



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

**International
Markets
Bureau**

MARKET INDICATOR REPORT | APRIL 2011

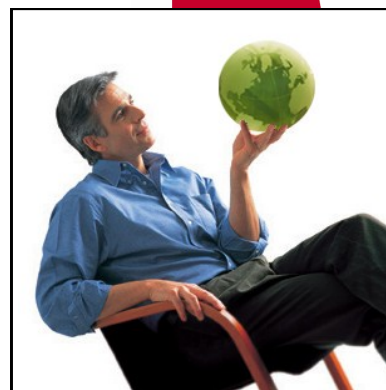
Polyphenol Antioxidants In Japan



Source: Shutterstock



Source: Shutterstock





► EXECUTIVE SUMMARY

Japan is an advanced, high-income economy with a population of 127 million that is mainly located in urban city centres. It has one of the world's highest proportions of older people; by 2025 it is forecast that there will be one elderly person (over 65) for every two persons of working age.

Japan is a highly sophisticated and mature market for food and beverage products. Although more food is imported than grown domestically (40% food self-sufficiency) and a large proportion is used as ingredients, imported products are present throughout all distribution channels including retail, foodservice and institutions. Japan is also a leading nation in food manufacturing, as well as the development and consumption of functional foods, and health and wellness products. As a result, customers have high expectations of product quality and packaging, and that claims are met by suppliers.

In Japan, the field of antioxidants is moving rapidly. During the last decade, efforts have been made to analyze the effects of plant food and natural antioxidants on the prevention of chronic diseases, and the results have been encouraging. As a result of many studies and ongoing research, it is largely believed that the dietary consumption of antioxidant-rich fruit, vegetables, herbs, or their phytochemical constituents, may protect the body's cells from damage, and thus reduce the occurrence of risk factors associated with many common diseases.

Antioxidant-rich foods are consumed on a large scale by the Japanese, to try to obtain and preserve optimal health. This pro-active approach to personal wellness, and the market for antioxidant products it has helped inspire, will be significant as Japan's population continues to age.

► INSIDE THIS ISSUE

<i>Executive Summary</i>	2
<i>Consumer Trends</i>	3
<i>Sources of Antioxidants</i>	4
<i>Japanese Labelling Regulations</i>	4
<i>Antioxidant Resonance</i>	5
<i>Japanese Diet</i>	5
<i>Market Trends</i>	6
<i>Soft Drinks and Juices</i>	7
<i>Asian Specialty Drinks</i>	9
<i>Hot Drinks</i>	10
<i>Naturally Healthy Packaged Food</i>	13
<i>Pet Food</i>	15
<i>Sources</i>	16
<i>Annex</i>	16



Source: Shutterstock

► CONSUMER TRENDS



Japan's population is aging, and is showing signs of an overall slow decline that is forecast to continue. The country's low birth rate maintains its downward trend, and life expectancy continues to lengthen, driving this population shift. Consumer trends will be largely affected by these demographic changes in the future.

With a strong healthcare system and good dietary habits, life expectancy in Japan is one of the highest in the world, with an average of 82.7 years. This breaks down to 79.3 years for men and 86.1 years for women (2008 Statistics Bureau, Japan Ministry of Health, Labour and Welfare). The country's over-65 population already stands at 25.6 million, which is more than 20 percent of the total population, and the size of this demographic is predicted to continue expanding alongside rising life expectancy.

In a nation of consumers that are already health-conscious, spending on health and wellbeing will be further propelled by the demands of this aging population. Along with healthcare services, these consumers will likely seek new food and beverage products that address age-related health conditions. For instance, Japan has already seen increased expenditures on bottled water, organic products, health foods, and health-promoting teas (Euromonitor, Consumer Life Styles, 2009). The impact of increased health-oriented consumption will also be shaped by government initiatives. In an attempt to alleviate some of the growing pressure on the healthcare system, the Japanese government actively promotes taking responsibility for one's own health, and overall healthier lifestyles for all age groups, through policy changes and highly visible marketing initiatives.

Due to labelling legislation, any health-oriented claims associated with the term "antioxidant" must be vigorously tested and medically verified in order to appear on product packaging. However, the majority of Japanese consumers are familiar with the term itself ("kosanka" in Japanese), and recognize to varying degrees that it signifies additional healthy properties. Thus, many food manufacturers will simply indicate that their product contains antioxidants without making any particular claims, trusting that consumers will appreciate what that means.

Since 2000, there have been over 5,500 new functional foods, including antioxidant products, introduced in Japan, an average of about 500 a year. On any given day, there are 1,500-2,000 functional foods on the market and, of these, 400 qualify for FOSHU (Functional Foods for Specified Health Use) a government-approved food classification in regards to health claims (see page 4 for more information).

Despite a slowdown in sales in the food and beverages sectors that corresponds with a shrinking population, the market remains a large and significant one. Suppliers such as Creek Nutrition and others are confident that, as a supplement category, antioxidants are seeing a revival in public interest in Japan. One reason is that antioxidants play well into the aging population's desire to extend and improve life. Nutraceuticals World has noted (2009) that scientific studies continue to demonstrate the importance of antioxidants in long term health, and that these studies are getting increased public exposure in magazines, radio and television. In addition, food companies are increasingly promoting the health benefits of antioxidants contained in fruits and vegetables, for example.

