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The History of U.S. Exports of Wheat to Japan

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Report Highlights: FAS Japan is writing a series of reports on the history of U.S. agricultural exports to Japan. These reports showcase the unique partnership between U.S. cooperators, USDA's Foreign Agricultural Service (FAS), and Japan's food and agriculture sector that has made Japan the most successful country for the market development of U.S. food product exports in history.

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Introduction

Japan is one of the largest importers of wheat in the world, accounting for about 5% of world trade. Japan imports around 5.5 million metric tons of wheat each year, nearly 90 percent of the wheat the Japanese consume.¹ Annual wheat consumption averages about 70 pounds per person.² About forty percent of the wheat is used for making bread and noodles, around 15 percent is for making confectionary items, and the rest is for other uses. For over 50 years, the U.S. Wheat Associates and its predecessor organizations, working with FAS and the Japanese industry have effectively marketed U.S. wheat in Japan. This partnership has helped the agricultural economy in the United States remain vital and strong and assisted Japan in feeding its people.

The U.S. wheat industry's market development in Japan from the mid-1950s through the early 1970s was nothing short of amazing. Through creative market development, they changed the taste buds of the Japanese consumer and helped to introduce a wide variety of wheat foods to Japan. U.S. wheat exports to Japan took off in the mid-1950s, increasing from 1.28 million metric tons in 1956 to a high of 3.24 million metric tons in 1974, an increase of 150 % in 18 years. Today, Japan is still an important market for the United States, importing some 3 million metric tons of wheat from the United States per year.

The Introduction of Bread into Japan

Bread was first introduced to Japan by Portuguese missionaries during the Warring States Period (1482-1558).³ In fact, the Japanese word for bread is “pan,” which is derived from the Portuguese language. In 1543, a Portuguese ship was forced to land in Japan accidentally because of a terrible storm and the Japanese saw the Portuguese sailors eating something unfamiliar, which was bread.⁴ Lord Oda Nobunaga, who united most of Japan before his death in 1582, is said have been the first Japanese to eat bread.⁵ However, during the Tokugawa Shogunate period (1603-1868), most Japanese didn't eat Western food because of Japan's isolation from other countries. During this period, bread was baked only for the Dutch living in the southern part of Japan. Otsuki Bansui, a well known court physician of the 18th century observed that to Europeans bread was a staple food. Though he was unsure of how bread was made, he guessed that “it was made by adding a sweet wine made from fermented rice to flour and then kneading the mixture, letting it sit, and finally baking it for breakfast or supper.”⁶

Bakeries began to become popular in Japan after the first bakery, Fugetsudo, opened for business in 1868 in Yokohama.⁷ In the same year, it supplied bread for the armies of the Satsuma clan in wars against the Shogunate. In 1875, Fugetsudo became the first bakery in Japan to make and sell western-style biscuits and pastries. At that time, bread was not made with yeast as it is today. The technology acquired by bakers, however, allowed them to simulate modern production by fermenting their bread using hops and other methods. These bakers also made the trip to Yokohama just to buy the necessary imported ingredients. Though bread was sold primarily to the military and schools, there were approximately 116 bakeries operating in Tokyo by 1883.

During the early part of Meiji Era bread became more common because of the work of Kimura Yasubei, a Samurai who lost his job because of the rise of the Imperial Army. Believing that the Japanese culture needed to be more westernized, this enterprising gentleman opened a bakery, Kimuraya, in Tokyo in 1871.⁸ He created *anpan*, a sweet bun filled with red bean paste. In

Japanese, “an” means sweet bean paste and “pan” means bread. At first his bread was modeled on Dutch loaves since his chief baker had worked as a chef in a Dutch household in Nagasaki. However, he wanted a product that the Japanese would like and eventually made the bread by raising the dough with traditional sakadane liquid yeast instead of conventional yeast. In 1875, the bakery presented their creation to Emperor Meiji, who was so delighted by it that he soon requested *anpan* on a daily basis. The enormous popularity of *anpan* was probably due in large measure to early imperial patronage.

