# Acceptance of Milk and Dairy Products in Rice-Centered Food Cultures: A Comparative Study of Consumer Practices in South Korea and Japan

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# Summary

The purpose of this study is to compare and analyze the position of milk and dairy products in the daily diets of Korean and Japanese consumers. It also aims to consider the main factors that have contributed to the acceptance of milk in the rice-centered food cultures of South Korea and Japan. The research results are based on a questionnaire survey conducted in 2020 and 2021 among Korean and Japanese university students. The results of the survey show the frequency of consumption of milk and dairy products, especially that of cheese and milk, is high in both countries. Non-flavored milk, drink-type of yogurt and probiotic beverages such as Yakult were consumed more frequently in South Korea. While in Japan the frequency of consumption of milk and dairy products was lower, milk was more often consumed in combination with coffee and tea. In both countries milk and dairy products were perceived as healthy food. However, due to the different timing of introduction and distinct cultural contexts of dairy consumption, different aspects of healthfulness were highlighted by Korean and Japanese consumers. Milk and dairy products were primarily associated with calcium intake in Japan and lactic acid bacteria in South Korea. The acceptance of milk and dairy products in the two countries was related to post-war state policies and the provision of milk with school lunch, lifestyle changes due to rapid economic growth, and overall westernization of the diet. Corporate marketing and company strategies have also significantly contributed to the formation of positive attitudes towards milk and dairy products.

Key words: milk, dairy products, South Korea, Japan, factors of acceptance

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# Research aim and background

Milk and dairy products are not part of the traditional, rice-centered food cultures of South Korea and Japan. It was only in the 20th century that they gained a well-established position in people's daily diets. Now that milk and dairy products have become a common sight in supermarkets, convenience stores, organic shops, etc., we are asking: how is milk perceived by Korean and Japanese consumers? What are the differences and similarities in their consumption practices and what factors have influenced the acceptance of milk and dairy products in the two countries? The aim of this study is to compare the position of milk and dairy products in people's daily diets



with a focus on consumption practices among young people. We will also consider the main factors that have contributed to the acceptance of milk and dairy products in South Korea and Japan.

As Bell and Valentine have argued, "the history of any nation's diet is the history of the nation itself, with food fashion, fads and fancies mapping episodes of colonialism and migration, trade and exploration, cultural exchange and boundary-making" (Bell and Valentine 1997: 168). In both South Korea and Japan, the mass consumption of milk and dairy products is a modern practice that has been constructed through post-war state policies and food aid programs, school meals and nutritional guidelines, economic growth, lifestyle changes and westernization of the diet, as well as company strategies and management philosophies.

The research presented here is part of a broader project focused on the acceptance of milk products in rice-centered food cultures including China, South Korea, Japan, Thailand, and Vietnam.

#### 2. Research methods

In 2019, twelve middle-aged and older people living in Seoul were interviewed about their perceptions of milk and the types of dairy products they usually consumed. In addition, in August-September 2020 and July 2021, an internet-based questionnaire survey was conducted among 139 university students in their twenties, and SPSS ver27 was used for the statistical analysis. The answers to the open questions were subjected to text analysis with UserLocal AI text mining. Based on the results of the questionnaire, supplementary interviews were conducted with three Korean informants. The characteristics of the survey participants are shown in Table 1.

Country		Sex (number	r of people)	Age (years old)		
	male	female	other	Total	Average	Standard deviation
Korea	25	34	0	59	22.15	2.41
Japan	56	23	1	80	19.56	1.18
Total	81	57	1	139	20.63	2.19

Table 1. Survey participants

# 3. Research results

# 3.1 Preference for dairy products

In terms of favorite dairy products, yogurt was the most common response in both Korea and Japan, followed by cheese and milk. At the same time, cheese and milk were also listed as the least favorite dairy products in some of the responses, indicating that attitudes vary according to personal preferences. Students' attitudes were divided particularly in relation to milk which was liked by 22% and disliked by 27.1% of the Korean respondents. 16.3 % of the Japanese respondents said they liked milk against 18.8% who expressed dislike for the product. In both countries those who disliked milk slightly outnumbered those who liked it, making it the least favorite product.

