

KOREAN TRADITIONAL FOOD: STATUS, PROSPECTS AND VISION FOR GLOBALIZATION

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ABSTRACT

This Bulletin describes the unique properties and diversity of Korean traditional food, as well as some prospects and directions for its future development as an industry. Traditional foods are prepared with the use of ingredients unique to a particular area and people. They are considered as historic food, and are transferred from generation to generation with some local variations. Korean traditional food can be classified based on the ingredients used: rice products as staple food, beverages, vegetables, fish, and fruits. Traditional foods using meat are very limited. Other classifications are based on production methods, such as steamed foods (almost all of the grain products), puffed foods, brined foods, and fermented foods. Traditional foods are used more as seasonal and banquet food or for religious ceremonies rather than as staple food, but it has become popular as a delicacy food in recent years. Korean traditional foods have not been given enough attention for a long time, but recent domestic consumption has gradually increased in view of people's recognition and consciousness of such products as health foods. The food culture of Korea has also caught the interest of other countries through the export of traditional food. Traditional food has been developed on the basis of unique techniques from each country, and efforts to export them are now expanding. Hence, it is now considered a competitive product, what with its unique materials and production techniques. In order for traditional foods to meet the international standard, it is necessary to develop new policies and strategies, such as the development of traditional foods for foreign consumption, fusion foods, adaptation and brand marketing, and scientific and safety guarantees. The need for international standardization of traditional food and improvement of packaging and design must also be addressed.

Key words: traditional food, fusion food, consumer preference, global competitiveness, food safety, international standard

INTRODUCTION

There are many different definitions of the term "traditional food" depending on the people, region, or country. Generally, however, it refers to food products with a long history, and developed by people with the same life style and belonging to the same region. It may also be defined as food cooked using materials produced in the region, and is commonly enjoyed by most people in the area. Based on these definitions, Korea can boast of a rich variety of traditional foods through its five millennia of history.

The history of Korean traditional food is a process of creation of taste, in combination

with the property of the materials such as grains, vegetables, marine products, and meat. Through these various combinations, foods have been developed or have ceased to exist as time changes. These point to the fact that traditional food is not static but is continuously changing; new products are produced, old products are modified, all of which are fated to be judged by the consumers now and in the future.

The food eaten by a group of people is largely dependent on their conditions in life, and consists of raw and available ingredients in their area. In the case of Korea, the pattern of dietary life has greatly changed after going through the difficult times of the 1940s and the

Korean War. However, for some period, traditional food seemed to have ceased to exist due to neglect and lack of provisions.

After the liberation of Korea, the food industry showed a rapid growth quantitatively and qualitatively in the 1970s, characterized by the introduction of improved technology, upon going through a germination period from the 1950s to the 1960s. It then occupied a very important position in the manufacturing industry since the 1970s.

In the 1980s and 1990s, the food industry was characterized by mass production and supply. The end of 2002 showed a remarkable development with gross sales of over US\$ 30 billion. Most of the success of the Korean food industry comes from the use of nontraditional materials. The products include bakery, confectionery, and various kinds of canned goods, instant noodles, and fast food. With an efficient mass production system, these food products form a huge market. However, traditional food products have not particularly performed well with respect to commercial success through mass production.

The major characteristics of Korean traditional food are the use of grains and vegetables in various ways, and the application of a lot of fermentation technology. Another unique feature is the warm food culture, with hot soup as an essential part of every meal. Grains used include rice, millet, barnyard millet, beans, and wheat, and several others are used as side dishes to complement the principal food. The weather and natural feature of Korea's land makes it possible for both grains and vegetables to be grown easily.

In preparing vegetables as a side dish, a method of preserving them with salt and fermentation was developed to achieve a savory taste. The food culture of fermented soybean products has existed in everyday life since the early times.

In the past, many religious ceremonies were centered on praying and being thankful for the good weather and harvests. Most traditional foods originated from these ceremonies. Such food includes rice cakes, cookies, and alcoholic beverages. Many of these foods and ceremonies still exist today.

