CHANGING CONSUMER AND MARKET DEMANDS IN CANADA'S PRIORITY MARKETS:

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CONTENT

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"Report on Changing Consumer and Market Demands" is an AAFC publication providing updates on data, issues and analysis in the area of changing consumer and market demands for food.

INTRODUCTION

This is the first in a series of reports on changing consumer demand for food in Canada's five priority markets, namely Japan, United States, Mexico, the European Union and China. The rationale for considering what is happening in Canada's priority markets is to identify the changes that are taking place in consumers' demand for food in these countries, to anticipate market opportunities for Canada's agriculture and agri-food exporters and to raise awareness of some of the developments in global markets that are influencing Canadian consumers. It is also important to consider major factors, and policy and regulatory changes particularly related to food safety and quality, that will have an impact on the demand for food in these five priority markets.

This report begins with a discussion of the agriculture and agri-food policy and regulatory environment that affects the production, consumption and trade of agri-food products in Japan, including the institutions involved. This is followed by a description of the cultural influences that affect the demand for food in Japan. The third section presents the factors that are impacting food consumption trends and patterns including demographic variables, household characteristics, income and prices. Important developments in consumption and demand trends are discussed including the increased consumption of prepared foods and spending on meals away from home. The report concludes with a brief description of supply-side factors and the extent of import dependency of Japan before ending with potential export opportunities for Canadian exporters.

AGRICULTURAL POLICY AND INSTITUTIONS

AGRICULTURAL POLICY

The *Basic Law on Food, Agriculture and Rural Areas* continues to provide the agricultural framework and policy direction of Japan. Since the passage of this law in 1961, various factors such as population ageing, economic downturns, increasing public expectations of the food system for food quality and safety, shrinking agricultural sector and growing dependence on food imports have provided the impetus for changes in the traditional systems and approach to agricultural and food policy in the 21st century. The report submitted to the Prime Minister by the Investigative Council on Basic Problems Concerning Food, Agriculture and Rural Areas in 1998 recommended measures to:

- secure and strengthen the domestic food supply,
- make food safety and quality, balanced dietary habits and food information a national health priority,
- diversify domestic food production, and

- improve competitiveness of the agricultural sector and food industry.

Ensuring the multi-functional role of agriculture and revitalizing domestic farming through improvements in infrastructure and farmers' skills were among the other policy objectives.

AGRI-FOOD TRADE POLICY

Domestic support

While there has been progress in reforming agricultural policy and reducing domestic subsidies, domestic support for agriculture in Japan remains high. The support received by farmers and consumers of agricultural products in Japan continues to exceed the Organization for Economic Cooperation and Development (OECD) average. Japan's net Producer Support Estimates (PSE) and Consumer Support Estimates (CSE) for 2003 have been provisionally estimated at 58 percent and 53 percent respectively, against an OECD average of 32 percent and 24 percent, respectively. In the same year, over 90 percent of total support to producers consisted of measures, which had production and trade distorting effects, including market price support payments based on output and input subsidies.

Other measures

Japan has continued to liberalize its trade and investment regimes. Although progress has been made, important distortions to competition are still evident in agriculture. Tariffs are Japan's main trade policy instrument. Dairy products, vegetables, roots and tubers, products of the milling industry, sugar and sugar products benefit from relatively high tariff protection. Non ad-valorem duties applied to live animal and products, vegetables, fats and oils and prepared food are important for Japan to provide consistent protection of domestic products against low-priced imports. Tariff quotas are applied to dairy products, rice, wheat, barley, prepared edible fat and starches. In-quota imports of rice, wheat, barley, certain milk products and silk are handled mainly by state-trading entities.

Japan also maintains some non-tariff border measures such as import prohibitions, import licensing and quantitative restrictions. Import surveillance is applied to certain products to confirm place-of-origin and documentation requirements.

In the wake of the Bovine Spongiform Encephalopathy (BSE) crisis, a new Japanese Agricultural Standard (JAS) ensuring the traceability of imported beef and beef products not covered by the new *Beef Traceability Law* was introduced. The Ministry of Agriculture, Fisheries and Food (MAFF) is establishing a new JAS for pork and is considering the introduction of similar standards for vegetables, rice and other agricultural products. A new JAS covering all aspects of organic livestock products and for other organic agricultural products is also being developed[1]. Japan plans to establish standards under the JAS system by 2005 and to issue certification marks to all agricultural products to ensure food safety.