The reasons given for disliking milk were related to feeling stomach pains after drinking milk and aversion to its smell. Unpleasant smell was also pointed out as one of the main reasons for disliking cheese, which suggests that the specific smell of milk and dairy products causes a feeling of dislike among consumers in both countries. On the other hand, lactose intolerance is a possible explanation for the stomach pains related to drinking milk<sup>1)</sup>. Infants produce an enzyme (lactase) that allows them to break lactose down and digest milk, but its levels decrease as children grow up and no longer consume milk on a daily basis. Lactose intolerance is quite common

among people in rice-centered food cultures, where the diet does not require intake of milk and dairy products (except for infants and small children).

Due to its high content of lactic acid bacteria<sup>2)</sup>, yogurt generally does not cause stomach pains and other symptoms of lactose intolerance. This may be one of the reasons for being the number one favorite dairy product in the survey. It is also worth noting that about 40% of the respondents replied "nothing in particular" to the question which dairy product they disliked most. This is indicative of the popularity of milk and dairy products which seem to be well liked in both countries (Figure 1).

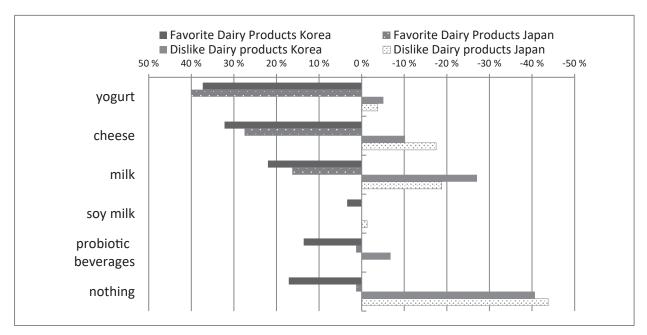


Figure 1. Preference for dairy products (free responses)

# 3.2 Frequency of intake

The frequency of consumption of milk and dairy products was high in both countries, especially that of cheese and milk (Table 2). The consumption of non-flavored milk (plain milk without sugar and flavors) was particularly high among Korean students, showing a significant difference compared to Japanese respondents. In Korea, 45.8% of the respondents consumed non-flavored milk "every day," "5-6 times a week," and "3-4 times a week," suggesting that about half of the students consumed plain milk 3-4 times a week or more. In Japan, on the other hand, only 25% of the respondents consumed milk more than 3-4 times per week or more, and the number of those who almost never consumed milk was 50%, half of the respondents.

In Korea, the consumption of milk was followed by that of probiotic beverages such as Yakult and flavored yogurt drinks, both of which were significantly higher than in Japan. On the other hand, the consumption of flavored and plain yogurt was higher in Japan where about 30% of the respondents consumed yogurt every day, 3-4 times a week or more<sup>3)</sup>.

Looking at the consumption of milk mixed in other beverages such as tea and coffee, coffee was preferred black more often in Korea, whereby a significant difference was observed. In Japan, where café au lait is particularly popular, coffee was more often consumed with milk. Although there was no significant difference in the frequency of consumption of café au lait and milk tea, responses related to "every day" and "5-6 times a week" in Japan tended to be slightly higher than in Korea. No significant difference was observed in the consumption of soy milk, either; about 25% of the respondents in both countries consumed the product at least once a week.



These results indicate that the daily consumption of milk and probiotic beverages such as Yakult is more common in Korea. While in Japan the frequency of consumption of milk and dairy products was lower, milk was more often consumed in combination with coffee and tea.

