



## Current situation and future direction of traditional foods: A perspective review

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### Abstract

Innovation of traditional foods become a new paradigm in the food industry as an effort to prolong the shelf life of the food following the changes in the society's life style. The innovation was also supported by the current advance study on packaging technology, microbiology, biotechnology, metabolomics, medicinal properties and health as well as computational methods. This review covers various definition of traditional foods and some terms closely related to traditional foods, including ethnicity and ethnoecology, the progress of innovation of traditional foods as well as the risk of the traditional food innovation in terms of product identity, culture and continuity. Geographical Indications (GI) as a strategy of protection and standardization of traditional food are, therefore, discussed in this review. At the end, a recommendation for the direction of traditional food in the future is given in order to create a paradigm on the future action for protecting traditional foods.

### Article History

Received April 8, 2022

Accepted May 25, 2022

Published June 1, 2022

### Keywords

Traditional Food, Innovation, Present, Future.

## 1. Introduction

Recently, there is a growing interest to study traditional foods, including the social function of the food. It has been recognised that food is one of ways of communicating, showing care to each other, celebrating together, and passing on family tradition. Also, traditional foods are often consumed during special occasions (1). Thus, it can be understood that traditional foods are strongly correlated to culture, people and territory (2). However, traditional foods have been industrialised and marketed outside its original territory as an impact of people migration. The main aim of traditional food industrialisation is that providing products with prolonged shelf-life. Nevertheless, improvements of quality, nutrition and convenience are also other purposes of traditional food innovation (3). In some cases, innovation is also conducted to advance the health-promoting properties of the foods (4,5). The readiness of advanced food technology supports this progression as well.

The recent development in the study area of microbiology, metabolomics, health benefits, medicinal properties and computational methods also significantly contributes to the modernization and innovation of traditional foods. As such, advance knowledge in the food microbiology, particularly fermentation process, had encouraged Japan to modernize some traditional foods, including sake (rice wine), shoyu (soya sauce), miso (soya paste), natto (fermented beans) in the past century using industrial controlled fermentation (6). In the

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more recent decades, metabolomic study, an analytical profiling technique for measuring and comparing metabolites presents in biological samples, has also been rapidly growth. This is open a new perspective that traditional fermented foods may contain important metabolites. Interestingly, some of metabolites are beneficial for health. In this context, Korean traditional fermented foods are good examples of successful industrialization and modernization of traditional foods (7–9). The progression did not only happen in the materials, but also the method of cooking. In the past, traditional foods were normally prepared by using traditional cooking equipment (traditional type of production). However, due to the evolution cooking equipment as a result of computational study, the way of cooking of traditional foods may change significantly. For instance, Mekonnen (10) recently provided an example of computational study of cookstove. Computational tools make the food industry easier to scale-up and innovate the production of traditional foods. Despite of the advantages of conducting traditional food innovation and modernization, it has been also acknowledged that the innovation may bring some risks. As such the traditional foods may lose their original identity. As advance food technology is continuously evolved, it may also affect the direction of traditional foods in the future making them farther from their originality. Therefore, it is interesting to discuss the present condition and future direction of traditional food, and so the innovation is still in the corridor of the basic definition of traditional food. This research aims to review the traditional food definitions as stated by various bodies in the world as well as the progress of innovation of traditional foods, and also to provide a recommendation for protecting the original identity of traditional foods.

## 2. Definitions of Traditional Food

Many scientific reports have proposed the definition of traditional food. In general, it can be categorised into two different perspectives; the expert and consumer perspectives. According to experts' perspective, *traditional means proven usage on the community market for a time period showing transmission between generations; this time period should be the one generally ascribed to one human generation, at least 25 years; 'traditional speciality guaranteed' means a traditional agricultural product or foodstuff recognised by the Community for its specific character through its registration under the regulation* (11). From a sociological point of view, a traditional product is *"a representation" of a group, it belongs in a defined space, and it is part of a culture that implies the cooperation of the individuals operating in that territory* (12,13). Thus, to obtain the status of traditional, the food should entail a territory and routine tradition that is done over time. In agreement with this point of view, Cayot (2) considered that traditional foods are related to event/religion, people, and region. *"Harira"* is such an example of traditional food of Algeria which is usually prepared during Ramadhan. Traditional food can also be the food that follows special routine events, usually related to life cycles, for instance *tumpeng* (cone-shaped rice) in Indonesia and *'kagemand'* (cakeman) in Denmark for a birthday party. Another example is the famous traditional cake usually served in the wedding ceremony in Great Britain. In a small context, traditional food could be the food made by the native people (grandmother) of a specific area and so-called ethnic food. Local food using specific ingredients may be also included as traditional food (2).