1. *Seventeen countries' standards and labeling for organic agricultural products are currently regarded as equivalent to the current JAS: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, the UK and the U.S.*

The *Food Sanitation Law* introduced specifications and standards for genetically modified foods, and prohibited their import unless approved under the law. "Foods for specified health use" require individual permission or approval by the Ministry of Health, Labour and Welfare (MHLW) to be sold on the market, while "foods with nutrient function claims" are required to meet the standards and labeling rules.

Recent changes in Japan's Sanitary and Phytosanitary (SPS) measures have included amendments to current animal quarantine regulations and the entry into force of various BSE-related regulations and laws, including mandatory testing of every cow for BSE. In 2003, beef labeling showing production and distribution stages became mandatory under the *Beef Traceability Law*.

The *Genetically Modified Food Labeling Standard Law* requires labeling and packaging for six genetically modified commodities available on the Japanese market: soybeans, corn, potatoes, rapeseed, cotton seed and some processed food made from soybeans or corn. Labeling requirements for some food products are reinforced by the JAS. The *Agricultural Products Inspection Law* requires mandatory inspections of rice, wheat, barley and soybeans. In addition to mandatory labeling requirements, de facto standards can be established based on the Japanese Fair Trade Commission's guidelines on misleading representation. Most recently, the Government established a Food Safety Commission to evaluate biological, chemical and physical risks presented by domestic and imported foods in an objective and scientific manner. The objective of the Commission is to safeguard the health of the nation.

FOOD RELATED INSTITUTIONS: CONSUMER CO-OPERATIVES

The Japanese co-operative movement dates back to the 19th century, with the first consumer cooperative established in 1896. Originally based on the Rochedale[2] co-operative's principles, Japanese consumer co-operatives have taken on a character of their own and developed many features which have made them a major force in retailing. Of the products supplied by co-ops, food is the mainstay. Some 76 percent of total turnover is food sales. Fresh food products accounted for 53 percent and dry food 23 percent[3]. Consumers concerned about modern agriculture that makes use of chemical fertilizers and pesticides join food co-operatives to ensure their access to safe and natural foods.

Today, consumer co-operatives are an important institution and an integral part of Japanese society and communities. Food safety[4] and freshness are high priorities for co-op members and

2. *The co-operative philosophy originated in Rochedale, England in 1844, when a group of 28 weavers opened the first "co-operative" to market their own products.*
3. *(Japanese Consumers' Co-operative Union). Co-op Facts and Figures, 2002-03.*
4. *The concept of food safety referred to the level of agricultural chemicals and other additives present in foods. Foods produced with low levels of chemicals are considered safer than those produced with high levels. Ada, R. and Kawasaki, H. (1997). Japanese Consumer Co-ops and Direct Transactions. The State of Queensland, Department of Primary Industries, Brisbane, Australia.*

important principles of the co-op's corporate identity. The Japanese Consumers' Co-operative Union (JCCU) develops its own food standards, much stricter than those imposed by the government (Jussaume, 1994)[5] and ensure that food and co-op brand products supplied to their members meet its own standards for safety and quality (JCCU, 2002-03). Co-ops sensitize and popularize food safety among members and influence public opinion through various activities and campaigns on food safety and sanitation. They advocate environmental protection, educate and encourage members and consumers to change their lifestyles to help preserve the environment by recycling papers and containers, and limiting household waste.

By supplying food that meets co-operatives' standards and specifications for freshness and safety, farmers are guaranteed prices and cost of production. Direct procurement, marketing and distribution by the co-operatives minimize intermediaries through which food and beverages are channelled and guarantee food safety and freshness. By linking with consumer co-operatives, food producers and suppliers can secure a guaranteed market for their product and gain accurate information on consumer needs and preferences for food (Riethmuller, 1994)[6].

The revision of the *Food Sanitation Law* and the passage of the new *Basic Law for Food Safety* in 2003 gave consumer co-operatives a central role in food safety (JCCU, 2002-03)[7]. Food standards and specifications developed by co-op consumers are often adopted by other suppliers in the food industry.