Food ceremonies were intended as a form of devotion or sacrificial offering in various religious ceremonies, intended to pray to the God for peace of descendants and plentiful harvest. Foods were faithfully and heartily cooked and offered to win the favor of the God.

The four seasons in Korea contributed significantly to the evolution of many traditional foods. Preserved food in winter like *kimchi* was developed primarily to make the vegetable available in this season when growing is impossible. Soy sauce and salted foods are used to season and enhance the flavor of other foods.

One of the special features of Korea's traditional food is that most are made by housewives, and these dishes are only served to family members or relatives who participate in the religious ceremonies. For this reason, our traditional food was not intended for mass production and supply and as such, the preservation of this food was not seriously regarded. It also seems difficult to produce traditional food on a commercial scale because it is hard to mechanize/automize the process of production, as most of these foods are produced by hand.

Another obstacle in the production and supply of traditional food is the sudden changes in the taste of Korean people due to the rapid westernization of their dietary life following the Korean War. The reason why traditional tastes are giving way to other tastes is that, people have been adapting to the changing society. Moreover, dietary life that is dependent on milk and meat is fated to alter the people's existing taste. As well, the smoothness and mildness of grains and vegetables cooked in western style have been perceived to have a more exciting and appealing taste.

The types and kinds of traditional food are related to the style of the principal food of the people residing in the area, its climate, and natural resources. However, the social consciousness of today's society will keep on changing, such that the *kimchi* from the past is different from the *kimchi* of today, and will continue to change in the future.

PRODUCTION STATUS OF TRADITIONAL FOODS AND RELATED SYSTEM

Designation of traditional food

Objective of the designation. The purpose of designation is to support the development, succession, and growth of traditional food by means of government control. The designation is supported by the law “Public law for the manufacturing industry of agricultural and marine products and quality management” (June 11, 1993).

Standard for the designation

- Must possess traditionality and popularity.
- Must have potential for competitiveness and commercialization.
- Necessary for the preservation, succession, and development of traditional food.

Quality certification for traditional food

It is a system to assure excellence in traditional food, which must possess peculiar taste and flavor, through government control. It is to protect both the agriculture sector and the consumer at the same time by developing the commodity values, as well as the succession and development of traditional food.

Designation of items for quality certification. The Ministry of Agriculture and Fisheries have standardized traditional methods for the manufacture and processing of traditional food using domestic agricultural products. The designation of items and specifications are published in consideration of the commodity values, traditionality, and popularity in order to promote the commercialization and promotion of traditional food.

Number of items under quality certification. As of 2003, there were a total of 30 items and 144 companies under quality certification.

Master system for traditional food

Objective. The objective of this master system is to promote the development of traditional food and to protect the honor of the manufacturing technicians.

Designation of master

- He/She must have continuously worked for over 20 years cooking and manufacturing traditional food, or have continuously worked for over 10 years in the area of traditional food and whose skills have been honed by a master.
- He/she must have natural special skills and talent in traditional cooking and processing.

Certification of Korean traditional food

The present status of the certification of Korean traditional food is shown in Table 1. Traditional food is manufactured in Korea by 144 factories with 30 items, but it is assumed that more food is produced by non-certified companies.

Present status of the production of traditional food

Table 2 presents the annual production of traditional food in Korea. As shown in Table 2, production has increased, although traditional beverages take a large part of it. *Kimchi*, preserved foods, and tea also have majority share of production.

Table 3 shows the status of exportation of traditional food. As shown in Table 3, the amount of exportation of major traditional food has increased. The exportation of *kimchi* is the biggest one, followed by tea.

CONCEPTS AND CLASSIFICATIONS OF TRADITIONAL FOOD

It is not easy to clearly classify traditional food in the present condition, as foreign foods have also become localized. To make a clear classification, it is necessary to consolidate various evaluations and comparisons, such as the materials used, manufacturing methods, status of supply, and history.

