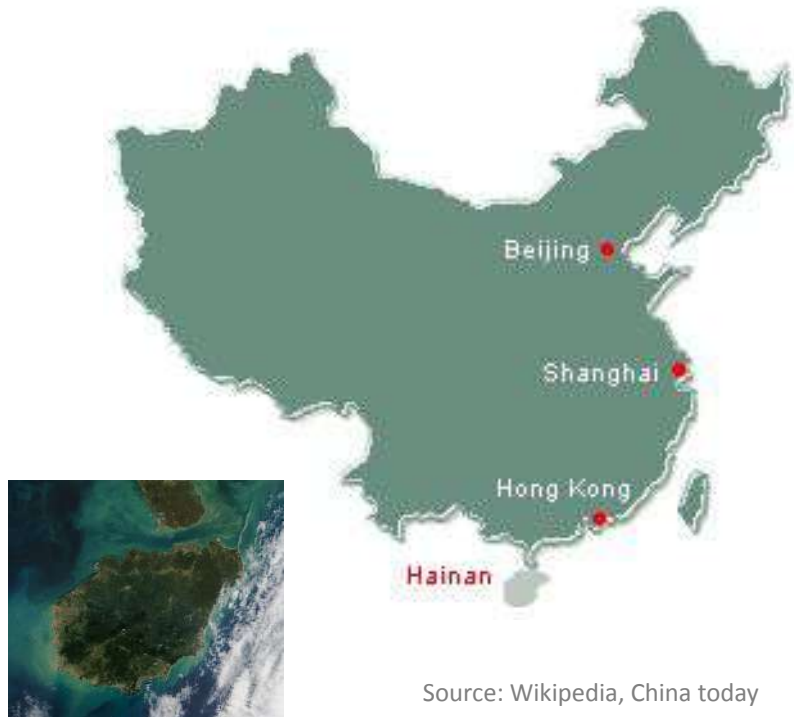
Source: Heidari et al., 2023



Source: Timesofindia, 2025

- ✓ Food provides emotional pleasure, self-care, and symbolic meaning (Soltani et al., 2020).
- ✓ Shared dining fosters healing and social intimacy (Forlani et al., 2022).
- ✓ Tourists value healthy features like lightness and herbal balance (Yang & Xu, 2024).
- ✓ Food is often studied through gastronomy or nutrition labels, not as a structured wellness experience (Apak & Gürbüz, 2023).

Why Hainan?



- ✓ National wellness island policy encourages integration of food, medicine, and tourism (Tang, 2012).
- ✓ **Hainan cuisine reflects health-oriented principles like mildness, herbal elements, and food therapy** (Yang et al., 2021).
- ✓ Tourists express preferences driven by both cultural authenticity and wellness motivations (Liu & Choe, 2023).

Limited Frameworks for Wellness-based Food Experience



- **Prior models emphasize taste, safety, and authenticity but overlook wellness-oriented dimensions** (Zhong & Cheng, 2017).
- **The therapeutic and symbolic roles of food in healing remain underexplored** (Forlani et al., 2022).
- **A tailored measurement scale is needed to capture wellness-specific food experiences** (Stone & Zou, 2023).

Research Flow

Study 1

Literature Review

UGC-Based Qualitative Exploration

Item Generation & Initial Scale Development

Study 2

Reliability and Validity Testing

Questionnaire Survey

Pre – test & Refinement

Final Scale Confirmation

Research Questions

1. What key dimensions define food experiences in wellness tourism?
2. Can user-generated content be used to extract representative and theoretically valuable items for constructing a food experience scale?
3. Does the developed food experience scale demonstrate sound reliability and construct validity?
4. What measurable and unique attributes characterize food experiences in Hainan, as a tropical island-based wellness tourism destination?

Research purpose

- ✓ To identify the core dimensions of food experience in wellness tourism.
- ✓ To generate measurement items based on user-generated content (UGC) analysis.
- ✓ To develop and validate a food experience scale for Hainan wellness tourism settings.