FOOD CULTURE IN JAPAN

Influences on a society from climate, geography, religious and cultural beliefs, basic nutritional requirements and the unaccountable elements of tastes and preferences affect the development of a particular country's eating habits and cuisine.

Japan consists of four large islands and is surrounded by thousands of smaller ones. As one would expect, fish and seafood, both fresh and preserved, play an important dietary role in Japanese daily life. It has often been said that Japanese eat with their eyes. **"Nature"** and **"harmony"** are words used to describe Japanese food which is presented in a very artistic and three-dimensional way. The ingredients must be in harmony with each other to make one dish, and the main dish must be in harmony with the other dishes to make a meal. Food must be in harmony with nature and its surroundings, including the person who eats it. With a premium placed on freshness and natural flavour, people are fond of foods and ingredients that are at their "shun" (now-in-season). Eating the ingredients at their "shun" is believed to be good for the health and pure for the soul, in addition to creating energy for the body.

5. *Jussaume, R. (1989). "The Growing Importance of Food Safety to Japanese Consumers and Implications for United States Farmers". American Journal of Alternative Agriculture (6), pp. 29-33.*
6. *Reithmuller, P. (1994). Consumer Cooperatives: A Neglected Part of Japanese Distribution Industry, Review of Marketing and Agricultural Economics, Volume 62, No.3, December 1994.*
7. *JCCU (Japanese Consumers' Co-operative Union) Co-op Facts and Figures, 2002-03.*

Japanese food culture is also influenced by **religious beliefs**. Despite the pre-existence of Shinto and Confucianism, Buddhism became the official religion of Japan in the sixth century. For the next 1,200 years, meat was a forbidden food to the Japanese because Buddhist teachings prohibited killing animals for food. Meat was allowed for sale and consumption only after the Meiji Restoration in 1867, some 137 years ago today. Although meat is widely consumed, only certain cuts are preferred.

Japanese consumers are fastidious. Quality is the overriding consideration for foods. Freshness is probably the most important aspect of quality. Consumer concerns over food freshness and safety stem from this traditional and imperative use of fresh ingredients in Japanese cooking.

DEMAND FOR FOOD

VARIABLES AFFECTING FOOD CONSUMPTION

A consumer's demand for a product is a function of his/her income, the price of the commodity and of its substitutes and complements, demographic characteristics, and tastes and preferences (Intriligator, 1971). In analyzing the role of socio-economic characteristics in influencing the demand for food in Japan, Morishina, Aita and Nakagawa (1992) suggested that age was the most important factor affecting food consumption in Japan. Tokayama and Egaitsu (1994) and Tokoyama (1995) attributed a significant proportion of the changes in food consumption to factors such as convenience and health concerns. Riethmuller, Smith Morison, Nagano, Kobayashi, Koizumi and Jussaume (1995) considered food safety as a factor influencing the demand for meat, while the importance of social and religious factors is discussed in Longworth (1983) and Filed (1986).

In addition to the variables discussed above, other papers in the literature discuss the role of the female labour force participation, disposable income, population growth, and food distribution systems as factors affecting food demand in Japan. Ageing and education, which influence access to food and health information, are also mentioned as factors influencing food consumption and preferences for food attributes.

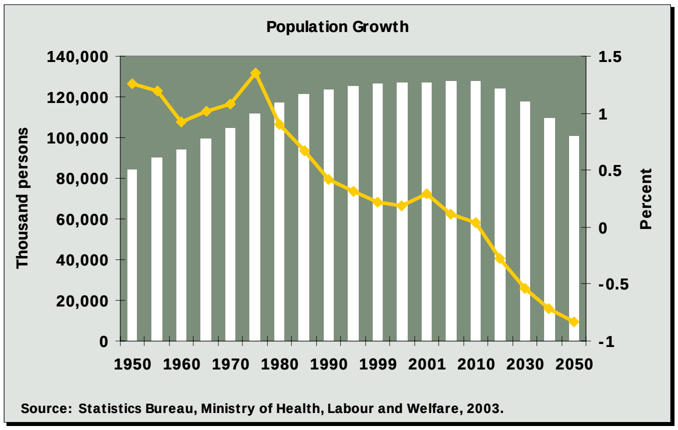
Demographic characteristics

Statistics continue to point toward a childless and ageing Japanese society. Population growth, which averaged about one percent annually from the 1960s through the 1970s declined sharply to below the 0.2 percent mark in the 1980s and 1990s (Japan Statistics Office, 2003) (Figure 1). Currently at 127 million people, Japan's population is expected to peak at 127.7 million in 2006 and to begin shrinking afterwards, reaching about 110 million by 2040.

