

Sja Q1.

p-ISSN: 2352-6181 | e-ISSN: 2352-619X | VOLUME 5 | NUMBER 4 | DECEMBER 2018



Journal of Ethnic Foods

Traditional Food Knowledge,
Culture, Health, Nutrition and Dietetics,
Ecology and Geography

Food taboos and suggestions among Madurese pregnant women: A qualitative study

Research on Joseon royal birthday cuisine memos


Street sale of pulque and socio-spatial practices: a gender perspective in central Mexico



[Skip to content](#)

Advertisement

Menu

- [Explore journals](#)
- [Get published](#)
- [About BMC](#)
- [Search](#) 
- [Login My Account](#)

Search all BMC articles

[Search](#) 

[Journal of Ethnic Foods](#)

Menu

- [Home](#)
- [About](#)
- [Articles](#)
- [Submission Guidelines](#)

About

- [Contact](#)
- [Editorial Board](#)

We use cookies to personalise content and ads, to provide social media features and to analyse our traffic. We also share information about your use of our site with our social media, advertising and analytics partners in accordance with our [Privacy Statement](#). You can manage your preferences in 'Manage Cookies'.

[Manage Cookies](#)

✓ OK

Communication Editor

Myung Ok An, *International Vaccine Institute, Republic of Korea*

Honorary Editor

Hae-Wol Cho, *Eulji University, Republic of Korea*

Managing Editor

Dai Ja Jang, *Korea Food Research Institute, Republic of Korea*

Statistical Editor

Jin Sik Nam, *Suwon Women's University Food Analysis Research Center, Republic of Korea*

Editorial Board

Anil Kumar Anal, *Asian Institution of Technology, Thailand*

Dimitrios Buhalis, *Bournemouth University, UK*

Francesco Canganella, *Universit degli Studi della Tuscia, Italy*

Soo Wan Chae, *Chonbuk National University, Republic of Korea*

Kyung-soo Chun, *Seoul National University, Republic of Korea*

James W. III Daily, *Daily Manufacturing Inc., USA*

Sevim Erhan, *U.S. Department of Agriculture, USA*

Seyed Mohammad Taghi Gharibzadeh, *Islamic Azad University, Iran*

Martin Hall, *Campden BRI, UK*

Bei-Zhong Han, *China Agricultural University, China*

Wilhelm Holzapfel, *Handong Global University, Republic of Korea*

Nam-lin Hur, *University of British Columbia, Canada*

Jin Taek Hwang, *Korea Food Research Institute, Republic of Korea*

Hye Kyung Jeong, *Hoseo University, Republic of Korea*

Wei Jia, *University of North Carolina, USA*

We use cookies to personalise content and ads, to provide social media features and to analyse our traffic. We also share information about your use of our site with our social media, advertising and analytics partners in accordance with our [Privacy Statement](#). You can manage your preferences in 'Manage Cookies'.

> **Manage Cookies**

✓ OK

Myeong Soo Lee, *Korea Institute of Oriental Medicine, Republic of Korea*

Young Chul Lee, *Korea Food Research Institute, Republic of Korea*

Guan-Sheng Ma, *Peking University, China*

Valeriy Pak, *Institute of the Chemistry of Plant Substances, Uzbekistan*

Kun Young Park, *Busan National University, Republic of Korea*

Sang Chul Park, *Seoul National University, Republic of Korea*

Zhao Rongguang, *Zhejiang Gongshang University, China*

Laura Rossi, *National Institute for Food Nutrition, Italy*

Lee-Yan Sheen, *National Taiwan University, Taiwan*

Kalidas Shetty, *North Dakota State University, USA*

Won O Song, *Michigan State University, USA*

Udagawa Taeko, *National Museum of Ethnology, Japan*

Jyoti Prakash, *Sikkim University, India*

Asakura Toshio, *Ritsumeikan University, Japan*

Honggen Xiao, *The Hong Kong Polytechnic University, Honk Kong*

[Submit a manuscript](#)

- [Editorial Board](#)
- [Sign up for article alerts and news from this journal](#)
- **Affiliated with**



- *Journal of Ethnic Foods* is affiliated with [Korean Food Research Institute](#).

2017 Journal Metrics

We use cookies to personalise content and ads, to provide social media features and to analyse our traffic. We also share information about your use of our site with our social media, advertising and analytics partners in accordance with our [Privacy Statement](#). You can manage your preferences in 'Manage Cookies'.

> [Manage Cookies](#)

✓ OK

Journal of Ethnic Foods

ISSN: 2352-6181

Contact us

- Submission enquiries: [Access here and click Contact Us](#)
- General enquiries: info@biomedcentral.com
- [Read more on our blogs](#)
- [Receive BMC newsletters](#)

We use cookies to personalise content and ads, to provide social media features and to analyse our traffic. We also share information about your use of our site with our social media, advertising and analytics partners in accordance with our [Privacy Statement](#). You can manage your preferences in 'Manage Cookies'.

> [Manage Cookies](#)

✓ OK



ScienceDirect

Journals & Books



Create account

Sign in

Keywords

Author name

Journal of Ethnic Foods

Volume

Issue

Pages

Journal of Ethnic Foods

OPEN ACCESS

Latest issue All issues

Volume 5, Issue 1

Pages 1-74 (March 2018)

< Previous vol/issue

Next vol/issue >

Editorial

Editorial Open access

Advancing ethnic foods in diverse global ecologies through systems-based solutions is essential to global food security and climate resilience-integrated human health benefits

Kalidas Shetty, Dipayan Sarkar

Pages 1-3

Download PDF

Review Articles

Review article Open access

Ketupat as traditional food of Indonesian culture

Angelina Rianti, Agnes E. Novenia, Alvin Christopher, Devi Lestari, Elfa K. Parassih

Pages 4-9

Download PDF Article preview

Review article [Open access](#)

Traditional flat breads spread from the Fertile Crescent: Production process and history of baking systems

Antonella Pasqualone

Pages 10-19

[Download PDF](#) [Article preview](#) ✓

Review article [Open access](#)

Traditional Indian way of eating – an overview

Shweta Hegde, Leena P. Nair, Haritha Chandran, Haroon Irshad

Pages 20-23

[Download PDF](#) [Article preview](#) ✓

Original Articles

Research article [Open access](#)

Factors affecting households' meat purchase and future meat consumption changes in China: a demand system approach

Haifeng Zhang, Jun Wang, Wayne Martin

Pages 24-32

[Download PDF](#) [Article preview](#) ✓

Research article [Open access](#)

Personal values underlying ethnic food choice: Means-end evidence for Japanese food