Traditional food is defined as “food succeeded from ancient times possessing traditional tastes, flavors, and colors, and produced and processed as major agricultural and marine products in Korea” by The Law of Cultivation for the Agricultural and Marine

Table 1. Items and number of factories certified for the production of traditional food in Korea (2003)

Items	Number of factories	Items	Number of factories
Korean cookies	20	Bean-curd	4
<i>Meju</i> (fermented soy mash)	1	Rice wine	1
<i>Cheonggukjang</i> (like <i>natto</i>)	2	Green tea	4
Chinese matrimony vine tea	1	Roasted rice powder	2
Dried shiitake	3	Persimmon vinegar	6
Dried persimmon	3	Plum concentrations	2
<i>Yeot, Taffy</i>	2	Extruded rice cake stick	2
Rice syrup	4	Black goat extracts	1
<i>Kochujang</i> (Hot pepper soy paste)	27	Brown rice vinegar	1
Soybean paste	15	Red pepper powder	1
Soy sauce	8	Polygonatum tea	1
Malt	3	Odoratum tea	1
Preserved citron	3	Buck wheat powder	2
Sesame oil	8	Ginseng tea	
<i>Kimchi</i>	47	Product platy codon	1
		Spicy rib	1
Total: 30 items, 144 Factories			

Table 2. Annual production of traditional food (unit: 1000 US\$)

Items	1999	2000	2001
<i>Kimchi</i>	258,026	301,121	331,141
Brined foods	79,132	78,268	92,723
Ginseng	96,545	127,517	129,410
Beverages	1,701,410	1,735,500	2,011,273
Fermented soy products	293,243	346,759	357,821
Tea	597,088	540,921	652,254
Korean cookies	21,178	31,553	47,536
Others	470,124	564,683	580,513
Total	3,516,744	3,726,322	4,202,672

Source: Annual production of foods and additives, Korea Food and Drug Administration

Products Manufacturing Industry: Clause 1, Article 6. The law aims to protect agriculture through the promotion of domestic products and production of traditional food.

The classification method of traditional food in Korea can be divided into: materials used such as grains, vegetables, fruits, livestock products, and marine products; and production methods such as fermented foods, brined foods, puffed foods, syrup foods, and beverages.

Grain products

Grain products are the most important and abundant products in our agricultural society. There are many different kinds of Korean traditional food using grain.

Rice. Boiled rice is the most basic principal food and is served in three meals a day, but this has been changing recently. The amount of rice consumption in the country has decreased to 78.6 kg/person (2003) and is

Table 3. Annual export of Korean traditional food

(unit: 1000 US\$)

Foods	1999	2000	2001
<i>Kimchi</i>	72,250	66,753	65,573
Brined foods	3,271	4,223	2,401
Ginseng	29,517	24,923	32,861
Beverages	13,001	18,546	20,528
Fermented soy products	5,744	6,587	9,967
Tea	27,816	31,756	38,797
Korean cookies	220	223	238
Others	62,422	100,629	111,581
Total	214,242	253,640	281,947

Source: Annual production of foods and additives, Korea Food and Drug Administration



Fig. 1. Various rice products in Korean market

expected to continue decreasing in time. This rate, however, is not considered low, given that the rice consumption in Japan is now only about 60 kg/person.

Although boiled rice is usually cooked in the house, some factories produce boiled rice and other kinds of packed rice which are successfully distributed to consumers. Moreover, a kind of rice hash, *Bibim-bab*, is distributed as a popular food. Market expansion of various rice dishes is expected to continue (Fig. 1).

In the case of boiled rice, special purpose machinery and control of the retrogradation of starch are necessary. Furthermore, studies on both the improvement of the taste and the extension of shelf life of cooked rice are now ongoing.

Porridge. Porridge used to be the principal food in Korea before the introduction of grain foods. After that, rice became the principal food, and porridge became just a kind of substitute food, delicacy food, special-purpose food, and moderation food. There are many kinds of porridge handed down from generation to generation, and they are classified into categories, depending on what raw materials are used, such as: rice, mungbean, rice and bean, rice and pine-nuts, chestnut, milk, chicken, crustacean, sea mussel gruel, lotus gruel, arrowroot, gourd, and pumpkin.