Functional Foods and Beverages - Market Sizes - Historic - Retail Value RSP - US\$ millions						
	2004	2005	2006	2007	2008	2009
United States	35,823.5	39,100	41,779	46,569.1	49,237.6	47,564.2
Japan	19,955.8	20,016.8	20,252.8	20,193.7	19,776.9	19,330.6
China	4,673.5	5,703.9	6,747.3	7,869.5	8,745.4	9,762.9
United Kingdom	4,936.4	5,533.7	5,909.8	6,094.5	6,471	6,753.7
Germany	4,433	4,624.4	4,876	5,292.7	5,439.4	5,623.3
France	4,541.4	4,702.2	4,876.7	5,119.6	5,295.3	5,392.3

Source: Euromonitor International, 2011



► SOURCES OF ANTIOXIDANTS

There are two major categories that make up the antioxidants market in Japan. The first category includes natural or synthetic chemicals that are added to a product to prevent spoilage, whether from microbial growth or undesirable chemical changes. These chemicals help protect consumers from microbial infection, and extend shelf-life. They can be broadly divided into antimicrobial preservatives, which function by inhibiting the growth of bacteria and fungi, and antioxidants, which inhibit oxidation and prevent the rancidity of oils and fats.

Secondly, there are polyphenol antioxidants, which actively work in the body to prevent certain disease mechanisms from occurring. Polyphenols are antioxidants from plant foods that work in the body to enhance health in complex ways. Their specific health-promoting actions are subject to active research and innovation, and it is generally recognized that they can reduce the risk, or help protect bodily systems from many types of chronic disease. As a result, polyphenol antioxidants are increasingly important additives in food and drink processing. For many consumers, their knowledge of antioxidants doesn't extend beyond vitamins C and E, and beta-carotene. However, as understanding of the antioxidant compounds in fruit and vegetables increases, more research is pointing towards the potential health benefits of such compounds.

The main source of polyphenol antioxidants is dietary, since they are found in a wide array of foods. For example, most legumes (fruit such as apples, blackberries, blueberries, cantaloupe, cherries, cranberries, grapes, pears, plums, raspberries, and strawberries; and vegetables such as broccoli, cabbage, celery, onion and parsley), are rich in polyphenol antioxidants. Red wine, chocolate, green tea, coffee, olive oil, fruit and plant-derived beverages, and many grains and pulses are also good sources. The principal benefit of ingesting antioxidants seems to stem from the resulting consumption of a wide array of phytonutrients; correspondingly, the role of dietary supplements as a method of realizing these health benefits is the subject of considerable research and innovation.

This report will look at the opportunities for Canadian producers in major applicable categories for polyphenol antioxidants, within the Japanese food and drink market. Japan is well known as the world's functional foods birthplace. This category came to life in the 1950s with the country's little bottles of immune boosting and probiotic drinking yogurt, which is now a global blockbuster product.

► JAPANESE LABELLING REGULATIONS

Food and agricultural products are subject to a number of complex labelling regulations in Japan. The Ministry of Agriculture, Forestry and Fisheries (MAFF) has established mandatory quality labelling standards that all producers, distributors and other operators must follow. Japan's Ministry of Health, Labour and Welfare (MHLW) administers separate voluntary and mandatory standards such as nutritional labelling and food additive/allergen labelling, for processed foods and beverages.

Food sector regulations in Japan are divided into two areas: FOSHU (Foods for Specific Health Use) and non-FOSHU. FOSHU products contain ingredients with specific health functions, and are authorized by the Ministry of Health, Labour and Welfare to claim their physiological effects on the human body. In order to sell a food as FOSHU, it must be assessed for safety, and the effectiveness of its functional claim, and the claim itself must then be approved by the Ministry of Health. FOSHU products are intended to be consumed for the maintenance and promotion of general health or for the control of specific health conditions, including blood pressure or cholesterol. In 1991, when the FOSHU system was introduced, there were less than 20 foods listed. Now there are about 1000.

Non-FOSHU products usually contain healthy ingredients like green tea extracts, glucosamine and, fish oil, but they will usually not make a claim beyond "good for your health." Specific claims are only permitted for FOSHU products, which have to rigorously demonstrate their efficacy.



► THE RESONANCE OF ANTIOXIDANTS

Market surveys by Mintel, Euromonitor, and Datamonitor, and reported scientific literature support the rise of antioxidant awareness amongst consumers in general. Researchers at the University of Tokyo surveyed male and female shoppers of a large grocery store chain in Tokyo and its surroundings, regarding their perceptions of vitamins. They found that consumers considered vitamin C to be the single most important vitamin for health among all age groups, while the reputation of vitamin E increased with age (Food Quality and Preference, 2005).