The definitions of traditional food as described above have some shortcomings. It was criticized the previous definition of traditional food does not represent a protection for the producer or the food. This is because the concept of 'traditional' may fail to ensure the

exclusive registration of product. In 2000, therefore, AGROCERT anticipated some criteria which is included in the definition. Traditional food is a food of a specific feature or features, which distinguish it clearly from other similar products of the same category. The features can be: (1) traditional ingredients; (2) traditional composition; or (3) traditional type of production. In short, the feature of “traditional ingredients” refer to traditional raw material or primary products that have been used in the past in identifiable geographical origins and are still being used until today. The term of “traditional composition” means traditional formulation or ingredients which have been transmitted from generation to generation, while the term of “traditional type of production” is a traditional processing method that has been transmitted from generation to generation through oral tradition or other means and is applied until today (14). In agreement with AGROCERT, Gellynck & Kühne (15) added two more criteria about traditional food products, which are: “commercially available for about 50 years and part of the gastronomic heritage.”

The definition of traditional food from the consumer viewpoint is unavailable, except for the European consumers. They define traditional foods as “frequently consumed or associated to specific celebrations and/or seasons, transmitted from one generation to another, made in a specific way according to the gastronomic heritage, naturally processed, distinguished and known because of their sensory properties and associated to a certain local area, region or country” (16). So far, this is the most recent and only definition of traditional food from the consumer perspective. In line with the experts’ view, the definition also consists of people that maintain the culture, territory, and continuity. This definition, however, must be confirmed by expanding the research to other areas, such as Asia and Africa. This can be an interesting topic of study in the future.

The Slow Food organisation which focuses on local food cultures and traditions does not have a certain definition of traditional food. According to Murdijati Gardjito, a professor at Universitas Gadjah Mada (Indonesia) whose work deeply focuses on traditional food, traditional food is “food that identifies certain groups of people, is processed from locally produced ingredients, with a process that has been dominated by society and resulted in a product which is emotion-laden with its sensory properties, forms and ways of eating (known, loved, missed, pride) (17). In summary of those concepts, the associated words to define traditional food are described in Figure 1.

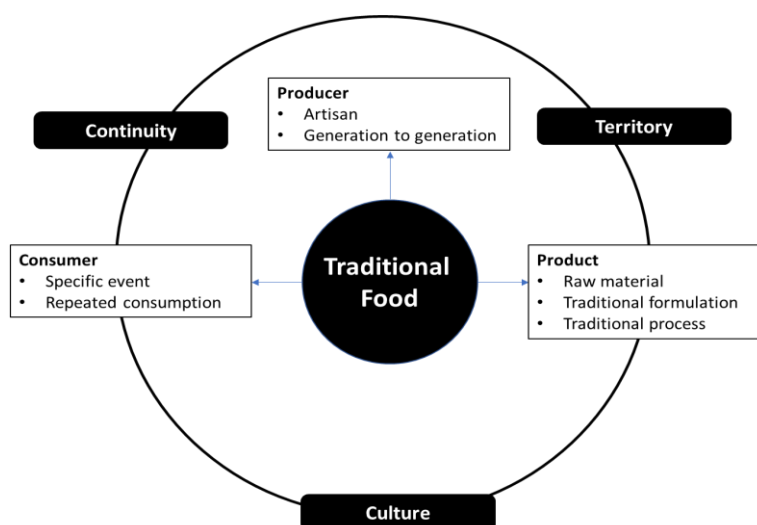


Figure 1. Schematic diagram of definition of traditional food based on the literatures.