Yeong S. Tey, Poppy Arsil, Mark Brindal, Su Y. Liew, ... Rika Terano

Pages 33-39

[Download PDF](#) [Article preview](#) ✓

Research article [Open access](#)

***Jongka*, the traditional Korean family: Exploring *jongka* food in the context of Korean food categories**

Chang Hyeon Lee, Young Kim

Pages 40-53

[Download PDF](#) [Article preview](#) ✓

Research article [Open access](#)

Extruded black gram flour: Partial substitute for improving quality characteristics of Indian traditional snack

Laxmi Ananthanarayan, Yogesh Gat, Vikas Kumar, Anil Panghal, Narinder Kaur

Pages 54-59

[Download PDF](#) [Article preview](#) ✓

Research article

Open access

Preparation of contemporary dishes and a functional drink using Japan's heirloom vegetable,
Katsura-uri

Azusa Sasaki, Yasushi Nakamura, Yukiko Kobayashi, Wataru Aoi, ... Kenji Sato

Pages 60-65

Download PDF

Article preview

Research article

Open access

Ethnic food perspective of North Dakota Common Emmer Wheat and relevance for health benefits
targeting type 2 diabetes

Ashish Christopher, Dipayan Sarkar, Steve Zwinger, Kalidas Shetty

Pages 66-74

Download PDF

Article preview

ISSN: 2352-6181

Copyright © 2019 Korea Food Research Institute. Published by Elsevier B.V. All rights reserved

ELSEVIER

About ScienceDirect

Remote access

Shopping cart

Contact and support

Terms and conditions

Privacy policy

We use cookies to help provide and enhance our service and tailor content and ads. By continuing you agree to the use of cookies.

Copyright © 2019 Elsevier B.V. or its licensors or contributors. ScienceDirect® is a registered trademark of Elsevier B.V.

RELX Group™



Scimago Journal & Country Rank Enter Journal Title, ISSN or Publisher Name

- Home
- Journal Rankings
- Country Rankings
- Viz Tools
- Help
- About Us


Journal of Ethnic Foods

9

H Index

| | |
|---------------------------|---|
| Country | Netherlands -  SJR Ranking of Netherlands |
| Subject Area and Category | Agricultural and Biological Sciences Food Science Social Sciences Anthropology |
| Publisher | Elsevier BV |
| Publication type | Journals |
| ISSN | 23526181 |
| Coverage | 2015-ongoing |

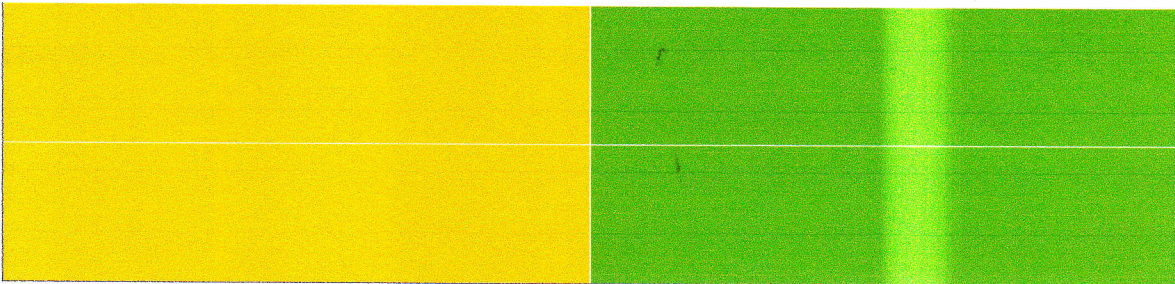
Scope The Journal of Ethnic Foods is dedicated to provide reliable information about people's consumption of food, as well as the superiority or creativity developed from the long-term accumulated traditional understanding and knowledge in foods. The superiority and creativity of food cannot be fully understood and appreciated from food ingredients and nutrition. It has to be viewed also from other aspects, such as culture, ecology, history and environment. It is recommended to the authors to cover these areas in the manuscript. It could be demonstrated by various approaches such as biological, nutritional, epidemiological, ecological, or cultural anthropological research. The journal covers foods from different geographic areas across continents, including ethnic foods. The journal ultimately focuses on topics which contributes to health and long life, or topics with academic value. The journal welcomes review articles in the above mentioned fields, especially those highlighting the multidisciplinary nature of the ethnic food.

-  [Homepage](#)
- [How to publish in this journal](#)
- [Contact](#)
-  [Join the conversation about this journal](#)

Quartiles

Anthropology

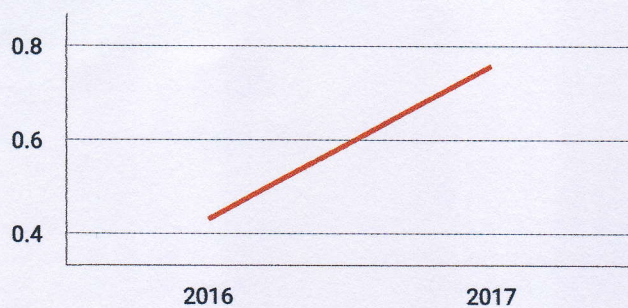
Food Science



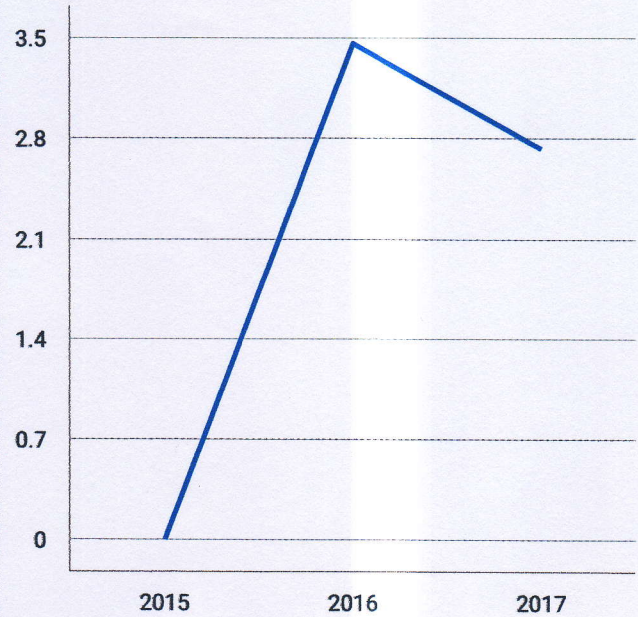
2016

2017

SJIR

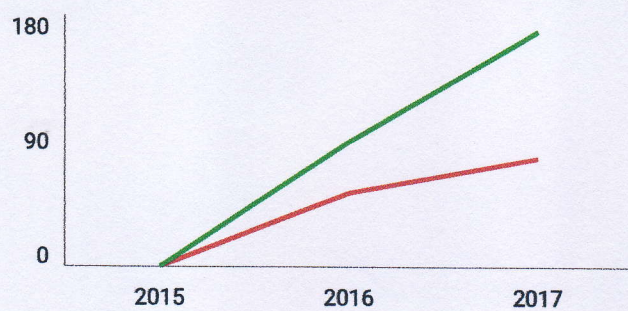


Citations per document

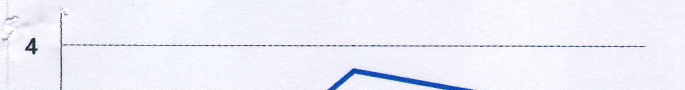


- Cites / Doc. (4 years)
- Cites / Doc. (3 years)
- Cites / Doc. (2 years)