Table 2. Intake frequency of milk and dairy products

Dairy products	Country	every day	5-6 times a week	3-4 times a week	1-2 times a week	1-2 times a month	almost never
non-flavored	Korea	8.5%	6.8%	30.5%	27.1%	10.2%	16.9%
milk **	Japan	13.8%	1.3%	10.0%	8.8%	16.3%	50.0%
flavored milk**	Korea	1.7%	0.0%	5.1%	16.9%	37.3%	39.0%
navored milk	Japan	7.5%	0.0%	1.3%	0.0%	15.0%	76.3%
probiotic	Korea	3.4%	1.7%	10.2%	25.4%	39.0%	20.3%
beverages**	Japan	3.8%	0.0%	6.3%	10.0%	27.5%	52.5%
non-flavored yogurt	Korea	0.0%	0.0%	10.2%	8.5%	25.4%	55.9%
drinks**	Japan	1.3%	1.3%	1.3%	2.5%	17.5%	76.3%
flavored yogurt	Korea	1.7%	0.0%	5.1%	18.6%	30.5%	44.1%
drinks**	Japan	2.5%	1.3%	1.3%	2.5%	26.3%	66.3%
non-flavored vogurt	Korea	0.0%	1.7%	6.8%	25.4%	28.8%	37.3%
non-navored yogurt	Japan	6.3%	2.5%	7.5%	10.0%	17.5%	56.3%
flavored yogurt	Korea	0.0%	0.0%	5.1%	16.9%	40.7%	37.3%
navored yogurt	Japan	11.3%	5.0%	3.8%	11.3%	21.3%	47.5%
soy milk	Korea	1.7%	3.4%	8.5%	11.9%	28.8%	45.8%
SOY IIIIK	Japan	8.8%	2.5%	10.0%	5.0%	13.8%	60.0%
café au lait	Korea	5.1%	1.7%	20.3%	20.3%	13.6%	39.0%
Cale au lait	Japan	12.5%	6.3%	6.3%	11.3%	18.8%	45.0%
coffee**	Korea	11.9%	20.3%	13.6%	13.6%	10.2%	30.5%
Conee	Japan	7.5%	6.3%	7.5%	12.5%	16.3%	50.0%
milk tea	Korea	0.0%	3.4%	5.1%	15.3%	25.4%	50.8%
IIIIK lea	Japan	2.5%	2.5%	5.0%	12.5%	33.8%	43.8%
Cheese	Korea	3.4%	3.4%	16.9%	30.5%	33.9%	11.9%
Olicese	Japan	3.8%	7.5%	23.8%	28.8%	23.8%	12.5%

<sup>\*</sup>p < 0.05, \*\*p < 0.01

# 3.3 The position of dairy products in the everyday diet

The respondents were asked to choose one option regarding the position of milk and dairy products in their daily diets. The results show that in both countries, a high percentage of the respondents perceived dairy products as healthy, nutritional foods. In Korea, dairy products were also positioned as snack foods, favorite tastes, and part of a meal. Although a certain variation in the positioning of dairy products was observed, Japanese respondents, too, tended to define dairy products as healthy, nutritional foods (Figure 2).

As far as milk is concerned, it was regarded as part of a meal, which may be because in both Korea and Japan, many respondents reported drinking milk in the morning when it is often consumed with some bread or cereals for breakfast. At the same time, during our interviews, it became evident that bread was viewed by many Koreans as a snack food in contrast to rice, which was pointed out as a staple food and an essential part of Korean diet. Since milk and bread are often consumed together, some people associated milk with snacking. Flavored milk was also considered a good snack in Korea where snacks such as banana milk, fried milk, and

Dalgona coffee are very popular<sup>4)</sup>. Banana milk is a bestselling snack with a long history, which is available in different varieties in any supermarket and convenience store and is often featured in Korean dramas. Other popular flavors in Korea are strawberry and melon<sup>5)</sup>. In Japan, banana milk and strawberry milk are quite common, but compared to Korea, the brand varieties are rather limited. In Japan, other opinions (20%) included drinking milk when thirsty, after weight training and taking a bath<sup>6)</sup>, which suggests life-style related choices.

In both countries, fermented milk beverages such as Yakult were consumed mostly for health or as a snack between meals. For the largest number of respondents in Japan drinking probiotic beverages was related to health, while in Korea the largest number of respondents associated it with snacking. In Japan, the increasing number of fermented milk beverages with functional claims such as "regulation of the intestinal flora" or "improving the immune system" may have contributed to these results.