In many literatures, traditional foods are also known as ethnic foods. The difference between these terms even is somehow not so clear. However, understanding the definition of “ethnic” can help to categorise a certain product as an ethnic food or not. Cobo (18) mentioned that the description ethnic is that relating to large groups of people classed according to common racial, national, tribal, religious, linguistic, or cultural origin or background. Previously, Jones (19) deeply discussed about the definition of ethnic group, ethnicity and ethnic identity. According to this literature, an ethnic group is classified as “*any group of people who set themselves apart and/or are set apart by others with whom they interact or co-exist on the basis of their perceptions of cultural differentiation and/or common ancestry*”, while ethnicity can be defined as “*all those social and psychological phenomena associated with a culturally constructed group identity*”. Ethnic identity is defined as “*that aspect of a person’s self-conceptualization which results from identification with a broader group in opposition to others on the basis of perceived cultural differentiation and/or common descent.*” By those definitions, it is clear that ethnic food is closely related to the culture which is similar to traditional foods as illustrated in Figure 1. Moreover, based on the definition of ethnic identity, it is clear that ethnic foods can be the identity of a certain ethnic as it is a person or group’s self-conceptualization in opposition to others on the basis of perceived cultural differentiation and/or common descent.

Interestingly, ethnic foods may be an important part of ethnoecology. According to Reyes-García and Martí-Sanz (20), ethnoecology is the study of local ecological knowledge understood as a complex form of adaptation and habitat modification, the result of the process of co-evolution between culture and nature underlining their potential to improve the well-being of today’s society and to contribute to human welfare and rural economic development. As shown in Figure 1, traditional or ethnic foods use traditional ingredients which are provided by nature and traditional process which are a product of culture. All these keywords (*i.e.*, nature and culture) are sufficient to place ethnic food is important subject in ethnoecology. The inclusion of ethnic food in the ethnoecology directly links between traditional foods and ecology (*i.e.*, natural resources and environment). In Figure 1, it is clear that the existing of traditional food product depends on the availability the raw materials provided by the nature and environment. This is the reasons why traditional foods may vary among regions. The contribution of traditional foods to human welfare have been shown in America and Zimbabwe as explained in the reports of Gurney *et al.* (21) and Gomez (22), respectively.

### 3. Progress of Traditional Foods in Socio-cultural Context

As per definition above, traditional food can be categorised as everyday food and special event food. Everyday food becomes ‘traditional’ because of habitus. From the definition, traditional food is used a lot to celebrate special event in life such as birth, death, special day in religion/belief (e.g., Christmas, Easter, *Eid Mubarak*, Cing Ming Festival, the beginning of planting season or harvest season, etc.). In special event, traditional food is served as a mean of commensality, eating together in the same table. This commensality encourages people to communicate, creates social connection that can be beneficial to emotional health. If this is done frequently, it creates memory and tradition. The tradition of eating specific foods at special occasions which is related to social function and culture unconsciously forms traditional food in a certain territory. Territory is related to the product, the region where the product is produced, the recipe and the raw material or ingredients used in the product.

Culture is not formed not only by consumer (in the context of frequency of eating, specific event, and a long time period), but also by producer. Producers pass the knowledge from generation to generation and usually made by artisan, not a large industry. Therefore, continuity is the key word for food artisan as it is correlated to the long time period in consumer. Even though continuity is more related to producer, culture to consumer, and territory to product, those outline factors are correlated to each other as they also have influence to consumer, producer and product (12,13,23).

Nowadays, traditional food is not only consumed by people in a certain territory. Many of traditional foods have been industrialised and marketed outside its original territory. This situation is also supported by evolving food technology which is able to substantially improve the traditional foods in terms of quality and nutrition as well as other aspects including convenience, packaging and market innovation (3). The modification and modernisation of traditional foods are also parts of strategy to meet consumer needs. For instance, traditional foods are modernized by using packaging technology aiming to have a longer shelf life allowing a broader distribution.