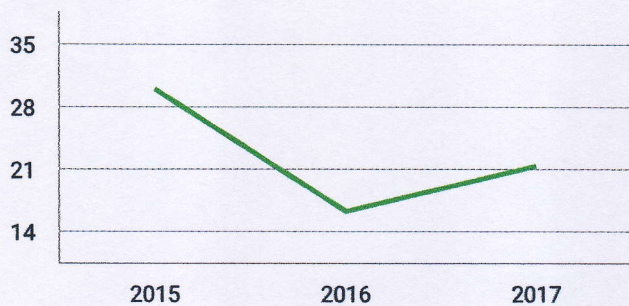
Total Cites Self-Cites



External Cites per Doc Cites per Doc

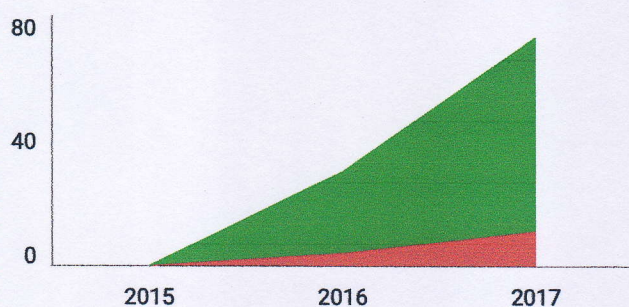


% International Collaboration



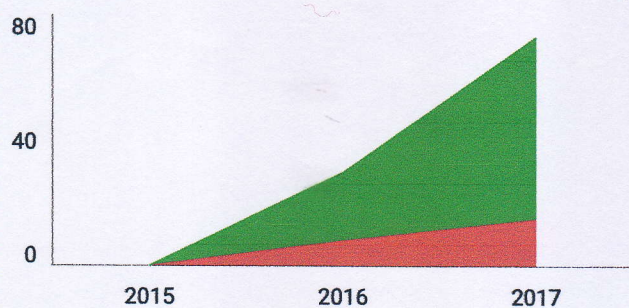
Citable documents

Non-citable documents

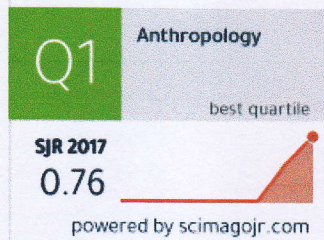


Cited documents

Uncited documents



Journal of Ethnic Foods



← Show this widget in your own website

Just copy the code below and paste within your html code:

```
<a href="https://www.scimagojr.com/journa
```

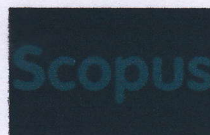


Loading comments...

Developed by:



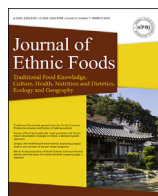
Powered by:



Follow us on @ScimagoJR

Scimago Lab, Copyright 2007-2018. Data Source: Scopus®

EST MODUS IN REBUS
Horatio (Saturni 1.1.106)



Contents lists available at ScienceDirect

Journal of Ethnic Foods

journal homepage: <http://journalofethnicfoods.net>

Original Article

Personal values underlying ethnic food choice: Means-end evidence for Japanese food

Yeong S. Tey^{a, b, *}, Poppy Arsil^c, Mark Brindal^d, Su Y. Liew^b, Chi T. Teoh^b, Rika Terano^e^a Institute of Agricultural and Food Policy Studies, Universiti Putra Malaysia, Selangor, Malaysia^b Putra Business School, Malaysia^c Department of Agricultural Technology, Jenderal Soedirman University, Indonesia^d School of Agriculture, Food and Wine, The University of Adelaide, Australia^e School of Global Humanities and Social Sciences, Nagasaki University, Nagasaki City, Japan

ARTICLE INFO

Article history:

Received 13 October 2017

Received in revised form

19 December 2017

Accepted 26 December 2017

Available online 2 January 2018

Keywords:

Attributes

Japanese food

Means-end chain

Personal values

Product attributes

Cognition

ABSTRACT

Background: Ethnic cuisines are increasingly popular in global food markets. This study identifies the personal values underlying Malaysian consumers' decision making with respect to Japanese food.**Methods:** A total of 134 Malaysian consumers were interviewed and analyzed using means-end chain methodology.**Results:** Our findings indicate that Japanese food is chosen for the values that the attribute "tasty" can help achieve, not for that attribute per se.**Conclusion:** Identified values primarily related to longevity, meaningful life-style and sense of accomplishment. The identification of these connections is an important step in understanding why a particular ethnic food is favored by foreign consumers. Our findings could be helpful to restaurateurs in meeting marketing strategies with consumer values and policymakers when designing health campaigns.© 2017 Korea Food Research Institute. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

In recent decades, various ethnic cuisines have gained increasing presence in global food markets. Ethnic food evolves from human culture, and human biological phenomena have significant sociocultural values and are an integral concept in human values [1]. When transposed outside its traditional settings, in the context of economic decision-making but other cultures, an ethnic food is seen to provide culinary variety and a sense of adventure. Consumers care about their food choice to the extent that their own utility is affected by the attributes of the ethnic food.

Decision-making by consumers ultimately determines their gastronomy. Preference for an ethnic food as a primary dining option or even incorporation of its culinary techniques and ingredients into traditional meals, is likely to be highly dependent on the motivation of individual consumers to embrace fusion in diet. In the psychological literature, personal values are viewed as a

standard or a rationale explaining why a certain action is chosen [2]. Consumers' sentient beings are not limited to product attributes but may include adventure, emotional mobility, and memories associated with a specific ethnic food or location [3].