Yogurt (including drink-type of yogurt) was more frequently regarded as a snack, dessert, or favorite taste than any other dairy product. In Japan, the frequency of consumption of flavored yogurt was higher than that of plain yogurt. When asked what product could replace yogurt, in addition to milk, cheese, and soy milk, many respondents answered pudding and jelly, which suggests that flavored yogurt is often consumed as a snack or dessert. In Korea, on the other hand, where yogurt was consumed more often as a drink compared to Japan, milk, probiotic beverages, soy milk, water, and fruit juice were listed as substitutes for yogurt. This is an interesting

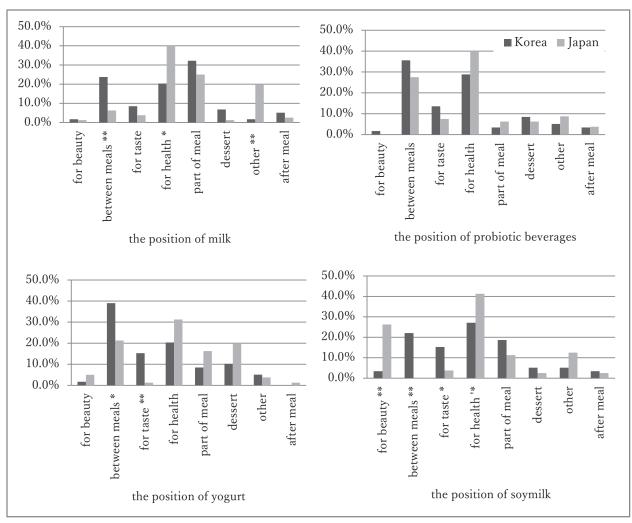


Figure 2. The position of dairy products

\*p < 0.05, \*\*p < 0.01



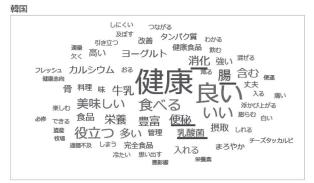
result suggesting that for many Korean consumers yogurt falls into the category of drinks and beverages, which is quite different from Japanese perceptions of yogurt. In Japan, drink-type was developed in 1980, more than a decade later than in Korea, and yogurt was initially adopted as a dessert. In Korea, it was the vice versa, drink-type of yogurt preceded dessert-type, which may account for these differences.

Soy milk was most frequently defined as a healthy, nutritional food in both countries, but while in Japan it was most strongly associated with beauty benefits, in Korea it was perceived rather as a good snack or drink consumed for its taste. That soy milk has good effects on beauty may be an image created by product advertisements in Japan, where claims such as "isoflavone in soy milk is good for female hormones and beauty" are quite common. In Korea, on the other hand, popular soy-milk desserts (such as a tofu pudding made from coagulated soy milk and topped with syrup and fruits) can explain why soy milk is often perceived as a snack.

#### 3.4 Perceptions of dairy products

The respondents were asked to give a free description of their images and perceptions of dairy products and their answers were subjected to text analysis. The results show that in both countries dairy products were strongly associated with health and nutritional benefits. In Korea, important keywords were "lactic acid bacteria," "intestinal tract and digestion," "improves constipation," whereas in Japan, the focus was on "calcium intake" and "bone health" (Figure 3).

In addition, the fact that "cheese dakgalbi" (spicy stir-fried chicken with cheese on top) and "mild taste" appeared among the keywords in the Korean survey implies that dairy products have been successfully incorporated into the local food culture. The reason why cheese is often combined with Korean spicy dishes is because it goes well with spicy food making hot taste milder. This can be explained with the cleansing effect that milk protein casein has on capsaicin, a fat-soluble chemical compound in chili peppers which binds to tongue receptors and causes a burning sensation. According to Fibrianto et. al (2019: 5), the ability of milk to neutralize capsaicin can also be attributed to its high calcium content.



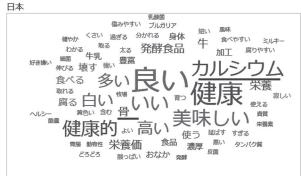


Figure 3. Perceptions of dairy products in Korea and Japan

(Keywords are shown with a size corresponding to their value in terms of frequency of appearance.)

# 4. Factors of acceptance

# 4.1 South Korea

One of the main focuses in the food policies of the Korean government in the second half of the 20th century was the development of a strong dairy industry. With the implementation of the "Livestock Industry Promotion Plan" from 1962, a great number of dairy cows were imported from abroad and Korea's dairy industry grew

significantly. However, since most people were not used to drinking milk, school lunch was seen as one of the best ways to promote milk consumption and ensure the students' nutritional improvement.