The proportion of children in Japanese society has been declining since 1975. The number of children under 15 is down for the 23rd consecutive year, having fallen by 200,000 since 2003, to 18 million. The ratio of children to total population has fallen to 14 percent, the lowest in Japan's history and one of the lowest in the world.

The productive age group (15-64) also continued its decline over time, accounting for 67 percent of the population with 86 million in 2002. Japanese society is ageing faster than anywhere else in the world. In 2002, the elderly population (65 and over) accounted for 23.6 million or 18.5 percent of the population, the largest number on record. The elderly group is expected to continue expanding rapidly, topping the 20 percent level around 2006. By 2010-15, over one quarter of Japanese will be 65 years or older.

Figure 1



Reflecting the changing structure of Japanese society and families, the average size of Japanese households is expected to continue declining in the years ahead. In the 1960s, the average Japanese household had about 5 members. In 2000, a typical Japanese household had 2.6 members, and this is expected to reach 2.4 members by 2020.

One-person households continued to increase steadily since 1970 to 28.5 percent in 2002. Elderly households increased from 3.3 percent in 1975 to about 15.6 percent (7.18 million households) in 2002. One-person elderly households burgeoned fivefold during the same period from 600,000 to about 3 million during the same period. Four out of five of these households were headed by females. For younger and single-persons, more households were headed by males.

Income and prices

The Japanese economy has expanded rapidly since the end of World War II. In U.S. dollar terms, average income per capita in Japan overtook that of the UK in 1972 and that of the U.S. in 1987. Real income per capita also grew rapidly, reaching eight times the pre-war level by 1993. Japanese income per capita stood at US $35,990, the world's highest in 2001. Although the Japanese enjoy the world's highest income levels, measuring in terms of Purchasing Power Parity (PPP) to take into account international price differentials, Japan, at 27,400 in PPP, stood below Switzerland, the U.S., Norway, Belgium, Denmark and Canada in 2001[8].

According to the last National Family Income and Expenditure Survey in 1999, a married couple with three children earned on average ¥8.8 million (C$102,000) a year[9]. Of the total, monthly living expenditures accounted for about ¥323,000 (C$4,000). Taking into account a 1.1 percent decline in consumer prices, real consumption expenditures in 2002 rose for the first time in ten years.

The household financial situation reflects the stage in life of the head of a household and the salary structure in Japan. Household heads under 35 years old receive the lowest disposable income, estimated at ¥325,046 (C$4,000). Average monthly disposable income peaks at about ¥500,000 (C$6,000) for household heads in their fifties. This positive relationship also holds true when it comes to food purchases and dining patterns. Higher-income and older households tend to buy higher-quality food products and to eat out more often than lower-income and younger households.

FOOD CONSUMPTION AND EXPENDITURES

Changes in food consumption

In a well-fed and sophisticated society, it is hard to believe that Japan was near starvation 60 years ago. Post-war Japan overcame hunger and achieved rapid economic growth and social changes. These transformations also brought about changes in the dietary habits of its people.

Because of rapid economic growth in the 1960s and 1970s, the traditional way of eating, which was heavily reliant on rice and fish, gradually shifted towards new food products such as livestock and dairy products. The mid 1980s saw the emergence of a variety of processed foods and the proliferation of fast food restaurants. Food consumption was focused on premium and high-end food products to go with continuing rapid economic growth.

The 1990s ushered in greater diversity in eating patterns but also simplification in food consumption and changes in lifestyles and dining patterns. The traditional form of dining at home at a fixed time with all household members present gradually gave way to flexible meal patterns with family members having their own meals at different times to suit their lifestyles and schedules. These developments led to a strong preference for processed and cooked foods and eating out. Cooking methods also became simplified in the late 1990s. Most processed or semi-prepared foods are served as home-cooked food after some "treatment" at home. Home-cooked meals using non-processed ingredients have become an exception in Japan. Consumers tend to opt for diversity and high quality on the one hand, yet simplification and convenience on the other. With increased purchasing power and improved education, Japanese consumers expect more from both the government and the food industry to ensure safety in the food they eat.