The porridge market in Korea has become large scale. Porridge also comes in different forms such as powder and liquid, and in different packaging such as cans and retort. To



Fig. 2. Korean rice cakes

further promote the porridge market, it is necessary to develop new and various products based on consumer preference, such as health benefits, and packaging must consider both simplicity and convenience.

Rice cakes. Rice cakes (Fig. 2) are one of the three main processed foods along with boiled rice and porridge, which are widely used for ceremonial and religious occasions.

Rice cakes appeared in the 12th century BC, and the first one was assumed to be steamed rice cake. After that period, the pattern in the production of rice cake, glutinous rice cake, and others have become typical. In addition, dumplings stuffed with honey and sesame, dumpling cakes, pancakes, steamed rice cake with yeast, pine needle rice cakes and others still continue to be produced these days.

A typical rice cake is the white rice cake, which diversified into rice-cake soup. This is one of the most enjoyed rice cake product of this time.

Glutinous rice cake is popular because of its particular texture and the pleasant taste of bean powder. Steamed rice cake with mashed red-bean is also one of the most popular rice cakes so far.

In order to expand the supply of rice cake, it is necessary to make every effort to improve its taste (to meet the taste of younger generation), and develop individual packaging considering simplicity and extension of shelf life.

Noodles. The origin of noodles dates back to the Three Kingdoms (Samguk) era (57 BC) in Korea. The kinds are divided into noodles for clear soup with wheat flakes, knife-cut noodles, and fine noodles. Noodles were introduced as a kind of main food to replace traditional rice, and are used as a symbolic food, such as an emblem of long life,

celebration of marriage, birthday, anniversary, and other holidays. The tradition is partly continued up to the present time, but instant noodles like the Chinese noodle (*ramyun*) have become popular these days. Ingredients used to make noodles include mungbean starch, buckwheat starch, and wheat starch. However, wheat flour is now the major ingredient and other grain dextrins are found in delicacy food.

Ramyun is representative of the noodle manufacturing market of the present time and forms a 1,226 billion ton industry (2002). In this situation, grain and other noodles as traditional food show a relatively small market share compared with *ramyun*. Noodle manufacturing as a traditional food has a problem not with the technical issues, but with satisfying changes in dietary life, which includes simplicity, convenience, and creation of new tastes.

Buns (bun stuffed with seasoned meat and vegetables). Korea's buns are believed to be introduced from China in the 12 BC. Buns are classified based on the type of bun skin – buckwheat buns, wheat buns, and fish buns – and whether they have filling or not.

Traditionally, buns are a seasonal food. The wheat bun is popular in October and June (the 15th day of the 6th lunar month) while the fish buns are popular in April; they are used as food for religious ceremonies. Frozen buns are popular these days because they are an expedient food, and its market share by 10 or less companies is about 100 billion ton.

The quality of a bun can be evaluated by the bun skin and bun filling. It is necessary to develop a new type of bun and bun filling by using traditional materials, and not by using wheat flour, to produce a quality product different from the popular type.

Muk (starch gel). *Muk* is made from grains and nuts and is the result of the gelation of starch and protein. Generally, *muk* is eaten as a side dish and is one of the well-known traditional foods that date back to the Three Kingdoms era.

The gelation of soybean protein is called soybean curd (Dubu), while that of mungbean starch is called green-lentil *muk*. The different kinds of *muk* based on the starch used are: green-lentil *muk*, buckwheat *muk*, acorn *muk*, and pea *muk*. Meanwhile, traditional bean curds are known as soft bean curds, hard bean curds, uncurdled bean curds, and dried bean curds.

If *muk* is to be evaluated as a healthy food, then it must be supported by scientific basis. The development of new texture and various tastes is also required.