The "General School Lunch Program" introduced in 1968 was jointly designed with the US government for the purpose of strengthening and expanding the school lunch system in Korea. The lunch consisted of either a piece of bread and/or a cup of milk. Both the wheat flour and the powdered milk were received as aid for recovering after the Korean War or were imported at low price from the US after 1972. However, the school lunch program with its focus on "correcting the rice-centered Korean diet" was not welcomed by many children and their parents who doubted the nutritional value of bread and milk. In Seoul, for example, teachers had to drink milk in front of the students in the classroom to set an example and prompt them to consume the school lunch (Park K. H. 2013: 331).

After several decades, however, the government's efforts to encourage the consumption of bread and milk through the school lunch program proved effective. For example, a study of 400 school children carried out in Seoul in 1982 shows that 41% of the students preferred the combination of "bread and milk" for school meal, while only 24% expressed preference for "rice and Korean style-soup." The change in food preferences had progressed to such an extent that more than 85% of children replied they liked drinking milk, and many chose the product as one of their favorite foods (Kim H. M. 1982: 40).

In addition to state food policies and nutritional guidelines, corporate advertising and marketing strategies were another major factor that significantly contributed to establishing a taste for dairy foods in Korea. Dairy companies made efforts to make their products more palatable, adding sweeteners and different flavors to mask the specific smell and taste of milk. This was the case with banana milk which, due to its sweet fruity flavor, became an immediate success after its launch in 1974. The product has kept its position as a top favorite snack for children ever since<sup>7)</sup>.

Another successful product was a sweet probiotic drink made from fermented milk introduced in 1971 by Yakult Korea<sup>8</sup>. The product was distributed through a network of women (Yakult Ladies) who made deliveries directly to their customers' homes. Due to active advertisement campaigns focused on promoting the health benefits of lactic acid bacteria, the probiotic drink soon gained a great popularity among Korean consumers. The system of home delivery, designed by integrating the model of Yakult Honsha, also proved to be very effective.

The importance of lactic acid bacteria for gut health had been in the focus of attention of the mass media for several years even before the establishment of Yakult Korea. For example, a newspaper article published in *Korean Daily* in 1966 explained that yogurt (*yokulutu*) was a milk beverage fermented with lactic acid bacteria that inhibit the growth of harmful bacteria in the gut. Another article in *Kyonghyang Daily* from the same year provided a similar explanation, stating that yogurt was a world-famous fermented milk drink that contained a great number of lactic acid bacteria and had the ability to suppress the growth of harmful bacteria, thus strengthening the function of the intestines. Interestingly, the same article also explained that the sour taste of kimchi was due to similar lactic acid bacteria that can be found in yogurt. This link with the traditional fermented food kimchi, widely recognized for its health effects, may have contributed to some extent to the acceptance of yogurt as a healthy drink in Korea<sup>9</sup>.

Furthermore, rapid urbanization and lifestyle transformations during the 1970s brought about significant dietary changes and increase of adult diseases, including gastrointestinal symptoms. Such changes resulted in an increased health awareness as many people realized the importance of eating healthily and including fermented foods such as probiotic drinks and yogurt in their daily diet. Economic growth and further westernization of the Korean diet prepared the ground for the development of a new, stirred type of yogurt in the 1980s. With its creamy texture and pieces of fruit, this product soon became popular as a healthy, delicious snack for children.



One of the leading brands Yoplait (yopulle, a French brand, managed and manufactured by a local dairy company) was first introduced in Korea in 1983. This brand product became so popular that yopulle started to be used as a generic noun to indicate similar products and distinguish them from probiotic beverages, for which yokulutu was generally used. Thus, Yoplait enriched the diversity of yogurt products on the market and added images of taste and pleasure to the perceptions of yogurt.

Today, the dairy processing industry is the third largest food industry in Korea (after the alcoholic drinks industry and the wheat processing industry). As our survey results indicate, the conception of yogurt as a probiotic beverage that is beneficial for intestinal health and digestion is prevailing among Korean consumers; drinking milk and yogurt has become a healthy habit in Korea.

# 4.2 Japan

In Japan, too, the provision of milk with school meals has played an important role in the acceptance of dairy products as part of a healthy diet. During the US occupation, GHQ actively provided skimmed milk powder and wheat flour as food aid to deal with food shortages in postwar Japan. Skimmed milk powder was seen as an important source of nutrition and TPAs around the country organized volunteers to assist in preparing and serving milk in school lunches. Since bread (made from surplus wheat flour from the US) was served as the main staple in school lunches, it gradually permeated into the eating habits of the post-war generation.