Island-Based Wellness Food Experiences

- ✓ **Island destinations offer natural conditions ideal for healing and relaxation, such as humid air, mild climate, and quiet environments**
(Parra-López & Martínez-González, 2018)
- ✓ **Hainan is China's most prominent tropical island destination, especially attractive for seasonal wellness migration by elderly tourists**
(Liu, 2022)
- ✓ **Tourists from northern China relocate to Hainan during winter for wellness purposes, driving demand in food, healthcare, and accommodation sectors** (Liu, 2022)
- ✓ **Island wellness destinations attract long-stay visitors with strong preferences for nutritious, low-processed, and local-origin foods**
(Wang et al., 2024)
- ✓ **Global wellness travelers favor tropical islands for climate escape, nature immersion, and cultural contrast** (Ruggieri & Platania, 2024)

This research focuses on how wellness-oriented food experiences are perceived by tourists in Hainan, an island destination rich in natural and cultural resources.

Prior Studies about Food in Wellness Tourism

- ✓ **Food enhances wellness tourism through both sensory pleasure and symbolic meaning** (Forlani et al., 2022)
- ✓ **Food-related ambience and quality influence subjective well-being in health-focused trips** (Yang & Xu, 2024)
- ✓ **Local cuisine supports cultural identity and contributes to destination sustainability** (Taheri & Gannon, 2021)
- ✓ **Tourists' perceptions of food value—functional, emotional, social, cultural—shape satisfaction and loyalty** (Zhu et al., 2024)
- ✓ **Wellness food products integrate flavor, cleanliness, environment, and service into an overall experience** (Muskat et al., 2023)

Despite these findings, no validated scale has yet been developed to systematically measure food experiences in wellness tourism. This study aims to fill that gap by proposing a context-specific measurement tool tailored to island wellness tourism

Theories Behind Wellness Food Experiences

- ✓ **Experience Economy Theory highlights food as immersive and personalized experience** (Pine & Gilmore, 1998)
- ✓ **Memorable Tourism Experiences (MTE) model explains how food leaves long-term emotional memories** (Kim et al., 2012)
- ✓ **PERMA framework links food with well-being through positive emotion, engagement, meaning, and relationships** (Seligman, 2011)
- ✓ **These theories must be adapted to Chinese collectivist contexts where harmony, family meals, and health beliefs shape food meaning** (Yang et al., 2021)
- ✓ **Local beliefs like 清淡 (light), 食补 (food-based healing), and 草本平衡 (herbal balance) enhance cultural depth of wellness dining** (Yang et al., 2021)

These theoretical lenses inform the development of a culturally grounded food experience scale tailored for Chinese wellness tourists in Hainan.

Xiaohongshu and UGC

- ✓ UGC reflects rich emotional, contextual, and narrative data from real travelers (Zhou, 2020)
- ✓ Xiaohongshu combines visual storytelling and affective writing—ideal for food and wellness tourism (Wang et al., 2022)
- ✓ Content on Xiaohongshu shapes destination image, health perception, and cultural understanding (Li & Lee, 2024)

These UGC data form the empirical basis for extracting themes and constructing initial measurement items for the wellness food experience scale.

Study1: Item Generation & Initial Scale Development

1. Data Collection



- Collect data from the web using Python (Contains "Hainan" and "Wellness tourism" and "Food")
- Store data in the original database(200 blogs)

2. Text Processing



- Remove meaningless words (using various dictionaries)
- Remove specific words (advertisements, special characters)
- Split and prepare text

3. Text Analysis



- Co-occurrence network analysis
- Inductive Coding
- Store analysis results in the database

4. Scale development



- Analyze the results and data
- Develop six dimensions scale



Study 1: Pre Test

- A preliminary survey was conducted on 100 adult consumers.
- Results showed that Cronbach's α values for the six dimensions were all above 0.86, indicating good to excellent reliability. Specifically, emotional value ($\alpha = 0.919$), memory value ($\alpha = 0.906$), cultural value ($\alpha = 0.885$), health attributes ($\alpha = 0.918$), sensory experience ($\alpha = 0.863$), and dining atmosphere ($\alpha = 0.881$) all demonstrated satisfactory internal consistency.