Another study by Japanese researchers into the motivation behind buying functional foods (Food Quality and Preference, 2008), found that 43 percent of younger respondents (age 25-34), and 63 percent of older participants (age 35-44) rated antioxidant ingredients as an important attribute in a functional food. Added vitamins and minerals were considered important by 87 and 63 percent of these age groups, respectively.

In a study to understand Japanese consumers' willingness to try functional milk desserts, both antioxidants and fibre were considered as the two functional ingredients of choice. The study found that emphasizing the added ingredient had a significant influence on consumers' evaluations. The use of common names, such as fibre or antioxidants, was found to result in a marked increase of both perceived healthiness and willingness to try when compared to the use of compound or scientific names (Food Quality and Preference, 2009).

What these three studies show is the resonance of antioxidants as a term to enhance the overall perceived healthiness of the product, despite the lack of a health claim on the label, especially in a heavily regulated market environment, such as Japan. Nielsen research further attested to this in their survey of the functional food sector in Japan. Nielsen reports that, "the consumer is looking at certain claims that are being made and when they see the word antioxidant, the indications from very recent market surveys are that around 55 to 60 percent of consumers may buy or stay with a product because it has an antioxidant claim to it," (2009).

► JAPANESE DIET AND HEALTH

Historically, the Japanese diet was characterized by a high intake of carbohydrates, a moderate intake of protein and a very low intake of animal fat. Rice and vegetables were consumed in high quantities, meat and dairy products in very low quantities, while potatoes, fruits, pulses and seafood were consumed in moderate quantities. Over the years, the Japanese have shifted towards a more westernized diet pattern, with increased consumption of meat, dairy products, eggs and fats. Starting in the 1970s, energy intake from carbohydrates, fats and protein were estimated to be around 64%, 21% and 15%, respectively.

Mortality from coronary heart disease has been traditionally low in Japan compared to other industrialized countries, and is among the lowest in the world in spite of the high prevalence of smoking and hypertension. The rate, however, has risen alongside the growing intake of dietary fats. A major concern remains mortality from stroke, particularly haemorrhagic stroke, which is attributed to the high prevalence of hypertension. This is, in turn, attributed to the high salt intake and possibly, to the extremely low serum cholesterol levels.

Several foods in the Japanese diet have been implicated in an increased or decreased risk of various cancers, but only the generally protective role of fruits and vegetables, and the detrimental role of salt intake regarding the risk of stomach cancer, are considered established at present.



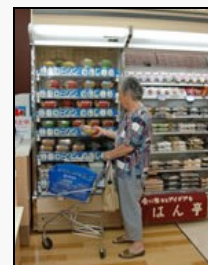
Source: Shutterstock



▶ MARKET TRENDS

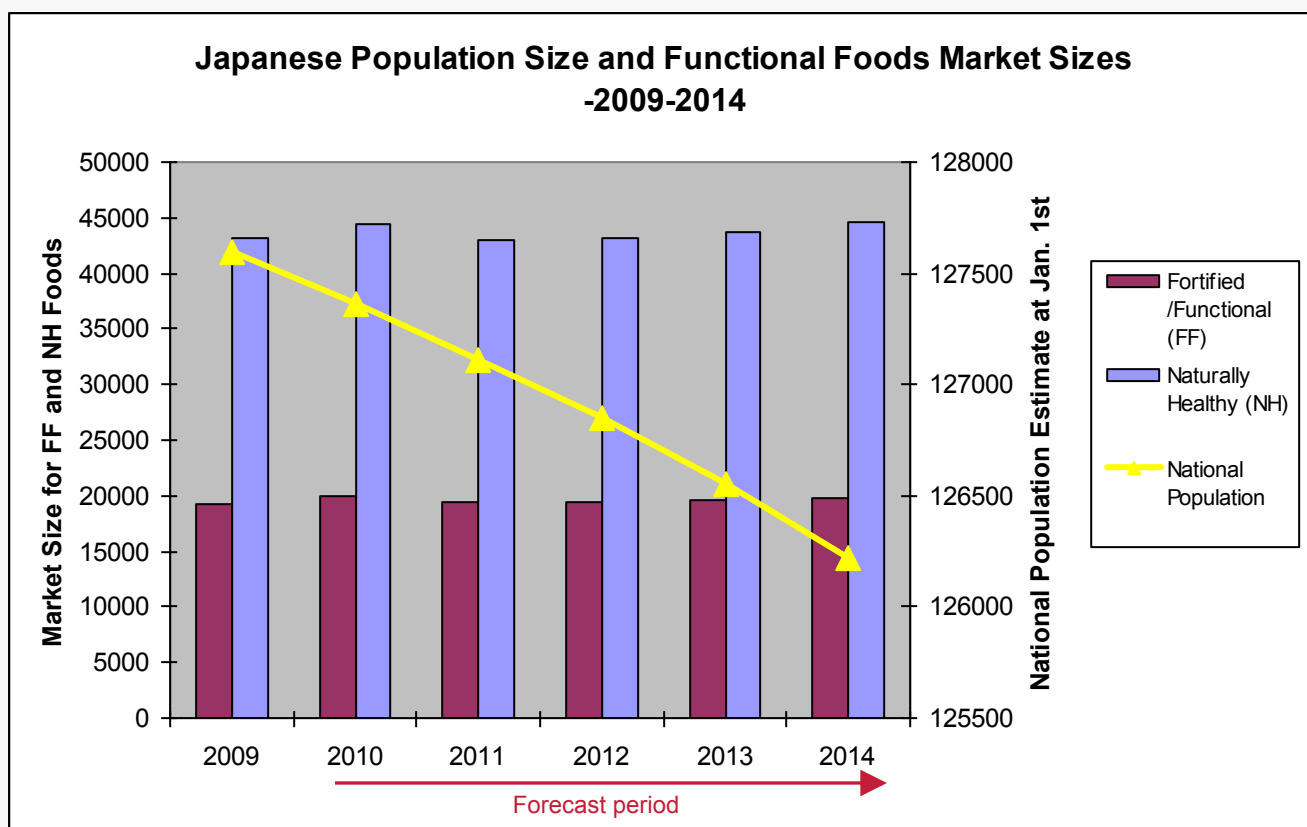
The Japanese functional foods market is the most developed in the world as illustrated by the cutting-edge innovations that continue to deliver more sophisticated and niche health benefits. In terms of size on an international scale, Japan's functional products market is second only to the United States, and is valued at US \$19.6 billion annually.