Viewing perspectives of different countries towards traditional foods may be also important to evaluate the modification and modernisation of traditional foods. This is because the culture in enjoying traditional foods of different country is diverse making the transformation of traditional foods condition in the future may be different. For instance, there is a well-known significant difference between Chinese and Europe in the culture of enjoying foods. The Chinese dining table for enjoying their traditional foods is quite unique and complex. In China, the dining table does not have a fork or knife. The eating habits of Chinese people were usually quiet in the past. No eating noises should be made, and everything should be done as calmly as possible. When they drink soup, wine or anything else, "sipping" is also prohibited. If there is any sound created by our intake of food or drink, that is bad behaviour. Of course, it is ridiculous to speak with a mouth full of food, and thus speaking only occurs before or after someone has taken the food and swallowed it. In addition, Chinese people can enjoy a complete meal from morning to night (24). This is different from Western countries; in Europe this tradition can only be felt once a day at night. Europeans don't have time to make a full menu for breakfast. Breakfast in Europe is easy, because the menu is very simple, such as bread, yogurt, or cereal. From another perspective viewed, Chinese food has a longer kitchen tradition than European cuisine. This is because Asian people use a variety of spices used in their cooking so that they have a very distinctive taste compared to European countries.

Based on the above-mentioned situation, it is hypothesised that Eastern countries have a higher concern to traditional foods than Western countries in present day and the future. The food industry in both western and eastern countries is increasingly developing, where western countries tend to be more advance than eastern countries. Up to date, there is no study that discusses the different perspectives of traditional food in western and eastern countries in present era. Thus, direct and comprehensive assimilation between food and national identity must be questioned. By comparing present condition regarding the evolvement of food technology and culture in different countries, i.e., eastern counties and western countries, may give a deeper insight in discussing the future of traditional foods. Thus, a study aiming at understanding the present and future condition of traditional food, particularly in the global eastern countries and western countries is urgently required. This

must be beneficial to define a strategy in undertaking modernization and industrialization of traditional food in the future.

#### 4. Innovation of Traditional Foods

The development of food biotechnology and method of fermentation has a significant contribution in the recent innovation of traditional foods. These techniques can enhance the quality, shelf life and medicinal properties of traditional foods and drink. For example, it has been reported that increasing of vitamin and antioxidant content naturally occurs in large number of traditional fermented foods such as soy sauce, kimchi, and several others meaning that fermentation can substantially improve the quality as well as the medicinal properties of traditional foods. Food biotechnology and fermentation may also be able to prolong shelf-life by involving lactic acid bacteria producing antifungal metabolites (25). The application of fermentation biotechnology for traditional food product has been reported from various regions, such as in Africa, China, India, Middle East and Mediterranean. The development of fermentation technology includes designing bioreactor, metabolic engineering of bacteria, and developing technology used for microbial production (26). As well-noted by Paredes-López *et al.*, (27), the application of modern biotechnology has changed the ancient methods of making traditional fermented foods.

In addition to food biotechnology and fermentation, other methods have also been used to prolong the shelf-life of food, including by advanced packaging technique and advanced powder technology. As afore-mentioned, the food scientists and industries attempted to modernize traditional foods to have a longer shelf life allowing a broader distribution. This effort is in line with the global trend of the food industry nowadays. Many studies have shown that the food production in the world leads to a general condition with safer food and longer shelf-life (28). The innovations, however, may affect the eating habits profoundly and also the state of traditional foods. In the last decade, traditional foods have begun to be produced on a large scale with more modern methods and novel positioning in the market. In Indonesia, for instance, there are some innovative packaging for traditional foods have been successfully conducted and the products are successfully marketed, such '*hygienic tempe*' as the innovative product of traditional *tempe*, '*canned gudeg*' as the innovative product of '*gudeg besek*', '*sambal in jar*' as the innovative product of '*homemade sambal*' and '*powdered coconut milk*' as the innovative product of fresh coconut milk (29). However, it is important to note that an increase in the scale of production and modernisation of traditional foods has a large risk of loss of the rich and diverse cultural heritage in food. New or modernised products may lose their authenticity if they are modified too much, and that may create a lower acceptance of modernised versions of foods. It can lead to a sense of loss of culture among the consumers, leading to long-term lower consumption of healthy traditional products (30).