Study 2: Sample & Measure

Participants	300 participants (over 19 age adult)
Survey period	July 12 – 14, 2025
Survey method	1) Online survey managed by Wenjuanxing specializing in online surveys. 2) 24 Questionnaires
Effective Sampling	Final 284 data

No.	Item Description (Candidate Scale Item)	Example UGC Excerpt (Source Code)	Coding Notes / Keywords	Dimension
1	I am willing to try traditional Hainanese foods such as coconut chicken or fermented vinegar broth.	“第一次喝糟粕醋，味道很特别，有点冲但真的上头，很有地方感觉。” (XHS18-5)	curiosity, authenticity, local identity	Local Cultural Value
2	Hainan's food helps me maintain a healthy diet during travel.	“这里的菜特别清淡，而且药膳的搭配很科学，吃完感觉特别轻松。” (XHS05-7)	light diet, balance, nourishment	Health Attributes
3	I find the flavor and aroma of Hainanese dishes very enjoyable.	“一进餐厅就闻到椰奶香味，真的很诱人。” (XHS09-2)	aroma, taste, sensory pleasure	Sensory Experience
4	I enjoy eating in tranquil, nature-integrated environments in Hainan.	“在热带花园里吃早餐，阳光洒在餐桌上，超级放松。” (XHS12-8)	natural setting, calm, healing	Dining Atmosphere
5	Sharing meals in Hainan with loved ones makes me feel more emotionally connected.	“和爸妈一起吃椰子鸡真的很温馨，有家的感觉。” (XHS03-6)	family bonding, warmth	Emotional Value
6	I love discovering hidden local eateries in Hainan.	“在小巷里找到一家老字号的汤粉店，太惊艳了！” (XHS14-1)	discovery, surprise, uniqueness	Memory Value

Based on systematic content analysis of Xiaohongshu user-generated reviews, we identified and constructed six key dimensions that characterize tourists' food experiences in wellness tourism.

IV. Result – Scale Development

Dimension	Item	Reference
Local Cultural Value	I am willing to try traditional local food in Hainan (e.g., coconut chicken, zhaopo vinegar)	Yan et al. (2023); Tang (2012)
	Hainanese cuisine helps me understand local culture	
	Local ingredients enhance the cultural atmosphere of the meal	
	Dining in Hainan sparked my interest in local traditions	
Health Attributes	I believe Hainanese food benefits my physical health	Taheri & Gannon (2021) Yang & Xu (2024)
	I value consuming light meals during travel	
	I prefer menus with health labels or nutritional recommendations	
	Hainanese cuisine makes me more aware of the diet-health connection	
Sensory Experience	The taste of Hainanese food left a deep impression on me	Forlani et al. (2022); Muskat et al. (2023) Kim et al. (2024)
	I enjoy the color, aroma, and flavor combinations of the food	
	The presentation and smell of the food enhanced my dining pleasure	
	The cuisine offered a multi-sensory enjoyment	
Dining Atmosphere	I enjoy dining in natural settings	Zhu et al. (2024); Wang et al. (2024)
	The dining environment made me feel relaxed	
	I prefer immersive dining atmospheres	
	The eating environment in Hainan felt pleasant	
Emotional Value	Sharing Hainanese food with travel companions makes the experience better	Zhou (2020); Wang et al. (2022)
	I value emotional connection during meals	
	Hainanese cuisine enhanced my bonds with travel companions	
	The dining process made me feel warmth	
Memory Value	I enjoy discovering lesser-known local foods	Zhu et al. (2024); Kim et al. (2024)
	Some dining experiences were memorable	
	Food experiences in Hainan created unique memories	
	I would consider revisiting Hainan because of the food memories	

We developed a 24-item scale based on UGC analysis and literature review to measure food experience in wellness tourism.