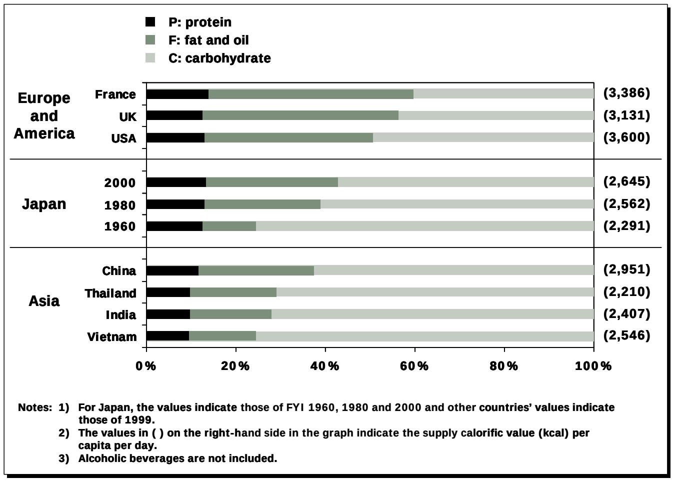
They are becoming increasingly sensitive about the rising incidence of obesity and cardiovascular disease due to the increasing consumption of fat in food and sedentary lifestyles. They also pay attention to the impact of food consumption on the environment and the rural landscape.

Despite the increase in the consumption of meat and dairy products, and consequently, energy supplied by fat, Japanese eating habits are considered among the healthiest in the world in terms of per capita per day caloric supply (Figure 2).

8. World Bank, 2003.

9. Japan Statistics Bureau, National Survey of Family Income and Expenditures, 1999.

Figure 2

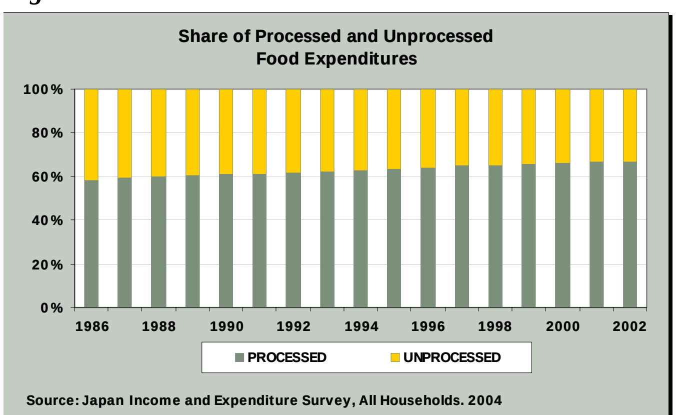


Processed and cooked foods and eating out

The trend in food consumption in Japan is manifested clearly through the increasing use of cooked food, processed food and eating out. Direct consumption of food and primary agricultural products such as rice and meat requiring preparation and cooking continues to plummet over the last decade.

Processed foods have become a way of life for the majority of Japanese consumers. Their share in food expenditures has continued to grow substantially and represented 67 percent of total food expenditures in 2002 (Figure 3).

Figure 3



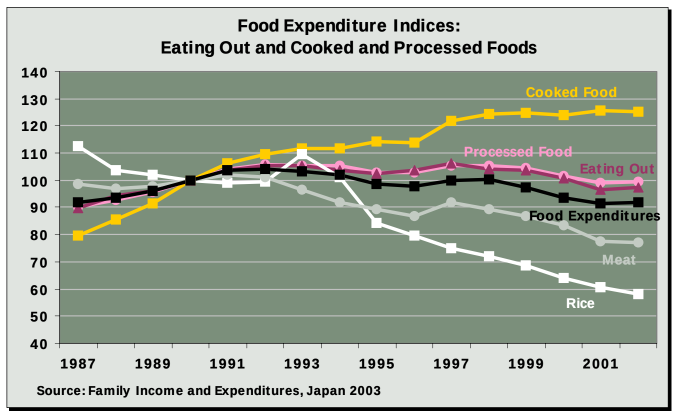
Between 1981 and 2003, the share of cooked food and "eating out" in food expenditures rose to 11 percent from 6 percent and 18 percent from 13 percent, respectively. Consumer's expenditures on cooked food doubled while spending on 'eating out' grew 31 percent over the same period (Figure 4).