It must be highlighted that traditional food is a product of high cultural importance – it is a blend of creations that cultivate local resources with flavourful legacies of many generations. Traditional foods are legacy of a long history. This legacy is disappearing because of changed lifestyle in the more modern era where the consumers tend to consume manufactured food. If this situation is not anticipated, the future generations might be totally deprived of it. An alternative approach to protect traditional foods is by registration and standardisation (14). However, since there is a connection between humans and food, and because this relation is more pronounced in traditional food, it is important to bring the

properties, which go beyond only the sensory properties attached to the traditional product, to the modernised version of the traditional food. The different perceptions of the superordinate properties would give a better position on the market because it can improve the likelihood of consumer repurchase. It could be the main reason and approach to sustaining traditional food through generations in the future. As traditional food also represents the biodiversity of its region, it is important to re-promote and preserves its legacy for a sustainable future. Therefore, emotion related to traditional food should be captured by food industry to bind their consumer not only by its sensory but food as a wholesome.

According to Guerrero and colleagues (16), consumers only accept innovations in traditional foods if the innovations offer tangible benefits and at the same time, not damaging the intrinsic character of the traditional foods (for instance not changing the sensory properties). However, different level of acceptance was identified which was depending on the country or culture, in addition to the individual consumer's personal interest.

The European project on traditional food namely TRUEFOOD (*TRaditional United Europe FOOD*) that was carried out in at least six different countries in Europe concluded that people in Europe have a tendency to have a better acceptance of traditional food compared to novel food (3,31). Almlı and colleagues (32) studied consumers' acceptance of innovative traditional cheese. It was shown that the cheese with traditional and authentic character was well-accepted by the consumer. Also, a previous study by Van Esterik (33), freshly made dishes (even those bought from food vendors) are still more preferred than a ready-to-eat meal.

## 5. Protection and Standardization of Traditional Foods

As has been discussed, present innovations in traditional foods often make the traditional foods lose their identity. According to Cayot (2) traditional foods must have a strong connection with agriculture. Agreeing with the previous opinion, Evans and colleagues (34) stated that deliciousness starts from the place-based taste where biogeographical constraint opens knowledge. To produce delightful food, it is important to know the principles for perception of food and human interaction with it. However, in the present day, most agricultural products are used as raw material in an industry with specific requirements following the standard in the industry. Food products have become progressively sophisticated time-by-time in order to fulfil the consumers' satisfaction. This is good, but bringing a risk to enlarge the distance between the source and the final products, and thus the agricultural products and/or traditional foods lose their identity and authenticity.

To anticipate the disappearance of its identity and authenticity, in the beginning of 90's, European started to think about standardization of traditional food. This approach was carried out by implementing The EU's Common Agricultural Policy (CAP) through an intellectual property called Geographical Indications (GI). GI allows recognition of food linked to a geographical region, by reason of reputation, local ingredients or production methods. This means that the characteristic of the defined region must have significant impact on the characteristic of the products. Agricultural products, drinks and foodstuffs obtained GI status must follow the EU labelling system, and thus the producer has the right to put GI logo (Figure 2). In this way, consumers will be easier to identify before buying the products.



Figure 2. Label of geographical indications in Europe adapted from European Commission (2021).

There are three types of Geographical Indicators, which are Protected Designation of Origin (PDO), Protected Geographical Indication (PGI) and Traditional Speciality Guaranteed (TSG). PDO is the condition where the product must be produced, processed and prepared in the geographical area and where the quality or characteristics are essentially due to that area (*i.e.*, specific region). PGI is the condition where the product must be produced or processed or prepared in the geographical area and where a specific quality reputation or other characteristics are attributable to that area. The geographical link is not a core attribute but production must take place in a defined geographic area. TSG is the condition where the product must be traditional (25 years/handed down through generations) or established by custom. Distinguishing features of the product must not be due to the geographical area where it is produced. Not entirely based on technical advances in the method of production. Name must be specific in itself or express the specific character of the foodstuff (35). After the regulation on traditional food, based on data accessed on February 2th, 2021, there are 659 products registered as PDO, 784 products registered as PGI, and 64 products registered as TSG in Europe (Table 1).