Anpan has remained popular in Japan. An example of the lasting popularity of *anpan* is the famous *anime* cartoon character *Anpanman*, which is perhaps the most popular cartoon character for children in Japan. The character was created by Takashi Yanase, who was inspired by the idea of *Anpanman* while struggling to survive as a soldier in World War II when he often dreamed about eating the bean-jam filled *anpan* pastry.⁹

According to Elizabeth Andoh in a 1997 Daily Yomiuri article entitled “*Bread, Bean Paste, and An Pan,*” the appearance of bread in the daily diet of the Japanese during the Meiji Era parallels other sweeping social and political changes during that time.¹⁰ Ms. Andoh wrote that the Japanese imperial military incorporated bread into their troops' daily rations to counter beriberi, an ailment caused by a deficiency of Vitamin B in the diet. Beriberi was a serious problem among Japanese troops. Many in the Japanese military believed that European soldiers suffered less from this ailment. In order to verify this claim, half the military patients at a municipal clinic in Kanda were given a Western-style diet; while the other half were given a traditional Japanese diet. Patients treated with a Western-style diet that included bread and milk were better off. Ms. Andoh pointed out that “during much of Meiji Period, bread-eating was credited with preventing beriberi, although modern science tells us it is more likely that the vitamin-B rich milk was responsible for the positive results. In both the Sino-Japanese War (1894) and the Russo-Japanese War (1904) Japanese troops brought bread to the front lines, and fought successfully. This only reinforced the impression of bread-eating as being “healthy” and, more important, as a source of political and social empowerment.”

Japan’s Wheat Contribution to World Food Security

While Japan is not a major producer of wheat, Japan and USDA made a little known contribution to world food security.¹¹ Cecile Salmon, an agronomist and a leader of wheat breeding research for USDA’s Agricultural Research Service was detailed to the U.S. Occupation forces in Japan after World War II. While visiting the experimental station in Iwate Prefecture in 1945 he discovered the Norin 10 wheat cultivar. The word “Norin” came from the acronym of the first letter of each word in the Romanized title of the Japanese experiment station.¹² Norin 10 provided two very important genes, Rht1 and Rht2, that resulted in reduced-height wheats, thus allowing better nutrient uptake and tillerage. Norin 10, which grew just two feet tall instead of the usual four feet, was less prone to wind damage and allowed better nutrient uptake. Salmon sent Norin 10 samples to Orville Vogel at Washington State University. These samples were eventually used by Norman



Norman Borlaug speaking at a USDA Conference in 2003

Borlaug in Mexico in 1952 to cross with traditional Mexican varieties to create the high yield varieties. Norin 10 helped developing countries such as India and Pakistan increase productivity by 60% that resulted in the green revolution. For his work with Norin 10, Norman Borlaug was awarded the Nobel Peace Prize in 1970 in recognition of his contributions to world peace.

The School Lunch Program

Just after the war, many Japanese were malnourished because of post-war food shortages. During the U.S. Occupation (1945-1952), the Supreme Commander of the Allied Powers



School Lunch Program in the 1950s
Source: U.S. Wheat Associates

(SCAP) worked to enhance the nutrition of the Japanese to improve their health and resistance to disease.¹³ New imported foods, such as wheat, corn, flour, butter, milk and meat, were introduced to Japan during this time. In December 1946, the U.S. and Japanese governments started a school lunch program. They wanted not only to provide food for malnourished children but also to teach them to acquire a taste for foods, such as powdered milk, meat, and bread, that they were unfamiliar with but would improve their diets. The goal of the lunch program was to provide children with 600 kilocalories and 25 grams of protein through a bread roll, a glass of milk and a warm dish.¹⁴ A total of 250,000 children in selected schools in Tokyo and Yokohama were fed a school lunch. At

the end of the U.S. Occupation in 1952, eight million children were participating in the school lunch program. SCAP officials, however, were concerned that once the Occupation was over, the Japanese would not be able to continue the program because the school lunch program would need large amounts of food imports. USDA not only helped the existing school lunch program meet the need for food imports but it was also able to help expand the program. In the mid-1950s, much of the food for the expanded program came from USDA's Public Law (P.L.) 480 donations. Some of the large breakthroughs in sales of U.S. commodities in Japan came through the school lunch program with surplus food provided by P.L. 480.¹⁵

The Beginning of U.S. Wheat in Japan

For Japanese, bread is the second staple food next to rice. However, it wasn't until the economic expansion after the Korean War and corresponding increase in consumer income and the pioneering work of the U.S. wheat industry in Japan that bread became important in the Japanese diet. Japan also saw tremendous increases in other wheat based products such as instant and Chinese noodles and confectionery items.