Bread and milk remained central foods in school lunches until around the end of the 1970s, when the government started promoting rice—a surplus product at that time—as the main staple (Noguchi 2010). Nevertheless, milk continued to be served even after the introduction of rice-centered school meals. Today, no matter whether the main staple is rice or bread, school lunches invariably include 200 ml of milk. Positioned as part of the educational curriculum under the School Lunch Act, school meals are aimed at promoting food education both in terms of nutrition and local food traditions (Utsunomiya et.al 2016). With the recognition of traditional Japanese food as a UNESCO Intangible Cultural Heritage in 2013, some doubts have been voiced about the adequacy of milk to be paired with rice-centered meals. However, state officials and school nutritionists have remained firm in their support for milk provision as part of a balanced, nutritious school meal. Since lunch time is used for the purposes of food education, teachers often emphasize the benefits of drinking milk for physical growth and bone health. Being repeatedly taught that as a rich source of calcium "milk helps you grow taller" and "milk is good for your bones," children grow up highly aware of its nutritional values and many continue to include dairy products in their daily diets even after graduating from school.

Another factor that has significantly contributed to the formation of a positive attitude towards milk and dairy products is the well-established system of home delivery of fermented milk drinks, which was first launched by Yakult Honsha in 1963. This was a unique system, deeply rooted in the philosophy of Yakult's founder Minoru Shirota who placed a high value on sincerity, kindness, and harmony among people; or as he put it, "to be caring enough to broaden acceptance," and "to be caring enough to make home deliveries" (Yakult Honsha 2014: 4). Shirota emphasized the preventive medicine approach based on the idea of *kenchou-choujyu* (healthy intestines for a long life) and sold the new probiotic drink (fermented with *Lactobacillus casei* strain Shirota) at a price that anyone could afford<sup>10)</sup>. Shirota and the people engaged in Yakult business aimed not only at selling the product but also at spreading healthy lifestyle habits, encouraging people to improve their intestinal health by drinking probiotic beverages. Since then, Yakult's female salesforce known as "Yakult Ladies" have been striving to achieve their mission as health advisors through building strong bonds with their customers. Interestingly, instead of the more common word for delivery "haitatsu", the Yakult Ladies refer to their home delivery services with the word "otodoke," implying not only delivery, but also direct, heartful communication (Okuno 2020: 93).

Now supermarket shelves offer a great diversity of probiotic beverages that contain specific strains of lactic acid bacteria and appeal various benefits to highly health-conscious consumers. However, it is Yakult's business model with its focus on personal communication with each individual customer that has provided a springboard for the popularization of fermented milk drinks and the propagation of positive attitudes towards dairy products in Japan.

Another key factor affecting the high awareness of the health aspects of dairy products has been the development of many plain yogurt products since the 1970s and an increase in health claims on yogurt and fermented milk drinks under the Japan's government-designated health food standard FOSHU (Food for Specified Health Use). As a result of the rapid growth of the Japanese economy in the 1960s, diets previously rich in carbohydrates and poor in fat and animal protein were rapidly westernized. Having fulfilled their basic nutritional needs, Japanese consumers turned to food as a source of pleasure and happy, healthy lives (Ishige 2000). In accordance with these consumption trends, dairy companies were competing to develop new products that would satisfy the diversifying consumer needs. In 1971, one of Japan's top dairy companies, Meiji, was ready to launch the first plain yogurt on the Japanese market, developing not only a completely new product, but also a taste for yogurt's natural taste and a new wave of culture. In 1996, "Meiji Bulgaria Yogurt" became the first yogurt to acquire a FOSHU certificate, followed by many other yogurt brands, which was a major step to wider recognition of the health effects of yogurt and lactic acid bacteria<sup>(1)</sup>. Today, the functional claims of yogurt vary from prevention of lifestyle-related diseases to maintaining brain health and improving quality of life. With promises to improve sleep, relieve stress and enhance concentration, such yogurts and their marketing match the spirits of modern times and the needs of a highly health-conscientious Japanese consumer<sup>(2)</sup>.