Beside of that, traditional food product was dominated western than eastern. This is because in eastern countries have a very long kitchen tradition. This is true as well in China and Indonesia. As such, even though industrialization in China has grown so fast in the last 30 years, they still keep practicing their traditional food. However, the trend could be easily shifted if the young generations do not care of their traditional food, the more limited time of direct socialization between the old and the young to pass on the know-how, and the more intensive grow of food industrialization. Without any written regulation on traditional food, there will be a great loss of history and diversity to the East. Besides that, the regulation about food and traditional herbals concern to modulate and control its safety. There is no regulation yet that protects or concern about traditional food authenticity or local knowledge in terms of traditional cuisine. Figure 3 shows the Chinese traditional food in conventional and modernised version. The modernised version has been filled up the market with numerous varieties, but there is no protection to its intellectual property of their culture.

Even though China do not have an equivalent regulation regarding traditional food in conventional form nor the modernised version as in Europe, they do still practice eating hot meal traditionally three times a day. Unlike Chinese, since the European has a different culture and working life, they only have one-time hot meal (usually dinner time). European in general would have cold meal (e.g., sandwich and coffee) for breakfast and lunch for practical reason.



Table 1. GI classification registered in EC per country.

Country	Protected Designation of Origin	Protected Geographical Indication	Traditional Speciality Guaranteed
Andorra	-	1	-
Austria	10	5	3
Belgium	4	11	5
Bulgaria	1	2	5
Cambodia	-	2	-
China	4	6	-
Colombia	-	1	-
Croatia	12	14	-
Croatia, Slovenia	2	-	-
Cyprus	1	5	-
Czechia	6	23	1
Czechia, Slovakia	-	-	4
Denmark	-	8	-
Dominican Republic	1	-	-
Finland	5	2	3
France	107	146	2
Germany	12	79	-
Greece	79	34	-
Hungary	8	10	2
India	-	1	-
Indonesia	-	1	-
Ireland	3	5	-
Italy	172	137	3
Latvia	1	2	3
Lithuania, Poland	1	-	-
Lithuania	-	6	2
Luxemburg	2	2	-
Netherlands	6	5	4
Norway	-	2	-
Poland	9	24	10
Portugal	64	75	1
Romania	1	6	-
Slovakia	2	10	3
Slovenia	8	13	3
Spain	103	94	4
Spain, France	-	2	-
Sweden	3	3	2
Thailand	-	4	-
Turkey	4	1	-
United Kingdom	27	42	4
Vietnam	1	-	-
<b>Total</b>	<b>659</b>	<b>784</b>	<b>64</b>
		<b>1507</b>	

Source: European Commission (2021)



Figure 3. (a) Chinese traditional food in conventional form; (b) Chinese traditional food in modernised version.

Regarding the modernised version of traditional food, as the development of food technology brings an improvement to the quality of traditional food. The difference is that the modernised version of Chinese traditional food has a total new look of the conventional ones. The food is disconnected. It has new look of packaging (mostly vacuum plastic bag), without any quality assurance label stating that the product is a traditional product, was made by the big food industry, designed to be consumed individually, has one single taste for all, contains a lot of artificial ingredients, and disconnected from the other food that usually ascertain the food. The good thing is that it has complete information of the product – the ingredients composition, nutrition fact, producers, etc.

Changes in traditional Chinese food products in the modern era have made consumers tend to enjoy traditional foods in the form of ready-to-cook and ready-to-eat. In the future, these innovative products may be able to lose the ability of the society to cook traditional food, and so, to lose the cultural heritage. Even though the packaging label already contains the composition of the ingredients, such as the using of percentage of the ingredients and the processing method can be lost in the community if the community does not maintain the culture, learn about it and practice it.