Health food

The ageing of Japanese society, health consciousness and concerns about preventing problems arising from life-style illnesses such as diabetes and cardiovascular disease, have made the health food market one of the very few growth markets in the recently stagnant Japanese economy.

The size of the health-oriented food market (encompassing foods for specified health uses, foods with nutrient claims, health food supplements and nutritionally enhanced foods) is estimated at ¥1.3 trillion (C$14 billion). Heath foods are positioned as an industry with high future growth expectations. The Japan Health Food and Nutrition Food Association indicates the size of the market for **foods for specified health uses** has rapidly increased from ¥132 billion (C$1.5 billion) in 1997 to ¥412 billion (C$4.7 billion) in 2001. This market has received "specified health" labels certifying the benefits of health promotion, specific health uses and effectiveness. Treated as pharmaceuticals, **food supplements** have been on the market since 1993. Deregulatory measures have helped consumers buy pills containing vitamins, minerals and other nutrient compounds that are difficult to get from their daily diets. Low sodium and low calorie food are leading products in today's **foods for ill persons**. Foods for ill persons are commercially prepared, delivered food, or ordered by internet for delivery. They are most often used for home-based care, hospitals or institutions as a substitution for meals prepared "by hand". The Japanese-population aged 65 and over will exceed one-fifth of the overall population by 2005. Since 1998, food producers and pharmaceutical companies began producing and selling foods aimed at the elderly living at home.

Figure 4



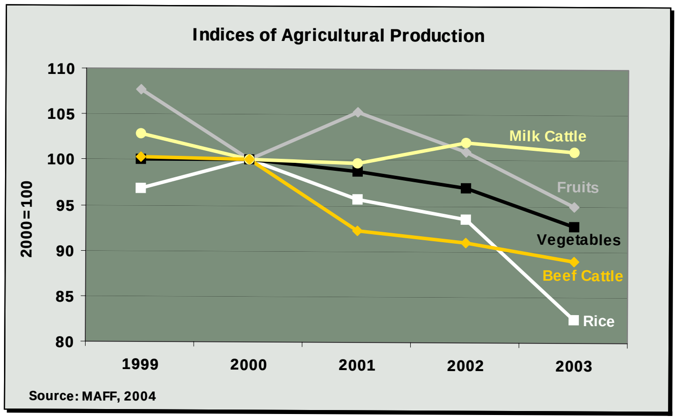
SUPPLY OF FOOD

AGRICULTURAL SECTOR

Only about 15 percent of Japan's total land area is suitable for agricultural cultivation. Japan is dominated by small farms with 70 percent of all farms less than one hectare in size. And while about 12 percent of the population live in farm households, only 7 percent of the population is actually involved in agriculture. Labour shortages and conversion of cropland to non-agricultural uses have contributed to a reduction in cultivated area and higher domestic production costs.

Domestic food production continues to drop. The index of total food production has been falling since the previous peak in 1986, and has dropped by 20 percent over the past decade. Japan's efforts in increasing food self-sufficiency ratio and domestic production have yet to show signs of rising. Among the commodities for which the index was over 100 were dairy cattle and chickens (Figure 5).

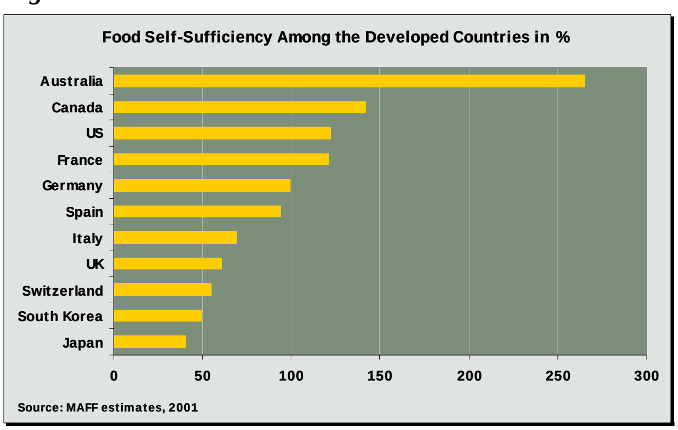
Figure 5



DEPENDENCE ON IMPORTS

The combined effect of high production costs and the liberalizing effect of trade agreements have made imports more competitive and improved market access for all sorts of consumer products from other countries. The continued appreciation of the yen relative to the world's currencies, which started in 1985 and lasted throughout the 1990s, has also played a significant role in increasing dependence on food imports. Diversified eating habits and globalization have also brought considerable changes to Japan's food imports over the last 40 years. Remaining at 40 percent on a caloric supply basis for a sixth year in succession in 2003, Japan's food self-sufficiency is the lowest among the developed nations (Figure 6).