In the United States wheat production was greatly enhanced in the 1940s and early 50s with the use of nitrogen and phosphorus fertilizers and motorized farm equipment. However, while production increased, the American export market suffered after the Korean War.

Oregon farm leaders saw the growing problems in their wheat industry and decided to meet these challenges.¹⁶ Oregon wheat producers needed to look at Asian countries to market their wheat since it was difficult to ship wheat overland through the Rocky Mountains to the rest of the United

States. The early success in wheat exports can be attributed to the pioneering efforts by the first U.S. wheat experts from Oregon and Japanese authorities, working collaboratively to develop a new demand for wheat. The Oregon wheat producers, through their Wheat Commission and Wheat Growers League, pioneered the development of the wheat trade in Japan. In 1947 they lobbied state legislature for a state check-off law that set up an independent commission that allowed growers to pool their resources through assessments for the purpose of education, promotion, and research. The commission began studying market potentials in Asia and organized a trade delegation to investigate opportunities for expanding U.S. wheat sales to Japan in 1949. This was followed by a three man delegation to Japan and other parts of Asia in 1954 that spent two months meeting with government and industry leaders to expand trade between the two countries.

P.L. 480 and the subsequent wheat cooperator program helped promote U.S. exports and particularly in Japan. The first cooperator agreement was signed between the Oregon Wheat Growers' League and FAS on September 21, 1955. The agreement noted that the Oregon organization had experience in wheat promotion both at home and abroad. Several months later in 1956, a specific project agreement was signed funding work in Japan.

This agreement and office in Tokyo gave the Oregon wheat industry the tools needed to begin a meaningful program of working with the Japanese buyers to strengthen imports from Oregon. Richard Baum was hired to run the Oregon program. He would eventually become President of the Western Wheat Associates. From 1959 through 1979, Baum traveled to Japan over 60 times because of the importance of the market to west coast wheat trade. An important director during the early years of the Wheat Associates in Japan was Jim "Hutch" Hutchinson, who was the director for 16 years in Japan (1958-1973) and would later go onto be the General Sales Manager for USDA.

Another person of note with U.S. Wheat Associates was Yasuo "Paul" Sone, who was Associate Director of U.S. Wheat from 1960 until his retirement in 1989. In 1960, one of the agricultural attachés from the U.S. Embassy went to Yamanashi Prefecture to check on the progress of the "hog lift" project. He made the acquaintance of Paul Sone, then assistant to the governor. Shortly afterward, the attaché recommended to Western Wheat Associates that they hire him to assist their new U.S. representative Jim Hutchinson. Sone became a longstanding stalwart in the "cooperator" scene in Tokyo. While Baum, Hutchinson and Sone were important to the success of U.S. wheat in Japan, there were also many other employees, both American and Japanese, who made significant contributions to the market development of U.S. wheat in Japan.

During the early years, the U.S. trade needed to introduce wheat products to consumers since rice was the staple food in the country. Through the Oregon Wheat Growers League, a variety of marketing activities were carried out including trade fair exhibits, taste testing in department stores, the school lunch program which included wheat foods such as sandwiches and bread, nutrition training for Japanese home economists, training of Japanese millers and bakers, consumer sales promotion and work through the local Japanese wheat trade associations.¹⁷