Different with in China, in Europe, they still try to keep value of their traditional food. This effort can be indicated in the packaging, selling, label, etc. The regulation protects the authenticity of the products. It also protects the small producer to produce the same kind of product with specific distinction of one to the other artisan. This leads to the protection of diversity in terms of taste, microflora, food source, etc. This is could be one of the reasons that the Eastern tend to be the Western while the Western tend to be the Eastern.

However, this regulation will only interest economy sector, but not the consumer nutrition section. This is because the health of the country actually comes from home. Traditional food as a context of commensality, going back to cook, will solve the nutrition problem and economy problem eventually. If people eat together, the people tend to eat moderately. During the meal time, the people also try to talk to each other, and thus building a connection by spending time for eating and talking. This action will not only protect culture but also protect biodiversity indirectly. Comparing to food products, people tend to eat in excess amount than they need. They eat the food with a lonely feeling in front of any gadget to get rid of the feeling.

## 6. Direction of Traditional Food in the Future

In the current era of modernization, there have been developments in traditional food products. In Western countries, traditional food products have been standardized based on GI. Most of the products registered as Protected Designation of Origin, Protected Geographical Indication or Traditional Speciality Guaranteed are traditional food products that can be produced in small to large scale industry. In the future, for the western, labelling is needed that is able to characterize traditional foods from a certain area. Moreover, it is also important to protect the traditional cuisine as a recognisable dish from a certain region. Regulation to support or encourage people (both men and women) to go back to the kitchen and set their value on health based on food they make is also important. This will eventually make traditional food in the West will always be a tradition that is practiced, not only theoretical. Since traditional cuisine is commonly eaten together with family or friends, in the future, there will be more emotion that connects people. This commensality will increase the social interaction between people in the thread of individualistic gadget-slave era (36). Even so, it is important to build a cooking tradition in the kitchen and eat together to maintain traditions and culture (37). As traditional cuisine has many different recipes from different family, makes it more complicated to make the standard rule. However, the rule can be simplified not based on the exact recipe, but based on the main ingredients and seasoning and the characteristic of its sensory profile.

Meanwhile in Eastern countries, traditional food products have developed in conventional forms, but these products do not have a guarantee label that indicates that these products are traditional products. As the progress of food technology in the East become more prominently done by the big industry, and the knowledge passing through generation is not as effective as before, it is important for Eastern to have a regulation that protects their artisan, small scale industry, and their practice on traditional food so that they will keep their diversity not only in practice, but also documented. Good example has been shown by the farmer society of Kerinci Regency, Indonesia, who have protected and documented their local products (i.e., *Cinnamomum burmanii* also known as *Cinnamon cassiavera*) through GI (38, 39). Thus, documentation is also required regarding the diversity of traditional foods and agricultural products, not only in eastern countries, but also in western countries, along with the gastronomic of each traditional food products.

## 7. Conclusion

To sum up, traditional food is blend of creations that cultivate local resources with flavourful legacies of many generations. Changes in the socio-cultural lifestyle in the modern world encourages the food scientists and industries to innovate traditional food, and thus has prolonged shelf-life and easier to distribute. The modernization, however, an increase in the scale of production and modernisation of traditional foods has a large risk of loss of the rich and diverse cultural heritage in food. In this case, therefore, protection and standardization of traditional foods are highly important. Significant steps have been undertaken by Western countries to protect the traditional. This step must be enlarged in the countries and adopted by the Eastern countries. This review creates a paradigm on the future action of protection of traditional foods.

## Acknowledgements

The authors acknowledge Carlsberg Foundation Grant for funding the first author to participate in Food, Health and Philosophy in East and West course offered by Graduate School of Health and Medicine Science, University of Copenhagen in 2016 which was inspiring the authors to write this article.

## Authors Contributions

D.L.N.F. conducted conceptualization, methodology validation and draft preparation; S.A. carried out investigation, data curation and review; R.F.U. conducted data curation and D.R.A.M. contributed to data validation, manuscript review and draft editing.

## Funding

Not applicable.

## Institutional Review Board Statement

Not applicable.

## Data Availability Statement

Available data are presented in the manuscript.

## Conflicts of Interest

Authors may declare no conflict of interest.

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