### 5. Conclusion

This paper was focused on understanding the consumer attitudes towards dairy products in South Korea and Japan and the place they take in the lifestyles of young people in both countries. The analysis of consumer motives, practices and attitudes towards dairy products showed that in both countries, consumers shared a common perception of milk and dairy products as possessing beneficial health effects and high nutritional value. One of the main reasons for such positive attitudes is the school lunch system which provides for serving milk in line with government policies and official dietary guidelines. Through state-promoted food education children learn about the importance to drink milk as a source of calcium which will help them grow strong and healthy. As Lisanne Wilken and Ann-Christina Knudsen (2008: 37) have argued in their discussion of milk perceptions in European countries, people in Korea and Japan, too, seem to be following and unconsciously reproducing the official discourse of state authorities and dairy associations. The knowledge about the goodness of milk they acquire at school or from promotional materials and TV commercials has been incorporated into their understanding of milk and dairy products to become part of their habitus; this is a form of internalized knowledge which is exhibited in their everyday life through experience and practice (Bourdieu 1990). This is how educational policies and nutritional recommendations, industry reports, and corporate strategies have contributed to the adoption of milk and dairy products in the category of healthy food in both countries.

However, due to the different timing of introduction and distinct cultural contexts of dairy consumption, different aspects of healthfulness were highlighted by Korean and Japanese consumers. For example, whereas Korean consumers showed a stronger association with "lactic acid bacteria" and their health benefits, Japanese consumers emphasized the positive effects related to "calcium intake." The focus on lactic acid bacteria in Korea was related to the popularity of fermented milk beverages and yogurt drinks which were widely promoted and consumed more frequently than in Japan. The attention to lactic acid bacteria was also influenced by public



discourses on the health effects and overall reevaluation of traditional fermented foods. It also reflected certain associations with kimchi, Korea's emblematic food that has been in the public spotlight both as a national symbol and for its high content of lactic acid bacteria.

Another characteristic of dairy consumption in Korea was that while milk was regarded as part of a meal, consumed usually unflavored with cereals for breakfast just like in Japan, it was also positioned as a between-meal snack, which can be explained with the popularity of common treats such as banana milk, fried milk, Dalgona coffee, etc. Probiotic beverages and yogurt drinks, which are usually sweetened, also tended to be categorized as snacks. The situation was similar in Japan, but due to the increasing number of products with functional claims, more consumers were inclined to place probiotic beverages in the category of healthy foods rather than snacks. On the other hand, more people in Japan preferred to add milk to their coffee than in Korea. Such a preference for café au lait may be related to the initial stages of acceptance of coffee in Japan, when it was consumed with a lot of milk and sugar. Today, due to health concerns, black coffee is preferred by increasingly more people in both countries, particularly in Korea.

Food research has shown that novel foods of foreign origin tend to become more acceptable if they taste sweet (Utsunomiya 2019: 246). As our sensory systems have evolved to prefer sweet-tasting foods that are rich both in energy and essential nutrients, sweetness has always been a major driver of food preferences. It has also played a role in the process of acceptance of novel foods, as in the case of milk and dairy products in rice-centered cultures. Only after obtaining a certain position in the local diets, a turn to the "original" taste may follow under the influence of socio-economic factors, branding strategies, and lifestyle trends. Such a pattern of familiarization was observed in the case of yogurt in Japan (Yotova 2017). Initially, only sweetened yogurt, consumed mainly as a snack or dessert, was available on the market, but this was to change with the health trends of the 1990s. Driven by government-designated health food standards, product advertisements, and public discourses on the goodness of lactic acid bacteria, plain yogurt gradually gained popularity as a health food to become a common sight in supermarkets and convenience stores throughout the country. Even though the consumption of plain yogurt was lower in Korea and the product variety rather limited, a similar trend of pursuing natural taste, health, and authenticity was evident from our informants' narratives, practices, and patterns of consumption. Thus, the appropriation of milk and dairy products in rice-centered diets involves processes of familiarization and routinization which transform new and unusual things into key parts of a culture (Mintz 1985: 120-121).