Beverages

Examples of Korean traditional beverages include honeyed water, tea, malt-digested sweet drinks, fruit punches, preserved fruit, juice mixed with fruit, and scorched-rice tea. Tea and malt-digested sweet drinks have grown as the biggest in the food industry up to the present time. The history of green tea goes as far back as the Silla Dynasty (828). This shows that tea is one of the oldest traditional beverages in the world. Other beverages remain in existence

for home use and as a delicacy but have limited production and supply.

Korean cookies

The kinds of Korean cookies are defined by the method of production, such as oil-and-honey pastry, glutinous rice puffed cake, fried-rice glutinous cracker, pattern-pressed candy, glutinous thin cookie, fruit-gluten cookie, fruit-honey pastry, wheat-gluten rice crackers, and other wheat-gluten products. The history of Korean cookies goes back to the Three Kingdoms era. Cookies were served as a major food in national ceremonies and in banquets. They are as essential now as before in ceremonial occasions. However, cookies are mainly enjoyed as a delicacy and seasonal food up to the present time and are produced and distributed on an industrial scale for both domestic and export markets.

In order to expand the supply of Korean cookies, it is necessary to make every effort towards the improvement of traditional tastes to meet the needs of the times, as well as to develop packaging and extension of shelf life.

Fermented foods

There are many traditional foods made with vegetables and beans that create a variety of tastes and show a great deal of the ingenuity



Fig. 3. Fermented soybean products

and good sense of our ancestors. For instance, *kimchi* is a product of a process that combines various vegetables that are difficult to store. Fermented soybean products are used to create new and different tastes. Many of these traditional foods are handed down from generation to generation.

Fermented soybean products. Fermented soybean products (Fig. 3) dominate the taste of traditional food. Korean soybean products are similar to those of China, Japan, and other Southeast Asian countries. Fermented soybean foods were developed during the formative period of the Three States, together with brined products. Traditional fermented soybean products include soy sauce, soybean paste, fermented soybean, hot pepper paste, and other sauces. The history of soy sauce and soybean paste goes back to the Three Kingdoms era, while red pepper paste was first introduced in 16 BC.

The main ingredients of fermented soybean products are naturally fermented and dried soybean mash (*meju*) produced by boiling soybeans and salt. Soy sauce, soybean paste, and hot pepper paste are produced by a fermentation process using dried soybean mash.

Soy sauce and soybean paste are roughly classified into traditional style and factory style. Most of the distributed products that started about 60 years ago were introduced by factory manufacturing methods.

In 2002, the amounts of production of soy sauce and similar products were: 231,776 tons soy sauce; 77,579 tons soybean paste; and 120,258 tons red pepper paste. Here, products produced by the factory take around 50% of the total production share, and the market share tends to go upward. It is necessary that the superiority of Korean traditional soy sauce

together with its physiological functions be promoted worldwide.

Fermented vegetables. *Kimchi* is one of the most famous fermented foods among the various brined foods produced in Korea, and is now a well-known Korean traditional food worldwide. It was developed before the Three Kingdoms era as a brined vegetable when red pepper was not yet introduced. After that period, *kimchi* was modified as it was combined with red pepper (Fig. 4).

Kimchi was originally produced by hand by housewives in every home, but it can now be made in factories. Factory-made *kimchi* is supplied to homes in Korea, and exported to Japan, the US, and other countries together with other brined foods at the amount of US\$ 158,393 (2002). Factory-made *kimchi* addresses the need to extend the shelf life and develop product variety to secure its unique world market.

Although other brined foods have also been handed down as traditional food, worldwide acceptance may be difficult due to saltiness. They can be developed to become popular products if saltiness will be reduced.

Salted fishes. Salted fish is made with fish, shellfish, and its internal organs by means of preserving with salt, and is used as a condiment in many dishes. It is produced and consumed in many countries of Southeast Asia. In Korea, the first documentation of salted fish is presented in the chronicles of the Three Kingdoms written in 683, but China is thought to be the birthplace of salted fish where the evidence of its existence and use date back to the 3 BC.