In the scientific literature, there is a considerable interest in investigating consumers' responses to ethnic food, in particular with respect to acceptance or consumption (e.g., [4,5]). Experience or satisfaction is also widely discussed [6]. These studies have generally found ethnic food preference to be related to perceived attributes, such as "edible," "tasty," "quality," "fresh," and "clean". Other studies have examined whether there are differences in views and reactions to ethnic food dependent on its perceived authenticity (e.g., [7,8]).

Notwithstanding these works, there appears scant interest in examining the content and structure of personal values underlying and directing consumers' decision-making with respect to ethnic food choice. Uncovering the values that guide food preference can improve existing understanding of consumer motivation to consume ethnic food. Such understanding will benefit the formulation of business strategy. Additionally, this knowledge can be used by governments and the food industry when developing marketing strategies to promote the gastronomy of ethnic foods,

* Corresponding author. Institute of Agricultural and Food Policy Studies, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia.

E-mail address: tyeong.sheng@gmail.com (Y.S. Tey).

through reference to the values ascribed by consumers to the product.

The objective of this study is to uncover the personal values underlying and directing consumers' decision making with respect to their choice by targeting one popular ethnic food—Japanese food—using the means-end chain (MEC) model. This model has been widely used to explore the personal values driving consumer preference for fresh foods (i.e., [9,10]), processed foods (i.e., [11,12]), and other food products [13]. Recently, the MEC model has been employed to examine consumer decision-making and ultimately those personal values guiding such decisions, with respect to novel food [14,15]. Its systematic interview technique pushes respondents to progressively reveal higher cognitive structures and eventually uncovers the personal values underlying their behavior. Based on the content and cognitive structure behind an ethnic food choice, through the application of the MEC model, our study will add breadth to the literature on ethnic food.

2. Conceptual framework

The MEC theory is disseminated through the seminal works of Gutman and Reynolds (i.e., [16,17]). They posit that consumers make a choice decision according to their perceived attributes of the products, the consequences associated with these attributes, and how the consequences can lead to the realization of the personal values. As such, the MEC model is predicated on a hierarchical cognitive structure, starting from product attributes leading to positive consequences and, in turn, gear to fulfilling values most personally relevant to consumers.

The highest hierarchy will reveal the personal values that drive consumers' choice. We posit that the attributes ascribed to Japanese food are the instrumental means whose consequential result is perceived to help fulfill self-desired end-states. This concept reflects self-congruence matching consumers' self-concept with the product. Therefore, consumers' choice for Japanese food is conceptualized as governing by the desire to satisfy one's personal values.

Personal values reflect what people think is important and desirable to them and guide people in their lives. Conventional personal values described by Rokeach [18] and Schwartz [19] are of a broad system applied to understanding human behavior in a general sense. However, various consumer studies (e.g., [20,21]) have shown that personal values influence human behavior only when they are activated in a specific context. For example, local food stimulates consumers' primary sense of “money for other things”, motivating preference over relatively expensive imported food [10]. Abundance of empirical support is also provided by MEC investigations of specific food products, such as beef [22] and yogurt [23]. Consumers are found to possess different personal values and to assign varied priorities according to different target products.

3. Methods

Study area: This study focused on Malaysia's Klang Valley where foreign foods can be found virtually in every shopping mall and at major business areas. Japanese food and Korean food are particularly popular in this study area. Korean food began to attract interest of Malaysian consumers in tandem with the play of “Autumn in My Heart” and “Winter Sonata” drama series on mainstream television in the early 2000. It gains further momentum as more Korean television drama series, pop music, and celebrities are covered by local media. Relatively, Japanese food has a longer history in Malaysia.

The number of Japanese restaurants has quadrupled in tandem with the birth of new shopping malls and their enhanced retail space in the past 30 years. Each shopping mall is now tenanted by

at least one Japanese restaurant. Although there are no population statistics, the popularity of Japanese restaurants is burgeoning [24,25]. Japanese cuisine appeals to increasingly affluent Malaysian consumers. The most popular and the most readily available Washoku (traditional Japanese food) are *sushi*, *ramen*, *sashimi*, *takoyaki* and *teppanyaki*. Most people identify these styles under the broad banner of Japanese food despite their divergence in history, preparation, and even taste. Consequently, they were selected as the representatives of Japanese food in our investigation (see Fig. 1).

Data collection: Our in-depth interviews were conducted using laddering technique where a systematic questioning process pushes respondents to reveal their increasingly higher motives with respect to a behavior.

A laddering interview begins with the identification of an entry concept through a seemingly simple question like “why do you choose that” and followed-up by a series of “why is that important” questions. Such questioning process moves respondents to increasingly higher mental hierarchy until a saturation point where respondents face difficulty in answering a question. The laddering interview can be operated using either a “hard” or “soft” technique.

“Hard” laddering involves the collection of primary information using a questionnaire. The questionnaire offers potential answers through *a priori* list consisting of attributes, consequences, and personal values elicited from a preliminary study (i.e., focus groups and pretest) and qualified by literature [26]. However, confined by a limited answer choice, “hard” laddering also denies researchers the opportunity to uncover other potential significant associations and, thus, generates a restrictive outcome and reduces the explanatory power of the resultant MEC model [27].

“Soft” laddering offers solutions to the limitations of “hard” laddering. It is the original MEC method and was designed to be used in individual, face-to-face, and semistructured interviews to elicit cognitive structure. Guided by interviewers, respondents are free to express unique answers while climbing their cognitive hierarchy to reveal attributes, their associated consequences, and their links with their personal values. This exploratory approach is particularly advantageous when the existing knowledge about cognitive structures in relation to a particular subject is limited [28]. The information collected through “soft” laddering is relatively robust, even with a small sample size [29]. Considering all of these factors, the “soft” laddering interview technique was applied in this study.

We recruited 134 respondents (see Table 1 for the statistical summary of their background) at eight major and conveniently available shopping malls in the Klang Valley between January 2016 and March 2016. Respondents were selected on the basis that they had consumed a kind of Japanese food in the previous month. Before the interview, we explained the purpose and procedures of the semistructured interview and assured that all information would be analyzed and presented anonymously. Upon their voluntarily agreement, we asked respondents to think about why they consumed Japanese food and then list the three most significant aspects that they considered when making their consumption decision. Their immediate responses were regarded as attributes of Japanese food and served as the starting point for the “soft” laddering interviews. All answers were written down accordingly in a hierarchical table on the questionnaire.

Empirical analysis: The “soft” laddering data were analyzed according to Reynolds and Gutman's [17] guidelines. Our MEC analyses were split into two stages: content analysis and hierarchical value map (HVM) analysis.