Since the early 1980s, functional foods have developed rapidly in Japan, becoming an established category with strong consumer acceptance. The important role of food in curing or preventing illness has long been recognized in Japan, and has facilitated the development of the functional food market as consumers have been encouraged to look after their own health, and proactively combat disease. Japan's aging population and the increasing prevalence of lifestyle-related health issues have put a growing emphasis on FOSHU products, as well as foods that are rich in antioxidants with more indirect health claims such as boosting the immune system, or containing cancer-preventing elements.



Source: Planet Retail

The government has had a strong involvement in this industry and continues to encourage the development of foods and beverages with proven benefits, as a way to help maintain the health of the general population, while potentially lessening the increases in health care costs that are expected in the future. Consequently, despite the shrinking population, as Japan's older demographic continues to expand, so too will the demand for functional foods. Japan represents one of the most sophisticated markets for these products, and foods that are perceived or labelled to have some sort of health benefit, will have an inherent advantage in Japan.



Source: Euromonitor International, 2010

► SOFT DRINKS AND JUICES



Fruit Juices

The Japanese drinks market is one of the most fiercely competitive in the world, with numerous companies competing for a piece of this highly lucrative market. Consequently, manufacturers constantly need to invent and innovate product concepts to grasp Japanese consumers' attention. In the eyes of many, Japan is considered a trendsetter for fortified soft drinks markets across the globe.

Superfruits are probably attracting the greatest interest from Japanese consumers. This category includes the core antioxidants of wild blueberry, cranberry, green tea, cherry, grape skin and grape seed extract. According to Datamonitor, the following are also emerging antioxidant ingredients that are beginning to capture significant market attention: açai, goji, acerola cherry, maqui and coffee berry. However, the report also cautions against completely overlooking the core antioxidants.

The claim "100% juice" is generally considered an adult-orientated product. However, for most Japanese consumers, their image of "100% juice" is unlikely to be orange juice in a gable carton, as in Western countries. Instead, most opt for one of numerous fruit/vegetable mixes.

Japanese Market Sizes of Fruit Juice- Historic/ Forecast - Off-trade Value Retail Sale Prices in US\$ million										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
100% Juice	6,423.6	6,963.3	7,588.4	7,210.1	6,727.8	6,335.1	6,135	6,084.7	6,089.4	6,140.8
Nectars (25-99% Juice)	661.5	737.3	826.9	743.7	678.6	637.1	608	583.9	565.5	552.4
Juice Drinks (up to 24% Juice)	3,554.8	3,551.2	3,458.9	3,251.3	3,004.7	2,790.9	2,621.8	2,491.6	2,387.9	2,315.5
Functional Drinks	6,274.3	6,285.3	6,201.9	5,770.1	5,488.3	5,282	5,075.1	4,908.7	4,753.6	4,589.5
Sports Drinks	4,233	4,295.1	4,251.8	3,898.9	3,676	3,528.3	3,382.1	3,276	3,184	3,080
Energy Drinks	2,041.3	1,990.3	1,950.2	1,871.2	1,812.3	1,753.7	1,693	1,632.7	1,569.6	1,509.4
Concentrates	284.3	282.6	281.6	290.2	303.5	309.7	314.4	316.4	318.2	317.8
Liquid Concentrates	172.5	170.9	173	182.5	200	208	215.9	221.5	226.5	229.5