Salted anchovies take around 50% of total production share, pickled shrimp about 20%, and salted roe of Pollack about 10%. These three salted fish products take around 80% of total production.



Fig. 4. Fermented vegetables

Salted fish is used as a condiment for manufacturing *kimchi* instead of for individual use. There is the need to resolve the issue of salt reduction, small individual packaging, and sanitary treatment.

Vinegar. Vinegar is one of the oldest acidic condiments throughout the East and West. Generally, it is produced by fermentation using grains in the East and fruits in the West. The history of vinegar in Korea dates back to the 2 BC.

The present production of vinegar is classified into brewed and synthetic, and brewed vinegar is further classified into grain and fruit vinegar. Our traditional vinegar is mainly produced from rice wine refined to produce an acetic fermentation.

Various types of vinegars are required to meet the demands of a high-class dietary life, and it is desirable to revive traditional vinegar using grain liquors.

Beverages

Korea's drinks are classified and developed as coarse liquor, clear-strained rice wine, medicinal wine, and distilled liquor. The clear-strained rice wine is called white birch wine. Rice-coarse liquor is called *Buyuji* and *Hahyangju*.

Korea's major drinks are consumed primarily for small and large home affairs and religious ceremonies. Home-made wine occupies an important position as a traditional drink. Some of these home-made wines have been handed down through time, and have become famous brands.

Most advanced countries have representative liquors, and there is a large market through the production of such. In Korea, there is tremendous potential for the development of famous brands of liquor toward meeting the growing domestic and world demand.

Condiments

Condiments are classified into fermented and non-fermented ones. Fermented condiments include fermented soy products and vinegar, as mentioned earlier. Non-fermented spices include red pepper, black pepper, cordifolia, Chinese pepper, mustard, chinensis, plum, garlic, welsh onion, ginger, leek, and scallion. It is likely

that the development and promotion of these traditional condiments will have a good potential in the future.

Meat and fishery products

The number of traditional foods made of meat and fish products is not as much as those of grains and vegetables. Some of these products are meat soup, broth, soup with bean-curd and radishes, hard-boiled meat and fish, beef with vegetables cooked in casserole, roasted meat and fish, shish kebabs, slices of boiled meat, sliced meat and fish, and meat buns. In addition, Korean barbecued beef (*bulgogi*) has recently become a popular traditional Korean food throughout the world and is now a flourishing industry. Frozen *bulgogi* can be distributed on a commercial scale in the future by developing new flavors and preservation methods.

The most preferred fishery products are broth, soup with bean curd and radishes, roasted fish, boiled fish, and salted dry fish.

Ginseng

Ginseng is presently classified and managed as a special-purpose food and is one of the oldest ingredients of Chinese medicine owing to its various medicinal values. The virtue of ginseng is well-known throughout the world, and Korea's ginseng is now exported globally. However, the amounts of exportation have been reduced because of the rising ginseng production in other countries such as China and the US.

TRENDS IN ADVANCED COUNTRIES

International position of traditional food

- Traditional foods similar to Korea's *kimchi* and soy sauce are manufactured in other countries, such as the seugemono and soy bean paste (*miso*) from Japan, and sauerkraut and pickles from the West. There are many studies related to these products, and the mechanisms of fermentation are widely published. In addition, fermentation technologies have been developed, such

that they can now be managed and controlled, and the methods of packing and distribution have been greatly improved.

- Various rice products are developed on a commercial scale in Japan and manufactured in some other Southeast Asian countries according to available production methods and consumer preferences. Other agricultural and marine products are also becoming popular as traditional food, in view of the development of highly advanced technologies.
- Korea's unique traditional foods, with their unique taste and flavor, are hard to find in other countries in Southeast Asia, such as *kimchi*, cookies, snacks, and beverages (fruit punch and malt-digested sweet drink).
- Mutual relations and trade with Japan and China are expected to increase through the sharing of information and fostering trade. China and Japan have a similar dietary culture to Korea.
- The technologies for the preservation of rice cakes for quality improvement, exudation of the oil and fat products, and suppression of browning have not been perfected yet, but are advancing.
- Nowadays, various efforts are being made in many countries to promote the characteristics of their traditional foods and make them as globalized products.