In the first stage, the content analysis involves assigning a construct code to each MEC element. To obtain valid and reliable results, two content analysts coded construct categories separately.


| Japanese food | Description |
|---|---|
|  (a) Sushi | <p>In Malaysia, menus at sushi restaurants are similar to those in Japan. Sushi is presented in a wide array of styles (e.g., pouch and rolled). Their ingredients, however, are adapted to the local palate and culture. In consideration of Muslim consumers, mirin (sweet rice wine), pork, alcohol, and lard are not used in the preparation of Malaysian sushi.</p> |
|  (b) Sashimi | <p>Sashimi is a thinly sliced fresh (raw) seafood or meat. Different from sushi, it is served without rice. Common types of seafood sashimi include tuna, salmon, sea bream, mackerel, yellowtail, squid or octopus, shrimp, scallops, clams. Among these, tuna and salmon are two of the most popular fish used as sashimi in Malaysia. Sashimi in the form of meat is less common in the local context.</p> |
|  (c) Takoyaki | <p>Takoyaki is a popular street food originated from Osaka, Japan. It is in the shape of little round balls containing small pieces of octopus. Takoyaki sauce, Japanese mayonnaise, and fish or octopus or seaweed flakes are used as toppings. In Malaysia, it is usually sold by supermarkets, food courts, and Japanese restaurants. It is a favorite snack for both adults and children.</p> |
|  (d) Bento | <p>Bento is a single portion take-away or home-packed meal in Japan. A bento typically contains rice or noodles, fish or meat, with pickled and cooked vegetables in a box. In Malaysia, it is available in convenience stores and supermarkets. Some Japanese restaurants also provide dine-in bento. There are also specialized bento restaurants.</p> |
|  (e) Teppanyaki | <p>Teppanyaki refers to dishes cooked using an iron griddle. They are cooked in front of guests at teppanyaki restaurants. Typical dishes of teppanyaki are those small ingredients, including finely chopped vegetables (especially cabbage) and meat slices. Kobe beef is a specialty of teppanyaki in Japan. That specialty, however, is less common in Malaysian teppanyaki restaurants.</p> |
|  (f) Ramen | <p>Ramen consists of wheat noodles served in meat or fish-based broth. Common flavors of the broth are soy sauce, salt, soybean paste, and pork bone. Toppings like sliced pork, dried seaweed, menma, and green onion are favorites of ramen lovers. In Malaysia, ramen restaurants can be found in major shopping malls. Ramen is also served by certain Japanese restaurants.</p> |

Fig. 1. Popular Japanese food in Malaysia.

Table 1
Descriptive statistics on the 134 respondents.

| Item | Percentage | Item | Means |
|----------------------|------------|-------------------|-------|
| Male | 41% | Age of respondent | 33.01 |
| Married | 33% | Household size | 3.31 |
| Undergraduate degree | 69% | | |
| Preferred sushi | 82% | | |
| Preferred ramen | 34% | | |
| Preferred sashimi | 12% | | |
| Preferred takoyaki | 15% | | |
| Preferred bento | 13% | | |

This assignment started with a careful understanding of the key element in each answer (sentence). The construct categories function similarly to latent variables, which are inferred from a number of converged elements. Together, they give meaning to the construct categories. After the coding exercise, the outputs of the two independent content analysts were compared. Differences in coding were resolved by discussion and consensus between them [26].

In the second stage, the coded construct categories are used as the input in HVM analysis. This involves constructing a summary implication matrix (SIM)—a square matrix exhibiting the frequency of each construct category leading to another in the same row, into a HVM. In the SIM, two types of relationships are presented: direct and indirect. (In)direct relationships are those in which one construct category leads to another without (through) any intervening construct category. Such collective relationships, as presented in the SIM, serve as the “blueprint” for drawing up the HVM.

The HVM is a tree-link network, starting from tangible attributes leading to the highest abstraction level of personal values. At its raw form, for example, presenting all the 21 attributes (see Table 2) revealed by the respondents would be highly challenging. To simplify that, a cut-off procedure was applied to emphasize significant constructs that appeared multiple times in our content analysis. We followed Leppard et al's [30] suggestion and tried cut-off levels between three and five with an aim of obtaining a manageable HVM. It turned out that the cut-off level three (3) proved robust, capturing 44.2% of total active links and providing ease of interpretation.

In the HVM, abstractness ratios and centrality measures were also produced for each qualified construct. Abstractness ratios and centrality measures are termed “in-degrees” and “out-degrees” respectively in the network theory. Like “in-degrees,” the abstractness ratios refer to the frequency each construct served as the means or end in cognitive ladders. Ranging between zero and one, a low abstractness ratio indicates that a construct is relatively tangible, and a high ratio shows that a construct category is relatively abstract. Like “out-degrees,” centrality ratios refer to the frequency each construct served as the source of origin for other constructs. Ranging between zero and one, a high centrality index indicates a construct being a dominant base, which a large proportion of associations between.

Table 2
Attributes mentioned by the respondents.

| Challenging food | Trial | Variety of food |
|-------------------|---------------------------|---------------------------------|
| Focus on priority | Higher standard of living | Fresh food |
| Good service | Maintain environment | Tasty |
| Health conscious | Motivation | Healthy food |
| Luxury | Appealing food | Special occasion and eating out |
| Nearby | An ideal option | Convenience |
| Proud | Meet my preference | Small portion |

4. Results

At cut-off level three, the abstractness ratios and the centrality index of significant constructs are presented in Table 3. Given that low abstractness ratios indicate a construct as being a predominant means, the respondents viewed Japanese food as an “appealing food,” “an ideal option,” “meet my preference,” “variety of food,” “fresh food,” and “tasty.” Amongst these, based on the highest centrality index (0.07), “tasty” was regarded as a common transit point of MECs by most respondents.

The abstractness ratio of the consequences “healthy food,” “small portion,” “hygienic food,” “appetizing,” “simple food,” “enlightening,” “maintain slim,” “value for money,” “save money,” and “maintain health” indicate a different level of abstraction. While these constructs were used to describe the nature of Japanese food by some respondents, most respondents linked these constructs to a relatively tangible attribute (i.e., “tasty”). Therefore, “healthy food,” “small portion,” and “hygienic food” turned out to be consequences. “Maintain health”, as indicated by the centrality index (0.12), was perceived by the respondents, in their cognitive structure, as the central component of consequences.

The high abstractness ratios of “self-image,” “sense of accomplishment,” “avoid wasting food,” “live longer,” “happy,” “meaningful life,” and “enjoy life” indicate that these constructs are ends. Among these personal values, “sense of accomplishment” has the highest centrality index (0.04) and is the central component to the final end in most connections.