Source: Euromonitor International, 2010

Japanese Market Sizes Of Fruit Juice - Historic/ Forecast - Off-trade Value Retail Sales Prices - Unit Price in US\$ per litres										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
100% Juice	5.1	5.1	5.1	5.3	5.2	5.1	5	4.9	4.9	4.9
Nectars (25-99% Juice)	3.7	4	4.3	4.4	4.4	4.3	4.3	4.2	4.2	4.2
Juice Drinks (up to 24% Juice)	2.9	3	2.9	2.8	2.7	2.7	2.7	2.6	2.6	2.6
Functional Drinks	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.2	3.2	3.2
Sports Drinks	2.5	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5
Energy Drinks	8.3	8.4	8.5	8.5	8.4	8.3	8.3	8.2	8.2	8.1
Concentrates	10.5	10.3	10.2	9.8	9.2	8.9	8.7	8.5	8.3	8.1
Liquid Concentrates	6.4	6.3	6.3	6.2	6	6	6	5.9	5.9	5.9

Source: Euromonitor International, 2010



Vegetable Juices

Many juices and juice drinks in this category are comprised of mixed vegetables, while others are part vegetable with other ingredients such as fruit or dairy products.

Drinks in this category come in the form of cocktails, concentrates and smoothies. Most products have positioned themselves as healthy and functional drinks, fortified with additional ingredients like vitamins and minerals. They may also claim to be calorie-free, no/low fat, natural, rich in antioxidants, or to have no added sugar or preservatives.

Some drinks are marketed for specific seasons of the year. For example, a blend of vegetable and fruit juices, including ginger, Chinese lemon, chilli, carrots, spinach, apples, and lemon, or a sugarless, less-calorie coffee product that uses deep-roast coffee beans, vegetable extract, milk and milk powder, which claim to have warming effects for the winter.

Japanese Vegetable Juice Market Sizes - Historic/ Forecast - Off-trade Value Retail Sales Price in US\$ (millions)										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Vegetable juice	971.4	961.9	953.9	947.6	942.2	938.9	936.2	934.3	933.1	932.6

Source: Datamonitor International, 2010

Japanese Consumers Expenditure on Fruit and Vegetables juices per Capita by Category - Historic/ Forecast 2005-2014 in US\$ (dollars)										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
100% fruit juice (from concentrate)	16.92	16.64	16.35	16.06	15.77	15.52	15.29	15.09	14.9	14.74
Vegetable juice	7.62	7.54	7.49	7.44	7.41	7.4	7.4	7.41	7.42	7.45

Source: Datamonitor International, 2010



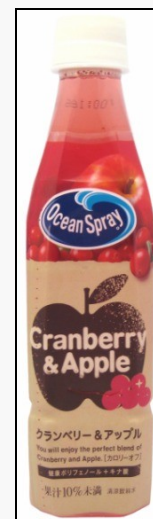
Pumpkin Pudding Drink

Source: Mintel International, 2010



Ginger Drink

Source: Mintel International, 2010



Cranberry and Apple drink

Source: Mintel International, 2010

▶ ASIAN SPECIALITY DRINKS



Asian speciality drinks are dominated by Asian Still Ready To Drink (RTD) tea products, with green tea the most significant product.

Health conscious Japanese consumers are showing an increasing interest in healthier soft drinks and many are choosing Asian speciality drinks, particularly green tea, fruit juices, and cereal/pulse-based drinks which contain a large variety of antioxidants, and have a lower sugar content than other non-Asian soft drinks. They are also perceived to be healthier than alternative beverages.

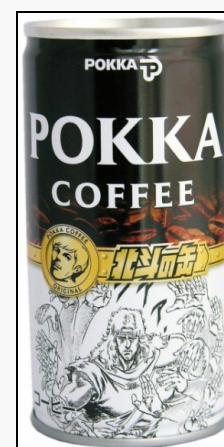
Japan Sales of Asian Speciality Drinks by Subsector: Volume 2004-2009 in millions of litres						
	2004	2005	2006	2007	2008	2009
Asian Still RTD Tea	4,075.6	4,311.3	4,199.7	4,396.7	4,323.1	3,989.0
Asian Juice Drinks	-	-	-	-	-	-
Cereal/Pulse-based Drinks	164.7	177.6	161.3	153.9	153	153.7
Other Asian Speciality Drinks	197.4	195.5	192.5	190.2	207	210
Asian Speciality Drinks	4,437.7	4,684.4	4,553.6	4,740.8	4,683.1	4,352.7

Source: Euromonitor International, 2010

Forecast of Japan Sales of Asian Speciality Drinks by Subsector: Volume 2010-2014 in million of litres					
	2010	2011	2012	2013	2014
Asian Still RTD Tea	3,849.4	3,733.9	3,640.6	3,567.7	3,478.6
Asian Juice Drinks	-	-	-	-	-
Cereal/Pulse-based Drinks	154.9	156.7	159	161.6	164.7
Other Asian Speciality Drinks	203.9	197.4	190.5	183.6	176.6
Asian Speciality Drinks	4,208.2	4,088.0	3,990.0	3,913.0	3,819.9

Source: Euromonitor International, 2010

With sales maturing in Asian speciality drinks, players are focusing on launching innovative and value-added variants in Asian RTD tea to re-ignite consumers' interest. However, Asian RTD saw the introduction of an extensive range of variants and niches, with the cereals/pulse-based drink category enjoying growth.