Figure 6



Japan today is highly dependent on a few countries for its food imports. The leading sources of food imports were the U.S. for meat, cereals and cereal products; China for fish and seafood, vegetables and prepared meat; Australia for cereals, meat, and dairy products; Thailand for prepared meat, fish and seafood; and Canada for meat, oilseeds and fish and seafood. These five countries supplied about 60% of Japanese food imports in 2003.

FUTURE OF FOOD AND DIETARY HABITS

"Simplified eating", which emerged in the 1990s, is becoming widespread in Japan as consumers tend to more frequently make use of take-out meals and pre-cooked foods. With more women working outside the home and long commuting distances, it is increasingly rare for the whole family to come together for dinners. In addition, as the number of one-person households continues to climb, the consumption of restaurant meals and pre-cooked, pre-packed in small bundles, ready-to-eat, and ready-to-heat and to-eat foods are likely to expand. In recent years, the trend toward simplified food consumption has also caught on with older consumers.

Consumption of pre-cooked food and food requiring simple cooking methods and easy storage will likely be the future of food consumption. Nevertheless, traditional Japanese dietary habits will remain a part of the daily life of Japanese consumers. A survey conducted by Japan Management Association Research Institute Inc., found that "natto" was cited by 70 percent of respondents as the healthiest food, followed by yogurt, milk and tofu at 60 percent.[10] These products have remained in the top five for the past three years and their image as health-promoting food is firmly established in Japanese society. Consumption of functional food is expected to expand further because of the growing public consciousness about health issues, the prevalence of lifestyle-related diseases and the expansion of older Japanese consumers in the population.

As consumers seek to improve their quality of life, they demand enhanced food safety, quality and diversification. A consumer survey by the Neikei Marketing Journal on food safety in April 2004 found that 65 percent answered that they are willing to pay more if the food is guaranteed safe. Also, 37 percent would choose domestic food over other sources, 31 percent thought non-GM labeling is crucial and 20 percent thought traceability and information disclosure is important.

Advances in information technology have brought significant changes to food distribution. Growing direct transactions between consumers and producers are expected to increase with the intensive use of the internet. "Ubiquitous consumption" is a term coined to characterize the fact that consumers now can buy anything, anytime and anywhere through the Internet. Through Internet orders, grocery and meals can be delivered to consumers in no time at all. According to Dentsu Inc., a major advertising agency, the "ubiquitous" market could grow remarkably and reach ¥2.5 billion (C$28.5 million) by 2006, around 5.3 times higher than in 2002.[11]

At the policy level, strengthening the domestic processing sector is a priority for the government as it represents 75-80 percent of Japanese expenditures on food and beverages, in addition to improving domestic agricultural productivity, expanding exports and reducing the gaps between domestic and international food prices. To ensure a stable food supply, Japan is expected to increase foreign investment in food production and processing operations overseas. The top five locations of overseas food production and processing are China, the U.S., Taiwan, Thailand and South Korea. Firms entered the U.S. to open local markets while they entered the other four countries to develop food processing businesses for imports to

10. JIAC Newsletter, July 2004.
11. JIAC Newsletter, September 2004.

Japan. About 70 percent of firms operating in China entered this market after 1990.

CONCLUSION

Japanese consumers are increasingly looking for diversity and high quality food choices. They are also willing to pay for prepared, ready to eat and processed foodstuffs. With the Japanese population increasingly ageing, they are demanding healthier food and health products. Given their high dependence on imports, increasingly policies are being put in place to combat the effects of greater trade liberalization and an appreciated currency. Japanese companies are investing abroad in order to ensure adequate supplies of food products produced abroad that meet their needs and tastes. Therefore, in order for Canadian exporters to take advantage of these market opportunities, they will need to become more competitive in high quality, healthful and ready to eat food products for the Japanese market.