At a cut-off level three, the resultant HVM is presented in Fig. 2. In the HVM, the Y-axis presents the abstractness ratio of qualified constructs, and the color of the boxes represents their centrality index. Based on the number of relations, the thickness of adjoining lines depicts the dominance of the relationship between two constructs. All pathways begin with an attribute (“tasty,” “variety of food,” and “appealing food”) notwithstanding, as mentioned earlier, that Japanese food itself can be a product attribute.

Dominant pathways, as illustrated by the thicker arrows, are of most importance to respondents. They all start from the attribute

Table 3
Abstractness ratio and centrality index for the 12 construct categories.

| Content codes | Abstractness | Centrality |
|-------------------------|--------------|------------|
| Attributes | | |
| Appealing food | 0.21 | 0.02 |
| An ideal option | 0.23 | 0.02 |
| Meet my preference | 0.23 | 0.06 |
| Variety of food | 0.25 | 0.04 |
| Fresh food | 0.28 | 0.04 |
| Tasty | 0.28 | 0.07 |
| Consequences | | |
| Healthy food | 0.35 | 0.08 |
| Small portion | 0.4 | 0.02 |
| Hygienic food | 0.41 | 0.03 |
| Appetizing | 0.47 | 0.02 |
| Simple food | 0.5 | 0.02 |
| Enlightening | 0.55 | 0.03 |
| Maintain slim | 0.56 | 0.03 |
| Value for money | 0.6 | 0.02 |
| Save money | 0.63 | 0.03 |
| Maintain health | 0.7 | 0.12 |
| Personal values | | |
| Self-image | 0.71 | 0.02 |
| Sense of accomplishment | 0.71 | 0.04 |
| Avoid wasting food | 0.75 | 0.01 |
| Live longer | 0.75 | 0.01 |
| Happiness | 0.78 | 0.03 |
| Meaningful life | 0.83 | 0.01 |
| Enjoy life | 0.9 | 0.02 |

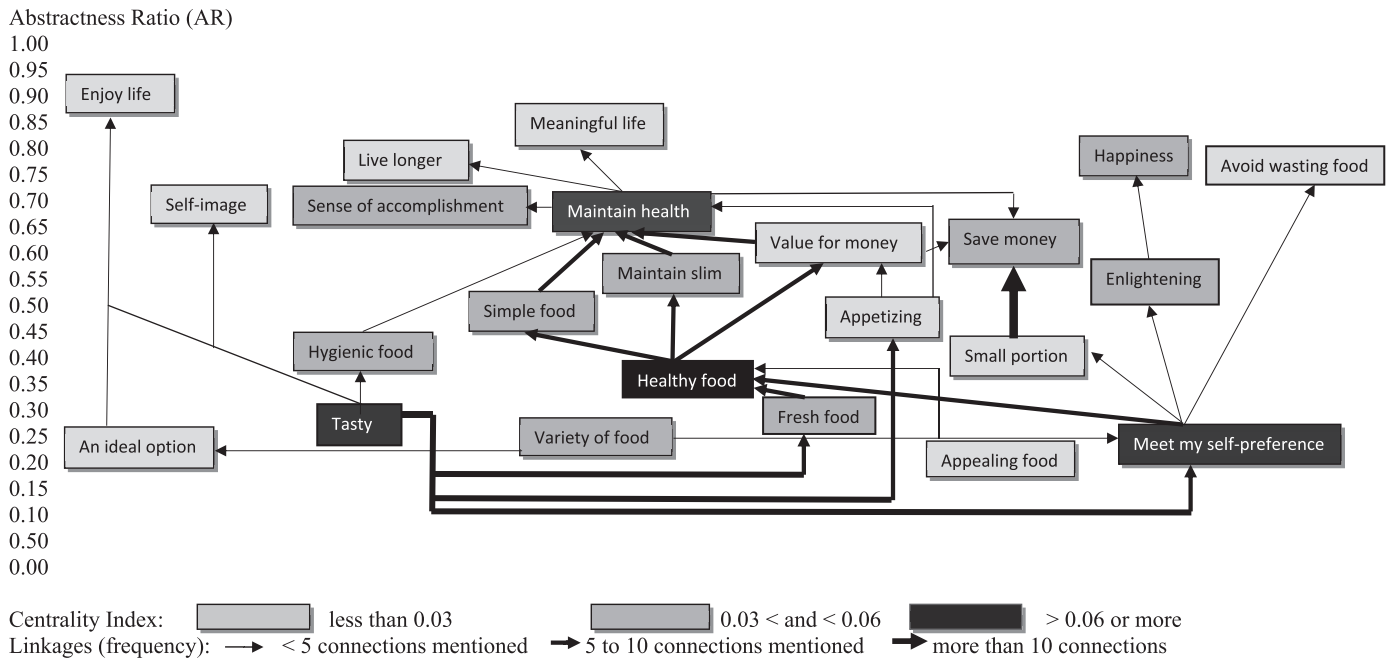


Fig. 2. HVM of eating Japanese food for Malaysian people at cut-off level of 3. HVM, hierarchical value map.

“tasty”, indicating that as being the most significant aspect perceived by the respondents. Although taste is quintessentially personal, according to respondents, Japanese food was universally perceived as offering a good taste experience.

From the perspective of the respondents, tasty Japanese food was linked to higher level the attributes “fresh food” and “meet my preference”. Japanese food was seen as fresh largely due to its stringent selection and preparation of all raw materials regardless of their presentation form (i.e., raw or slightly cooked). For respondents, self-preference did not just refer to their personal liking but also their choice for the taste of Japanese food over other ethnic foods. Consumption of tasty Japanese food was regarded as a way expressing that explicit preference.

Personal preference and fresh Japanese food were perceived as linked to the predominant consequence “healthy food”. Fresh food was perceived best from a nutritional standpoint. In particular, according to respondents, Japanese food meets every standard as being healthy. *Sushi* was given as an example since the vinegar-coated rice promotes digestion.

The link then diverges into three pathways and meets the consequences “simple food,” “maintain slim,” and “value for money” separately. As perceived by the respondents, healthy foods are simple in their nature, rich in natural taste, and make healthy eating a preferred choice. Consuming healthy foods was also seen as a significant way to maintain slim. For them, staying fit, healthy, and lean is an act requiring constant vigilance and is a result of healthy consumption. Healthy food was additionally viewed as giving better value for the respondents’ money.

After departing from the consequences “simple food,” “maintain slim,” and “value for money,” the links converge into a single pathway since respondents believed that they would “maintain health”. With minimal processing, simple food prepared using unsophisticated ingredients and methods were generally seen as nutritious and conducive to the maintenance of healthy well-being. That state of health, according to the respondents, could be achieved by keeping their body in good shape. Interestingly, by making better value (dietary) choices seeking value for money was claimed to improve their chances of living a healthy life.