Pokka Coffee

Source: Mintel International 2010

Forecast Off-trade Sales of Asian Speciality Drinks by Subsector: % Value Growth 2009-2014		
	2009-14 CAGR	2009/14 TOTAL
Asian Still RTD Tea	-3.9	-18.1
Cereal/Pulse-based Drinks	2.3	11.9
Other Asian Speciality Drinks	-4.2	-19.4
Asian Speciality Drinks	-3.5	-16.5

Source: Euromonitor International, 2010



► HOT DRINKS

Hot drinks are culturally significant in Japan due to the country's long history of green tea consumption, the significance of which is best illustrated by the tea ceremony that many Japanese still hold as part of their heritage. Participation in tea ceremonies is reported to have risen in the last decade across the country, as Japan's burgeoning elderly population endeavours to fill its time with cultural activities.

In Japan, food and beverages represent an opportunity to socialize with family and friends. This has helped a broader range of tea and coffee products become established as they are generally associated with relaxation, enjoyment and socializing. Japan is now the world's third-largest importer of coffee, and the seventh-largest coffee retail market, according to Euromonitor.

Convenience and health and wellness are the major trends within hot drinks in Japan. Whereas coffee is mainly affected by the convenience trend, led by coffee shops, the consumption of tea is more closely linked to the health and wellness trend. There is rising demand for fruit/herbal tea as consumers are looking for products that offer more perceived health benefits than standard black tea. Green tea remains a traditional favourite among health-conscious consumers because of its antioxidant properties and its presence is significant within the Japanese tea category.

Japanese Hot Drinks Market Sizes - Historic					
	2005	2006	2007	2008	2009
Hot Drinks Total	10,053	10,061.4	10,007.5	10,095.4	9,955.3
Coffee	4,781.5	4,684.3	4,560.5	4,592	4,492.9
Tea	4,928.1	5,030.4	5,102.1	5,161.8	5,125.7
Other Hot Drinks	343.4	346.7	344.8	341.5	336.8

Source: Euromonitor International, 2010

Japanese Hot Drinks Market Sizes - Forecast					
	2010	2011	2012	2013	2014
Hot Drinks Total	9,908.2	9,843.5	9,780.2	9,717.0	9,699.9
Coffee	4,467.0	4,459.3	4,458.2	4,459.4	4,456.6
Tea	5,110.3	5,059.9	5,005.7	4,950.2	4,944.6
Other Hot Drinks	330.9	324.4	316.4	307.4	298.7

Source: Euromonitor International, 2010



A sugar-free jasmine tea

Source: Mintel International 2010

As the Japanese population ages, companies should continue taking proactive steps to encourage both elderly and younger generations to take more interest in coffee. Promoting the active compounds in coffee and their beneficial effects on consumers' health and wellbeing, could be one avenue.

Tea



Japan Tea Market Sizes - Historic - Retail Sales Value in US\$ million					
	2005	2006	2007	2008	2009
Tea Total	4,928.1	5,030.4	5,102.1	5,161.8	5,125.7
Black Tea	874.5	896.7	913.8	938.9	952.3
Green Tea	3,211.3	3,265.9	3,298.6	3,313.4	3,250.4
Fruit/Herbal Tea	485.7	513.4	537.0	559.6	577.0
Instant Tea	46.1	46.2	47.0	48.2	49.1
Other Tea	310.4	308.2	305.7	301.7	296.9

Source: Euromonitor International, 2010

Green tea is a very familiar part of daily life in Japan, making it the most popular type of tea consumed by Japanese people. Almost all tea grown in Japan is green tea. There are a wide variety of green teas produced, differentiated by such factors as growing methods, timing of the leaves' harvest, and processing methods.



Japan has a tea culture dating back to 2700 BC; the lifestyles of modern Japanese people have changed substantially over the centuries, pushing producers to innovate. Tea is now used in a myriad of ways, which are not limited to just beverages, but also supplement products, which utilize the active components of tea.



Black tea sold in Japan includes packaged tea products (tea bags and tea leaves), tea drinks made from these tea products, and instant tea. Demand for black tea remained low in the past, but in recent years, it has become more accepted by Japanese consumers as a sort of health drink, and as something that satisfies consumers' need for indulgence.



Herb/fruit teas are a growing and dynamic category in Japan's mature tea market. These types of teas include single or blended brews made by infusing leaves, fruits, barks, roots or flowers of almost any edible non-tea botanical. In the West they are often referred to as "herbal tisane."



Functional tea is part of the "Other Tea" category. This group includes any type of tea, herbal tea or combination of teas, formulated or specially fortified, to produce specific physiological or psychological benefits beyond the inherent benefits afforded by a single ingredient. They can be categorized into diet, athletic, medicinal, longevity and weight loss formulations.