Technology development

- Korean traditional foods like *kimchi* are now being noticed as healthy food for the modern people.
- The development of traditional food industry in Korea has been influenced by social, economical, and cultural factors, such as the increase in national income due to the rapid growth of economy, changes in residential environments, development of processed foods, participation of women in social activities, and the rapid expansion of the "eating out" industry. Industrial manufacturing is required to meet the growing demand for traditional food.

- However, there are some difficulties in terms of advancing technology-based industry because traditional food manufacturing is usually operated as a small-scale business, therefore the development of a systematic technology is difficult.
- The development of traditional food as a top-class product towards meeting the demands of free trade and globalized dietary culture of the people has become of utmost importance.
- To promote traditional food in every country, it is necessary to increase consumer interest and intensify research and development through the support of government and private organizations.

Level of technological development

- It is essential to have a competitive edge, particularly for products that are unique to Korea. While traditional food satisfies the first condition for competitiveness, which is uniqueness, technologies are not yet sufficient to promote them as high-class products at the global level.
- Most of the existing traditional food industry depends on human power and traditional manufacturing methods, and are still operated by small-scale businessmen. These factors limit the development of new and innovative products. The development of new technologies and products are vital to expand the global market share in the future.
- Research studies on traditional food have been done to further develop the products. Several individuals, government, schools, enterprises, and organizations are also actively involved in research in this area. These studies should continue at both general and systematic levels.
- It is essential to increase the study of basic domestic and foreign consumption for the globalization of traditional food.

GLOBALIZING TRADITIONAL FOOD

The objective of globalizing traditional food is to contribute to both expanding exportation and promoting different dietary cultures throughout the world. Competition in the world

market is stiff, and a product must be unique in order to remain competitive. The marketing strategy for traditional food must be examined from this point of view. That is, it is not possible to penetrate the world market if a country's traditional food products are not top class.

Following are some ideas to develop traditional foods as top-class, global products:

Development of a consumer-oriented product

The food preference of the people has changed remarkably. Promotion of traditional food is likely to be limited in countries that have the capacity to export, and which have a good economy. Traditional food export is also bound by areas with similar dietary culture. It is essential that taste, nutrition, and convenience be given greater consideration when selecting the basic ingredients and during the preparation of traditional food for export. It is also important to make a product that is original.

Development of fusion foods

It is not easy to influence the food preference of people in other countries. The dietary choice of a person is a combination of life style and geography. In order to influence global consumer preference in food, efforts are needed to combine the taste of traditional food with that of foreign spices. For instance, Korea's *kimchi* is considered a fusion food, in which existing brined vegetables are dramatically combined with foreign spices like red peppers. Many of the country's traditional foods can be combined with foreign ingredients, to further develop them as global products.

Research studies to develop traditional food towards meeting the changing demand for new tastes are continuing, and the development of traditional food into different variations called fusion food is also being pursued.

Adaptation

Whether a traditional food belongs to one country or another is a controversial issue, and could be resolved solely on the method of production or recipe. However, many traditional

foods need to adapt to the new markets. It is necessary to study other countries' consumer preferences in terms of tastes and flavor, as they are potential trade partners. In addition, new tastes and flavors should be introduced into traditional food. *Kimchi* has a particular hot and peppery taste, but it will possibly change with the introduction of new kinds of spices to satisfy consumers with a different taste preference.

It is likewise necessary to conduct a survey research among local/hotel chefs and their organizations, and establish a cooperation system with them concerning adaptation of traditional food. In addition, it is essential to participate in world fairs/exhibition to promote the taste and history of Korea's traditional food.

Brand marketing

Each commodity must have an original brand, which would require a long-term plan. Public information strategies for the brand are a good means to expand product distribution. Government support is necessary in this aspect.