“Maintain health” was perceived by the respondents to link to values “live longer,” “meaningful life,” and primarily “sense of accomplishment”. Staying healthy was regarded as of paramount importance to live a long life. Failure to maintain health was said to plague them with loss of meaning in life. Conversely, healthy living was seen as a precondition to strengthening a healthy sense of self.

5. Discussion

Recognizing the growing demand for ethnic food, we have identified some of the personal values governing consumer preference with respect to Japanese food. Our application of an MEC approach using soft laddering interview technique has enabled an in-depth study of the values consumers use to evaluate Japanese food and their perceptions respecting how that choice can lead to the achievement of those values. It adds a new perspective to our collective understanding of this area of knowledge.

Our findings indicated “tasty” as the most significant aspect for consumers when making consumption decisions. That attribute, as suggested by the HVM, was regarded by the respondents as the entry (starting) point in their consideration with respect to Japanese food. Jang et al [31] have demonstrated that “tasty” is indeed one of the top three attributes valued by patrons of Japanese food. Further research might well confirm that this finding is the common starting point for all food choices, especially in cases where pressing hunger is not a factor.

Although tastiness is a relative and subjective concept, consumers generally learn and can tell, through consumption, whether they like the taste. If it does not taste good, consumers are unlikely to repurchase that food. When given options, no one willingly ingests anything whose taste (or presentation) they find abhorrent. Consequently, tastiness is a critical entry point that should be both emphasized and considered in the promotion of ethnic food. Evidence is available that the taste of Japanese cuisine is a prominent positive attribute and that taste is used by the Japanese government to enhance its national reputation through consumption experiences [32]. Similarly, at the discourse of cultural nationalism,

Japanese cuisine is promoted as a “delicious food in a beautiful country” [33].

The HVM also indicated that consumers associated “tasty” as an indirect pathway to “healthy food”. The motivation to enjoy delicious food is related to the enjoyment derived from ingesting any functional food, i.e., when properly combined and presented, it is perhaps the most desirable way of ingesting otherwise unpalatable healthy food. It is the adult alternative to masking the taste of a beneficial medicine for a child by combining it with one of their favorite foods.

Japanese food, in general, is thought to offer a healthy diet. This could arise because consumers are increasingly informed of production/preparation processes and concerned for food-related health issues. As an implication, all food (including ethnic food) should possess functional properties, e.g., offer physiological benefits and/or reduce the risk of disease. In so far as they are perceived to meet that goal, (as is the case with Japanese cuisine) they become a preferred choice for consumers. Reenforcing this finding, the demand for agri-food products has shifted from quantity to quality, and the functional segment has experienced substantial growth in recent years.

“Healthy food” was indicated to be indirectly connected to “maintain health”. This is the central consequence that was most desired by respondents in this study. Japanese food is also regarded as a diet food by American consumers [34]. This ethnic food is generally known for its healthy dietary components, designed to supply the essential dietary needs and balanced nutrients necessary to support human life and health. It is widely promoted in Japan to combat the over consumption of protein and fat that is frequently associated with health issues (i.e., obesity, cardiac disease, diabetes, and high blood pressure) that are endemic in the Western cultures but that, hitherto, have not been prevalent in Japanese society [35,36]. Evidence is available that Japanese diet can help reduce the obesity epidemic [37] as well as the risk of cardiovascular disease and mortality [38].

The Japanese value “ikigai”. When dissected, “iki” means alive and “gai” means worth. Their compounded value refers to a reason for living and a meaning for life. It is a Japanese cultural belief that discovering one’s “ikigai” brings sense of accomplishment and satisfaction. In our study, health maintenance was perceived to lead directly to the values “live longer,” “meaningful life,” and primarily “sense of accomplishment”. This suggests that Japanese food, through its functional properties, was perceived as linked to consumers’ personal welfare by offering a means to realize their existence values.

Apart from the values above, other values revealed in this study were “self-image,” “avoid wasting food,” “happiness,” and “enjoy life”. Most of these values were posited to be related to how one views oneself and how one would like to live one’s life. “Avoid wasting food” was the only value disconnected from self-importance values. However, since this value is derived from consumers knowing their consumption limits and understanding the consequence of over-consumption, a subtle underlying unifying link might well exist. The HVM did not suggest a link between health maintenance and happiness or between health maintenance and self-image. This suggests that consumers think of staying healthy as a major precondition leading to the existence values described earlier.

In sum, the findings of this study revealed largely life-related values, which lie beyond either the simple pleasure of consuming Japanese food or the need for food.

When viewed in the light of Schwartz and Bilsky’s [39] study, the revealed values “enjoy life” and “self-image” would be related to hedonism, “sense of accomplishment” to achievement, “live longer” to security, “meaningful life” to tradition, and “avoid wasting food”

would be associated with universalism. “Happiness,” in turn, is an outcome of value attainment [40].

6. Conclusion

The findings of this study have demonstrated that the consumption decisions made by consumers with respect to Japanese cuisine are governed by a set of internalized personal values. They suggest that ethnic food represents special value propositions to consumers.

Restaurateurs can leverage these insights to design their promotions and their offerings of Japanese food. While the “exotic” nature of a foreign culture, when expressed through restaurant décor a service, might enhance the experience. This study offers empirical proof that taste combined with the perception of healthy eating are the main motivators in the attraction toward Japanese cuisine. Since these are its strengths, the message to marketers, restaurateurs, and chefs becomes clear.

Policymakers would also benefit by taking the heterogeneity of our findings on perceived values into consideration. For instance, Malaysian consumers can be encouraged to prepare and/or consume food in a Japanese way by accounting for the values that are considered most salient by them in the public promotions of the long-term population health. In combating morbidity, this may be an effective alternative to shift the passion for (unhealthy) food to a healthier and tastier choice.

A key limitation of this study should give rise to future investigation. A single ethnic food is unlikely to render universally applicable insights. It is unlikely that all ethnic cuisines will be attractive based, primarily, on their health benefits. Some might be attractive because of their “exotic” appeal, others because of the unique foodstuffs used, and others because of reputation and/or taste despite the fact that the cuisine is basically “unhealthy”. Since each ethnic food is unique, marketing and policy strategists need to be sensitive toward the unique appeal of each ethnic food.