Source: Mintel International, 2010

Japan Tea Market Sizes - Forecast - Retail Sales Value in US\$ million					
	2010	2011	2012	2013	2014
Tea Total	5,110.3	5,059.9	5,005.7	4,950.2	4,944.6
Black Tea	959.6	970.0	981.3	992.0	998.2
Green Tea	3,216.3	3,143.9	3,067.3	2,990.2	2,969.2
Fruit/Herbal Tea	593.3	609.5	623.8	636.1	645.8
Instant Tea	50.0	51.0	52.0	52.8	53.4
Other Tea	291.1	285.4	281.2	279.1	278.0

Source: Euromonitor International, 2010

Coffee



Although Japan is renowned for its tradition of ceremonial tea drinking, it is also a country of avid coffee drinkers. Coffee was first introduced in Japan in the late nineteenth century, and today the nation is ranked as the third-largest coffee importer in the world. Japan imported 376 thousand metric tons of coffee beans in 2009 from more than 40 countries (Global Trade Atlas).

Coffee is fashionable in Japan, and it retains the same cachet as ever. Coffee is seen as a healthier alternative to caffeine-based energy drinks and continues to have broad appeal among a large portion of Japanese consumers who work long and increasingly anti-social hours.



Source: Planet Retail

Japan probably has a greater variety of coffee shops than anywhere else in the world. Of course, like in other countries, coffee shops in Japan are a good place to spend time, sip coffee, chat with someone or read a little. But Japanese coffee shops (called kissa-ten) keep evolving in different ways, following the trends of the day and evolving customer tastes, to form a distinctive part of Japanese social culture. However, there's something common to all coffee shops that has never changed; each one is an oasis of relaxation and comfort.

In Japan, drinking coffee is a long activity and it is consumed in significantly smaller portions than in other countries. Coffee drinkers slowly sip the beverage to savour the coffee's essence. Unlike tea, coffee is not an everyday beverage in Japan but is reserved for special occasions. Japanese consumers are mindful of the coffee's appearance, feel and flavour, which can significantly elevate the drinking experience.

Since coffee products in Japan must suit a wide variety of occasions and customers, a rich line-up of high quality products for institutional, retail, office and personal use have been developed, and the coffee industry has also rapidly adapted to customer demand for better quality, fair trade, environment-friendly, and a large variety of products that appeal to health-conscious consumers of all ages.

Japan Market Sizes for Coffee -Historic - Retail Sales Value in US\$ million						
	2004	2005	2006	2007	2008	2009
Coffee Total	4,853.7	4,781.5	4,684.3	4,560.5	4,592	4,492.9
Fresh Coffee	1,968.9	2,005.2	2,048.2	2,096.5	2,143.3	2,178.7
Instant Coffee	2,884.8	2,776.3	2,636.1	2,464	2,448.8	2,314.1

Source: Euromonitor International, 2010

Japan Market Sizes for Coffee- Forecast - Retail Sales Value in US\$ million					
	2010	2011	2012	2013	2014
Coffee	4,467	4,459	4,458	4,459	4,457
Fresh Coffee	2,208	2,236	2,265	2,294	2,318
Instant Coffee	2,259	2,224	2,193	2,166	2,139

Source: Euromonitor International, 2010



Source: Planet Retail



Other Hot Drinks

Japan Other Hot Drinks Market Sizes - Historic/ Forecast - Retail Sales Value in US\$ million										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Other Hot Drinks Total	343.4	346.7	344.8	341.5	336.8	330.9	324.4	316.4	307.4	298.7
Flavoured Powder Drinks	338.8	342.1	340.3	337	332.3	326.5	320.1	312.2	303.3	294.8
Other Plant-based Hot Drinks	4.6	4.6	4.6	4.5	4.5	4.4	4.3	4.2	4.1	4

Source: Euromonitor International, 2010

Partly as a result of demographic changes, one of the latest trends in Japan has been an emergence of functional, healthy foods, such as those that are nutrient-enriched, lower cholesterol, can improve circulation, and are additive free.

Health and convenience continue to be key themes for Japanese consumers. Hot beverage products that support healthy diets, weight loss and on-the-go lifestyles appeal to a large segment of the population, according to a new study from Nielsen, a leading provider of consumer and marketplace information.

► NATURALLY HEALTHY PACKAGED FOOD

Japanese individuals take responsibility for managing their health. This attitude stems from a strong emphasis on self reliance, and an acute awareness that good health extends longevity and wellbeing throughout life, especially during one's senior years. The notions of 'wellbeing' or 'wellness' resonate very well with Japanese consumers which in turn, are likely to result in the growth of products and services that are branded or named as such.

Naturally healthy packaged food includes products that naturally contain a substance that improves health and wellbeing beyond pure caloric value. These products are usually a healthier alternative within a certain sector/subsector.



Source: Mintel International, 2010

Blueberry and Vinegar drink

Japan Market Sizes of Naturally Healthy Packaged Food - Historic - Retail Sales Value US\$ million						
	2004	2005	2006	2007	2008	2009
Naturally Healthy Packaged Food	4,559.6	4,621.3	4,569	4,603.5	4,639.1	4,674.2

Source: Euromonitor International, 2010



There untapped opportunities in the Japanese packaged food sector for Canadian producers. Japan is an interesting market for packaged foods, and especially high-end packaged food manufacturers. The market size of some naturally healthy high-end packaged food, such as confectionery, bakery, and breakfast cereals, among others, where naturally antioxidant-rich ingredients could be a product base or a component, have a great potential for growth in the next few years.