Perhaps the most famous market promotion activity was the kitchen demonstration buses that traveled to rural areas throughout Japan to promote wheat foods to Japanese consumers from October, 1956 to December, 1960.¹⁸ The idea of “kitchen on wheels” was conceived and implemented jointly by the Japan Nutrition Association and the Oregon Wheat Growers’ League in 1956. Funds from the P.L. 480 program initially funded the purchase of the buses. During these four years, almost 2 million people attended presentations and the buses visited more than 20,000 locations in rural areas throughout the country. The total distance covered by the 12 buses was 574,895 kilometers. The program decided to target rural areas in Japan because of the lack of proper nutrition in many of these areas. The demonstration kitchen buses prepared simple, inexpensive, balanced meals using wheat and soybean products. The “kitchen on wheels” program would advertise in the media before a visit and the loudspeakers from the bus would indicate they had arrived. Hundreds of thousands of Japanese housewives attended the kitchen presentations and many more read or heard about the food life improvement campaign. The kitchen buses became known in Japan for “bringing nutrition to the people.” Because of the success of the program, a number of prefectures continued the demonstration kitchen buses program after 1960 for a number of years.



Kitchen on wheels
Source: U.S. Wheat Associates

The U.S. wheat industry also set about creating a strong relationship with the Japanese government and the Japanese flour milling industry.¹⁹ James Hutchinson, for example, would select young Japanese nationals from the Japanese government’s Food Agency (which bought foreign wheat at the time) whom he believed to have leadership qualities, and sent them to the United States as team members. Before Hutchinson left Japan, many of these men were running key departments in the Japanese Food Agency.²⁰ During the first 20 years of the program in Japan, 300 Japanese government and industry officials visited the United States as guests of the Wheat Associates. In addition, more than 150 U.S. wheat executives visited Japan.²¹ This exchange program led to a better understanding of the American potential to supply wheat to Japan, which resulted in an increase in market share for U.S. wheat in the Japanese market.

U.S. wheat promotion in Japan went through three early phases.²² The first period (1956-58), was a “soft sell” phase, where market development projects were mainly directed toward educating consumers to improve their nutrition and general health through increased consumption of wheat products. This phase corresponded to P.L. 480 wheat sales to Japan. The second period (1958-60) was the “semi-hard sell” phase to ready the Japanese Food Agency, flour millers, and consumers to use U.S. wheat. The third period began in 1960 involved the “hard sell,” specifically promoting U.S. wheat in Japan.

Japan’s initial imports of wheat in the late 1940s and early 1950s was soft white wheat from the Pacific Northwest, which was the best quality for production of cakes, cookies, crackers and certain types of noodles. Most Japanese in the wheat industry thought that the United States only had soft white wheat to sell from Oregon. As the U.S. wheat program expanded to include more

states, however, the office in Japan began to promote all classes of wheat. In 1959, the Oregon Wheat Commission merged with the state commissions of Washington and Idaho to form Western Wheat Associates. In the 1960s and 1970s, eleven out of the thirteen state wheat commissions active in market development joined the Western Wheat Associates. This is the major reason that in 1979 Great Plains Wheat merged with Western Wheat Associates to form the U.S. Wheat Associates.

The U.S. wheat industry launched a campaign to show that U.S. hard red winter and hard red spring wheat were top quality baking wheat, equal for bread use to any other wheat in the world. In the United States, wheat producers were also working to make it possible to ship the bread type wheat to Japan. Through their state associations the U.S. wheat industry obtained a reduction in domestic rail freight rates to the West Coast. This was a key development in opening the market in Japan to wheat produced in the Midwestern states.

The growth in wheat demand leveled off in the mid-1970s and the role of the U.S. wheat industry took on a new direction. Marketing efforts changed to service the wheat market in Japan by maintaining contact with Japanese government officials and Japanese buyers. The cooperator began to furnish information to Japanese government officials responsible for wheat imports on prices, quality, stocks, U.S. programs and trends for the future. They also began to work closely with the Japanese flour milling, baking, noodle and confectionary industries.

Today, the U.S. Wheat Associates helps buyers with detailed quality information, keeps both Japanese government and millers informed on market and policy developments, advises government officials on their policy change proposals, and collaborate in detail on any food safety related concerns, which in recent years has been mainly pesticide residue tolerance and testing issues. In short, the U.S. Wheat Associates works to ensure that Japan continues to buy U.S. wheat.