Scientific basis for traditional food

The processes of manufacturing traditional food must be based on scientific methods and guaranteed by safety and sanitation standards. Safety standards based on scientific findings and their strict enforcement are necessary for the products to gain support from the public. These health standards should include both the raw materials used and the manufacturing process. Fermented food, as a large part of traditional food, must also be managed using certain specifications that include optimal temperatures and conditions. The control and management of the fermentation temperature of *kimchi* used in the large food industry must be introduced to other traditional foods.

One of the most important factors when using scientific approaches in developing traditional food is the proof of their function and operation. In the case of fermented food, the compounds produced by the process of fermentation are known and they have various physiological activities. How these affect the human body must be explained to the consumers.

Side dishes and delicacy foods

It is difficult for Korean traditional food to gain a share of the foreign principal food market because of the difference in the dietary needs and choices of each country. Therefore, it is essential to market Korean traditional food as a delicacy or side dish, hence, creating its own niche and demand.

In the case of popular Korean traditional foods like Korean cookies, condiments and fermented soybean products, it may be possible to modify them by using ingredients originating from other countries to adapt to the preferences of the global market.

Development of environment-friendly food products

The popularity of organic farming and pesticide-free products has increased throughout the world. Given this trend, our traditional food products must also make use of organically grown materials as a strategy for marketing. While changing production and farming practices to incorporate organic and nonagricultural chemical methods is a heavy burden in terms of cost, return on investment is expected to be high as attributed to the production of high-grade products.

Standardization of traditional food

World standard for traditional food must be developed as a way to promote global marketing. The first step is to apply for international standardization and to get CODEX certification. *Kimchi* has already registered for CODEX certification; soybean and hot pepper pastes are also being promoted as traditional foods in Southeast Asia, and therefore should also be applied for such certification. Moreover, Japan has already applied for certification of its soy sauce. Other traditional foods must also have international standardization in the long-term.

Improvement of packing and designs

Product packaging and design creates a refined appearance and gives a good impression to foreign consumers. Refined and impressive design and packaging that present the efficacy

and properties of the product is as important as the product itself. There are some observations that the design and packaging of Korean traditional food is still behind global standards, although it has remarkably improved in recent years.

Improvement of safety

The primary element of food is safety. It is hard to say how good a food product is if the safety is not guaranteed. In order to globalize Korean traditional food, quality control procedures are essential for the production of safe products as well as the materials used in it. Moreover, the sanitation of laborers involved in the production processes should be managed and controlled.

It is not possible to guarantee safe products without the control of public and individual sanitation. Safety is an essential element in the production of traditional food as well as of other food products.

CONCLUSIONS

Korean traditional foods are special-purpose foods depicting the daily dietary life of the people, as well as many of the country's ceremonial occasions. However, consumption is rapidly declining due to the influence of westernized food. Fortunately, the common idea that traditional foods, which are made with local ingredients and have various health properties, is now arousing renewed interest among Korean people. It shows a new beginning in terms of understanding the important properties of traditional foods.

Traditional food is important not only as a food itself; it also plays a spiritual role in the Korean dietary life. Traditional foods are deeply related to the improvement of the conditions of agriculture because of the use of materials and ingredients produced locally.

Most traditional foods are believed to have a special function in human physiological activities other than just supplying nutrition. Hence, government support is necessary in terms of promoting this special function of traditional foods. Efforts must be made to better understand traditional food's physiological and health functions. Commercialization and standardization of these

food products are also required. Government support is necessary towards meeting the expansion of domestic consumption and exportation.

Another way to promote and develop traditional food is to build local technology support centers. These centers can provide assistance in terms of technology development and management consultation, toward fostering the local traditional food industry and securing its niche in the world market.

To promote globalization of Korea's traditional food, the products must maintain superior quality. It is necessary to increase efforts to introduce foreign consumer preferences in terms of taste, and produce high-quality products, packaging, and design as well as safety management. Given the concerted efforts of the academe, industry, and government and private organizations, Korean traditional food has a great potential to become globally renowned and enjoyed throughout the world.

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