The results of our research clearly showed that milk has become a widely recognized food category with an important role in the diets of Korean and Japanese consumers. The fact that dairy products have been incorporated into traditional dishes is a clear evidence of successful adaptation to local tastes and food preferences. The development of soy milk yogurt, maccha yogurt, yogurt made from rice, etc. and the popularity of dishes such as cheese dakgalbi, instant noodles with milk, cheese tonkatsu (deep-fried pork cutlet), and ice cream wrapped in mochi among many others, indicate that dairy products have stopped to be exotic ingredients once associated with Western food; rather, in combination with traditional tastes and recipes, they have become part of local diets. Perhaps our most interesting finding is that Korean and Japanese people have created their own distinctive patterns of dairy consumption with products and uses that are unknown in western countries.

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#### Notes

- 1) According to the Japanese Pediatric Chronic and Specific Diseases Information Center, "lactose intolerance is the inability to digest and absorb lactose due to reduced activity of lactase, the enzyme that breaks down lactose into glucose and galactose, resulting in significant diarrhea and poor weight gain. There are two main causes of reduced lactase activity: congenital enzyme deficiency and secondary enzyme inactivity. In mammals, lactase activity is very high for a certain period after birth, and then physiologically declines after lactation."
- https://www.shouman.jp/disease/details/12\_01\_001/#:~:text=%E4%B9%B3%E7%B3%96%E4%B8%8D%E8%80%90%E7%97%87%E3%81%A8%E3%81%AF%E3%80%81,%E3%82%AF%E3%82%BF%E3%83%BC%E3%82%BC%E6%B4%BB%E6%80%A7%E4%BD%8E%E4%B8%BB (last visited Aug. 19, 2021)
- 2) Lactic acid bacteria contain high levels of the lactase enzyme which allows them to break lactose down during the fermentation process and thus, help digestion.
- 3) However, no significant difference with Korea was observed here.
- 4) Fried milk is a Taiwanese street food made by frying coagulated milk, which has recently become quite popular among young people in Korea. Dalgona coffee, prepared from instant coffee that is whipped on top of milk, has become extremely popular through SNS amidst the corona virus pandemic.
- 5) It is difficult to find such pink, green or yellow-colored milk products in European supermarkets, as for many Europeans, milk is a white substance and whiteness itself is an important criterium to judge the authenticity of the product. In many European countries, when coffee, chocolate, sugar, etc. are mixed into the milk, the product is not considered milk anymore. This "cult of pure milk" was observed in countries with long dairy traditions such as Ireland, Denmark, and Norway (Wilken and Knudsen 2008: 38).
- 6) In the 1960s, there were a lot of public bathhouses around Japan. This was the time when refrigerated showcases started to appear, selling cold milk and beverages to customers to enjoy after taking a bath.
- 7) The 1970s were a period of rapid economic development and lifestyles were changing. However, despite all government efforts to promote the consumption of dairy products, milk was considered unpalatable by many Koreans. On the other hand, banana had the status of a luxury imported food product that was not widely available at the time. Combining milk with this high-status fruit turned out to be a successful business idea and banana milk gained a great popularity soon after its launch in 1974.
- 8) Yakult Korea was established and modeled after Yakult Honsha in Japan. A more detailed explanation of Yakult's business model and founder's philosophy will be provided in the next section.
- 9) A connection between kimchi and yogurt was also made by some of our informants. For example, a woman in her 40s explained that yogurt is as important food as kimchi for her and her family since both kimchi and yogurt are fermented products with a high content of lactic acid bacteria. Another woman emphasized the importance of consuming fermented foods like kimchi and yogurt to strengthen one's immunity system during the corona virus pandemic.
- 10) In 1955, when Yakult Honsha was established, the price of a 30ml bottle of probiotic drink was 5 yen per piece, the same as the price of a postcard at that time (Yakult Honsha Shashi Hensan Iinkai, 2014: 164).
- 11) According to *Health Business Magazine*, probiotics that support "healthy intestinal environment" lead the health food trend, ranking the highest among FOSHU products. The results of a survey conducted among university students showed that the participants in the study were more likely to rate the FOSHU brand drink as the healthier option among similar products (Ono and Ono 2015), which indicates the high credibility of the FOSHU brands among Japanese consumers.
- 12) Equally popular are gourmet products with typically Japanese ingredients and seasonal flavors (such as matcha, persimmon, red beans, and sweet potatoes), which offer unique combinations of flavors and new experiences to curious consumers who put a high value on local tastes and seasonal offerings.

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