Conflicts of interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

References

- [1] Kwon DY. Ethnic foods and globalization. *J Ethnic Foods* 2017;4:1–2.
- [2] Bardi A and Schwartz SH. Values and behavior: strength and structure of relations. *Pers Soc Psychol B* 2003;29:1207–20.
- [3] Ting H, Tan SR and John AN. Consumption intention toward ethnic food: determinants of dayak food choice by Malaysians. *J Ethnic Foods* 2017;4: 21–7.
- [4] Qu H. Determinant factors and choice intention for Chinese restaurant dining: a multivariate approach. *J Restaur Foodservice Market* 1997;2:35–49.
- [5] Jang SS and Kim D. Enhancing ethnic food acceptance and reducing perceived risk: the effects of personality traits, cultural familiarity, and menu framing. *Int J Hosp M* 2015;47:85–95.
- [6] Ha JY and Jang SCS. Effects of service quality and food quality: the moderating role of atmospherics in an ethnic restaurant segment. *Int J Hosp M* 2010;29: 520–9.
- [7] Kim JH and Jang S. Determinants of authentic experiences: an extended Gilmore and Pine model for ethnic restaurants. *Int J Contemp Hosp M* 2016;28: 2247–66.
- [8] Mynttinen S, Logrén J, Särkkä-Tirkkonen M and Rautiainen T. Perceptions of food and its locality among Russian tourists in the south Savo region of Finland. *Tourism Manage* 2015;48:455–66.

- [9] Kirchhoff S, Smyth H, Sanderson J, Sultanbawa Y and Gething K. Increasing vegetable consumption: a means-end chain approach. *Brit Food J* 2011;113: 1031–44.
- [10] Arsil P, Li E, Bruwer J and Lyons G. Exploring consumer motivations towards buying local fresh food products: a means-end chain approach. *Brit Food J* 2014;116:1533–49.
- [11] Bitzios M, Fraser I and Haddock-Fraser J. Functional ingredients and food choice: results from a dual-mode study employing means-end-chain analysis and a choice experiment. *Food Policy* 2011;36:715–25.
- [12] Sonne AM, Grunert KG, Veflen Olsen N, Granli BS, Szabó E and Banati D. Consumers' perceptions of hpp and pef food products. *Brit Food J* 2012;114:85–107.
- [13] Barrena R and Sánchez M. Frequency of consumption and changing determinants of purchase decision: from attributes to values in the organic food market. *Span J Agr Res* 2010;8:251–72.
- [14] Barrena R, García T and Sánchez M. Analysis of personal and cultural values as key determinants of novel food acceptance. Application to an ethnic product. *Appetite* 2015;87:205–14.
- [15] Barrena R, García T and Sánchez M. The effect of emotions on purchase behaviour towards novel foods. An application of means–end chain methodology. *Agrekon* 2017;56:1–18.
- [16] Gutman J. A means-end chain model based on consumer categorization processes. *J Market* 1982;46:60–72.
- [17] Reynolds TJ and Gutman J. Laddering theory, method, analysis, and interpretation. *J Advert Res* 1988;28:11–31.
- [18] Rokeach M. The nature of human values. New York: Free press; 1973. p. 438.
- [19] Schwartz SH. Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries. *Adv Exp Soc Psychol* 1992;25:1–65.
- [20] Torelli CJ, Ozsomer A, Carvalho SW, Keh HT and Maehle N. Brand concepts as representations of human values: do cultural congruity and compatibility between values matter? *J Market* 2012;76:92–108.
- [21] Zhang J and Bloemer J. Impact of value congruence on affective commitment: examining the moderating effects. *J Serv Manage* 2011;22:160–82.
- [22] Barrena R and Sánchez M. Consumption frequency and degree of abstraction: a study using the laddering technique on beef consumers. *Food Qual Prefer* 2009;20:144–55.
- [23] Boecker A, Hartl J and Nocella G. How different are gm food accepters and rejecters really? A means-end chains application to yogurt in germany. *Food Qual Prefer* 2008;19:383–94.
- [24] Md Akhir MN, Ishii Y, Paidi R, Hassan A, Mohd Hud MI, Kassim SR, Abdullah A and Mat Akhir A. Japanese halal food production in malaysia: a prospective survey. *Int J East Asian Stud* 2012;1:25–36.
- [25] Iqbal U, Hussin N and Seman AA. The historical development of japanese investment in malaysia 1991–2003. *Manage Adm Sci Rev* 2015;4:275–83.
- [26] Russell CG, Busson A, Flight I, Bryan J, van Pabst JVL and Cox DN. A comparison of three laddering techniques applied to an example of a complex food choice. *Food Qual Prefer* 2004;15:569–83.
- [27] Jonas MS and Beckmann SC. Functional foods: consumer perceptions in Denmark and England: MAPP center (Aarhus). 1998. Working Paper No. 55.
- [28] Grunert KG and Grunert SC. Measuring subjective meaning structures by the laddering method: theoretical considerations and methodological problems. *Int J Res Market* 1995;12:209–25.
- [29] Botschen G and Thelen E. Hard versus soft laddering: implications for appropriate use. *New Dev Approaches Consum Behav Res* 1998:321–39.
- [30] Leppard P, Russell CG and Cox DN. Improving means-end-chain studies by using a ranking method to construct hierarchical value maps. *Food Qual Prefer* 2004;15:489–97.
- [31] Jang SS, Ha A and Silkes CA. Perceived attributes of asian foods: from the perspective of the American customers. *Int J Hosp M* 2009;28:63–70.
- [32] Kimura AH and Nishiyama M. The chisan-chisho movement: Japanese local food movement and its challenges. *Agr Hum Values* 2008;25:49–64.
- [33] Hiroko T. Delicious food in a beautiful country: nationhood and nationalism in discourses on food in contemporary Japan. *Stud Ethnic Natl* 2008;8:5–30.
- [34] Issenberg S. The sushi economy: globalization and the making of a modern delicacy. Penguin; 2007.
- [35] Hattori Y. Shokuiku no susume. Magazine Hausu; 2006.
- [36] Naikakufu. Shokuiku hakusho. Shadan Hojin Jiji Gahosha. 2006.
- [37] Yamori Y. Worldwide epidemic of obesity: hope for Japanese diets. *Clin Exp Pharmacol P* 2004;31:S2–4.
- [38] Kurotani K, Akter S, Kashino I, Goto A, Mizoue T, Noda M, Sasazuki S, Sawada N and Tsugane S. Quality of diet and mortality among japanese men and women: Japan public health center based prospective study. *Brit Med J* 2016;352:i1209.
- [39] Schwartz SH and Bilsky W. Toward a universal psychological structure of human values. *J Pers Soc Psychol* 1987;53:550.
- [40] Sagiv L and Schwartz SH. Value priorities and subjective well-being: Direct relations and congruity effects. *Eur J Soc Psychol* 2000;30:177–98.