Looking to the Future



A Japanese boy loves his spaghetti
Source: U.S. Wheat Associates

The Portuguese missionaries would probably be pleased with all of the choices Japanese consumers have today with wheat based foods; from noodles at ramen shops, to pastries at bakeries, to bread at grocery stores. Much of this wide selection can be traced to the effective work of U.S. Wheat Associates and its predecessor organizations, and their partnership with FAS and the Japanese industry.

The future holds many challenges for the U.S. wheat industry in Japan. There could be uncertainty created with new technologies, competition from other countries, and the Japanese government's changing policies on wheat imports. However, like previous generations, the U.S. wheat industry will meet these challenges and turn them into opportunities to ensure that Japan remains an important market for U.S. wheat.

End Notes

- ¹ “Japan- Wheat, Production and Trade,” Kansas Asian Community Connection, University of Kansas.
- ² “Wheat and Barley Policies in Japan,” Hisao Fukuda, John Dyck, and Jim Stout, Economic Research Service, USDA, WHS-04i-01, November 2004, p. 2.
- ³ “The Acceptance and Modification of Foreign Cuisine Establishes and Spreads a New Food Culture,” by Zenjiro Watanabe, Food Culture, The Kikkoman Institute for International Food Culture, No. 8, 2004.
- ⁴ Zojirushi website
- ⁵ “The Acceptance and Modification of Foreign Cuisine Establishes and Spreads a New Food Culture,” by Zenjiro Watanabe, Food Culture, The Kikkoman Institute for International Food Culture, No. 8, 2004.
- ⁶ Ibid.
- ⁷ “The Acceptance and Modification of Foreign Cuisine Establishes and Spreads a New Food Culture,” by Zenjiro Watanabe, Food Culture, The Kikkoman Institute for International Food Culture, No. 8, 2004.
- ⁸ “Bread, Bean Paste, and “An Pan,” Elizabeth Andoh, Daily Yomiuri, April 27, 1997.
- ⁹ “Anpanman,” Wikipedia.org.
- ¹⁰ “Bread, Bean Paste, and “An Pan,” Elizabeth Andoh, Daily Yomiuri, April 27, 1997.
- ¹¹ “Norin 10 Wheat,” Wikipedia.org.
- ¹² “Origin, History and use of Norin 10 Wheat,” L.P. Reitz and S.C. Salmon, Crop Science, Volume 8, November-December 1968, p. 687.
- ¹³ “Medic: The Mission of An American Military Doctor in Occupied Japan and War torn Korea,” Crawford F. Sams, edited by Zabelle Zakarian, M.E. Sharpe publisher, 1958. pp. 62-64.
- ¹⁴ “Modern Japanese Cuisine: Food, Power and National Identity,” Katarzyna J. Cwiertka, Reaktion Books, 2006, p. 161.
- ¹⁵ “Comeback: Case by Case: Building the Resurgence of American Business,” Ezra Vogel, Charles E. Tuttle Co.: Publishers, 1985, p. 209.
- ¹⁶ “Partners in Developing Farm Markets Overseas,” James O. Howard and others, U.S. Agricultural Export Development Council, 1989, pp. 62-63.
- ¹⁷ Ibid, p. 88.
- ¹⁸ “The Story of Kitchen Demonstration Buses in Japan,” Japan Nutrition Association, 1961.
- ¹⁹ “U.S. Wheat in Action 20 Years in Japan: Mutual Cooperation and Benefit,” U.S. Wheat Associates, 1976.
- ²⁰ “Partners in Developing Farm Markets Overseas,” James O. Howard and others, U.S. Agricultural Export Development Council, 1989, p 87.
- ²¹ “U.S. Wheat in Action 20 Years in Japan: Mutual Cooperation and Benefit,” U.S. Wheat Associates, 1976.
- ²² “20th Anniversary of Wheat Associates Programs in Japan: Seminar Presentations,” U.S. Wheat Associates, November 30, 1976, p. 7.