Demographic Characteristics of Study Participants

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Variable		Frequency	Ratio	Variable		Frequency	Ratio
Gender	Male	136	47.9	Occupation	Students	16	5.6
	Female	158	52.1		Office employees	110	38.7
Age	19-29	58	20.4		Self-employed	20	7.0
	30-39	60	21.1		Professionals	34	12.0
	40-49	52	18.3		Services	14	4.9
	50-59	58	20.4		Others/Unemployed	90	31.7
	Over 60	56	19.7	Monthly Income	2,000,000 won or less	60	21.1
Education Level	Middle School	2	0.7		2,010,000 – 3,000,000 won	68	23.9
	High School	57	20.4		3,010,000 – 4,000,000 won	60	21.1
	College Degree	32	11.3		4,010,000 – 5,000,000 won	42	14.8
	Bachelor's Degree	156	54.9		5,010,000 – 6,000,000 won	26	9.2
	Above Master's Degree	38	12.7		Above 6,010,000 won	28	9.9
Total		284	100.0	Total		284	100.0

Participants were 57.9% male, with 20.4% in the 19–29 age group and 21.1% in the 30–39 age group. Additionally, 54.9% held bachelor's degrees, and 23.9% reported a monthly income in the range of 2 million to 3 million won. And 38.7% held

IV. Result – Factor Analysis & Validity

Factors		Standardized estimates	p	AVE	CCR	Cronbach's α
Cultural value	CV1	0.808	***	0.558	0.835	0.834
	CV2	0.828	***			
	CV3	0.843	***			
	CV4	0.789	***			
Health attributes	HA1	0.804	***	0.537	0.823	0.822
	HA2	0.789	***			
	HA3	0.814	***			
	HA4	0.823	***			
Sensory experience	AC1	0.738	***	0.519	0.811	0.808
	AC2	0.798	***			
	AC3	0.832	***			
	AC4	0.819	***			
Dining atmosphere	DA1	0.860	***	0.548	0.828	0.820
	DA2	0.810	***			
	DA3	0.812	***			
	DA4	0.759	***			
Emotional value	EV1	0.821	***	0.591	0.852	0.852
	EV2	0.838	***			
	EV3	0.843	***			
	EV4	0.827	***			
Memory value	MV1	0.833	***	0.548	0.859	0.827
	MV2	0.800	***			
	MV3	0.828	***			
	MV4	0.789	***			

Kaiser-Meyer-Olkin test (KMO=0.974) and Bartlett's test of sphericity (df =190 , p < .001)

Factor analysis and validity assessment are both effective in ensuring the reliability and accuracy of measurement instruments.

General Conclusion

- This study developed a dedicated measurement scale for **food experiences in wellness tourism** , consisting of six dimensions (**local cultural value, health attributes, sensory experience, dining atmosphere, emotional value, and memory value**) and 24 items, addressing a significant gap in structured assessment tools.
- By applying inductive content analysis to **user-generated content (UGC)** from Xiaohongshu, the study identified experience-based constructs that closely reflect real tourist perceptions.
- Grounded in the Experience Economy, Memorable Tourism Experiences (MTE), and PERMA well-being frameworks, the study provides a theoretical model linking food, experience, and wellness.
- Preliminary reliability and validity tests confirm the scale's robustness, indicating strong potential for future research and practical use.

Theoretical Implication

1. This research expands the scope of food-related tourism studies by shifting focus from functional aspects to emotional, symbolic, and cultural values in the wellness context.
2. It demonstrates how UGC can serve as a valid and rich source for scale development in experience-based tourism research, offering a methodological contribution.

Practical Implication

1. The proposed scale can support destination managers and tourism operators in service evaluation, product design, and market segmentation—especially in island-based wellness destinations like Hainan.
2. For policy-makers, the scale provides a visitor-centered evaluation tool that can inform wellness tourism policies promoting integrated “wellness-food-tourism” strategies.

1. The UGC data were primarily drawn from Xiaohongshu, which skews toward younger Chinese users; future studies should include broader demographic groups such as elderly and international tourists.
2. While the scale showed promising reliability and validity, cross-regional and cross-cultural testing is needed to enhance external validity and ensure generalizability.

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Thank You