DATA DESCRIPTION AND DEFINITIONS

The Family Income and Expenditure Survey (FIES, "*Kakei Chosa*") is one of the two consumer expenditure surveys[12] in Japan. The Statistics Bureau of the Ministry of Public Management, Home Affairs, Posts and Telecommunications conducts the surveys using a series of four questionnaires (Household Schedule, Family Account Book, Yearly Income Schedule and Savings Schedule); tabulates data and publishes results. The Survey provides data on family incomes and expenditures and other related information which are used for developing price indices and policy planning.

This paper uses the 2003 Family Income and Expenditure Survey. The Survey samples about 9,000 households, out of about 43 million *appropriate* households in Japan, using the three-stage stratified sampling method (first, city, town and village; second, the survey unit area; and third, the household). The *appropriate* households are all households in Japan, except those engaged in agriculture, forestry and fishery and one-person households.

Figures are yearly averages for all Japan and classified by cities and districts; receipts and disbursements in cash and kind; households and household members; distribution of households; yearly income groups, quintile and decile groups; and tenure of dwelling.

Living expenditures are expenses classified by use and by commodity purchased. The Survey provides information on food and nine other aggregated categories: housing, utility, furniture, clothing, health expenses, transportation, education, leisure and other expenditures. Statistics on food are provided in terms of expenditures, quantity purchased and frequency of purchase. The 2003 FIES gives statistics from 1986 to 2002 (projections).

The *Yearly Amount of Expenditures and Quantities per Household by Major Household Commodity Table* for 2003 defines the food groups as follows:

- Cereals: rice, bread, noodles, non-dried and dried udon and soba, spaghetti, Chinese noodles, instant noodles, other noodles, other cereals, wheat flour, rice cakes and other cereal products
- Fish and shellfish: fresh fish and shellfish; salted and dried fish; fish-paste products; other processed fish
- Meat: fresh meat (beef, pork, chicken, mixed ground meat, other fresh meat); and meat products (ham, sausages, bacon, other meat products)
- Dairy products and eggs: fresh milk; dairy products (powdered milk, yogurt, butter, cheese, other dairy products); eggs
- Vegetables and seaweeds: fresh vegetables; dried vegetables and seaweeds; soybean products (beancurds, fried bean curds, natto, other soybean products); and other processed vegetables and seaweeds
- Fruit: fresh fruits; and preserved fruit
- Oils and seasonings: oils and fats; and seasonings
- Cakes and candies
- Beverages: tea; coffee and cocoa; other beverages
- Alcoholic beverages: sake; Shoku distilled spirits; imported and domestic whisky; wine; beer and low-malt beer
- Cooked-food: cooked food with rice, bread or noodles (packed lunches; sushi, onigiri and others), bread like sandwiches, other cooked food with rice, bread or noodles; other cooked food (kabayaki broiled eels, salad, cutlets, fried food, shaomai, jiao-zi, grilled chicken, hamburg steak; canned cooked food, food stuff for cooking, frozen cooked-food
- Eating out consists of eating out for general meals (soba and udon Japanese noodles, Chinese noodles, sushi, Japanese meals, Western meals, hamburgers, other meals, drinking and other refreshments), and school lunches.

For Japan, expenditures for different food group are calculated based on the FIES, 2003 and are added together to make new subtotals for processed food and cooked food. The processed food category includes bread, noodles, other cereal products; salted and dried fish, fish paste products, other processed fish; meat products; dairy products; dried vegetables and seaweed, soybean products, other processed vegetables and seaweed; preserved fruits; oils, fats and seasonings; cakes and candies; tea, coffee, cocoa and other beverages; and alcoholic beverages. Cooked foods are classified according to Japan's Statistics Bureau's definition as outlined above. School lunches, as part of eating out, are not taken into consideration in this paper.

12. *The National Survey of Family Income and Expenditures, (NSFIE, "Zenkoku Shohi Jittai Chosa"), the other consumer expenditure survey in Japan, is conducted by the same Ministry every five years, with the 1999 edition being the latest. The Survey includes in its sample 60,000 households, including single-person households, and covers ten aggregate expenditure categories, without providing detailed statistical information on food.*

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