**Japanese Market Sizes of Naturally Healthy (NH) Foods - Historic/ Forecast
- Retail Sales Value in US\$ million**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
NH Bakery Products	344.2	352.7	359.9	363.3	368.3	375.1	385.9	400	417.9	438.9
NH Biscuits	22.1	22.3	22.5	22.7	22.9	22.9	23	23.3	23.4	23.8
NH Bread	135.9	139.8	143.9	148.5	153.6	158.3	164	171	179.6	189.4
NH Breakfast Cereals	186.1	190.6	193.4	192.1	191.7	193.9	198.9	205.8	214.9	225.7
NH Soy-Based Dairy Alternatives	635.7	570.4	536.7	544.8	554	553.6	555.8	560.5	568.7	578.7
NH Soy Milk	635.7	570.4	536.7	544.8	554	553.6	555.8	560.5	568.7	578.7
NH Noodles	1,296.2	1,329.9	1,363.2	1,376.8	1,387.9	1,407.8	1,439.1	1,480.1	1,533.4	1,595.3
NH Olive Oil	288.5	298.2	306.9	317.6	329	334.4	341.4	350.3	361.5	374.1
NH Rice	1,072.7	1,057.6	1,047.1	1,039.7	1,033.5	1,022.6	1,016.9	1,016.3	1,022.1	1,031.4
NH Snack Bars	1.9	2	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.4
NH Granola/Muesli Bars	1.9	2	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.4
NH Honey	421	425.2	435.9	425	417.8	403	391	382.2	376.3	372.5
NH Sweet and Savoury Snacks	561.1	533	551.7	569.7	581.4	580.6	582.3	585.7	591.4	597.2
NH Fruit Snacks	245.2	212.9	227.8	242.2	252.6	256.3	260.7	265.2	270.8	276.3
NH Nuts	315.9	320.1	323.9	327.5	328.8	324.4	321.6	320.4	320.7	321

Source: Euromonitor International, 2010

Launch Type from January 2009 to October 2010: Products containing Polyphenol Antioxidants	Number of Variants
New Variety/Range Extension	930
New Product	430
New Formulation	311
New Packaging	129
Relaunch	48
Total Sample	1848
Storage Type	Number of Variants
Shelf stable	1630
Chilled	165
Frozen	53
Total Sample	1848

Source: Mintel International, 2010



Sweet red bean drink

Source: Mintel 2010



► PET FOODS

According to the latest survey conducted by the Pet Food Association Japan (PFAJ), the number of dogs and cats kept as pets collectively reached 26.8 million in 2008, a record high in Japan that is expanding.

Single urbanites, especially women, often keep pets as companions, and the eight million baby boomers, who are reaching retirement age, keep pets as substitutes for their grown children. All in all, growing numbers of people are keeping pets for companionship and treat them as a member of the family.

According to the PFAJ, dogs over 7 years old account for 55.3% of the total dog population. Cats over 7 years old account for 47.4% of the total cat population. Dogs and cats over 10 years old are 29.3% and 31% respectively. Due to the wide availability of balanced pet foods as well as well-advanced pet medical care, pets are now living longer.



Source: Shutterstock

Due in part to the cases of Chinese pet food contaminated with melamine in 2007, and to other imported food-related safety problems, Japanese consumers are concerned about the safety of what they feed their companions. Consequently, more and more Japanese consumers are shifting toward the premium pet food segment. In response, a wide variety of premium pet foods have been introduced to the market in order to meet these new and diverse needs. The premium food segment, including functional pet food and special therapy diets, is estimated to account for 20-30% of the total pet food market.

The addition of antioxidant-based nutrients to pet food and snacks can provide a natural, or "label friendly" alternative while also providing increased shelf life - oxidation can impact a pet food's flavour, texture and cause nutrient loss.

Market Size - Historic/ Forecast Retail Sales Price in US\$ million and Retail Volume in Tonnes								
	2008	2009	2010	2011	2012	2013	2014	2015
Pet Food -US\$ million	4,618	4,653	4,665	4,661	4,680	4,720	4,772	4,825
Pet Food - Retail Volume - Tonnes	891,553	897,004	899,565	902,165	904,751	907,333	909,919	912,525

Source: Euromonitor International, 2010

► OPPORTUNITIES

Japan is the world's fastest aging country, and the average life expectancy continues to increase. This is creating a robust market for health-food products, dietary supplements, functional foods, nutraceuticals, and even pet food. Consequently, this trend presents opportunities for antioxidant compounds in these markets, more specifically amongst products that are natural, sugar-free, low-fat, or cereal-based. There are also new market opportunities for antioxidants, amongst private label products in these health-oriented categories. Private label has become increasingly popular among major retailers. Along with Japanese consumers' health-based requirements, portion size, packaging, labels and even particular flavours may need to be tailored to meet the needs of private retailers.



► SOURCES

- ▶ *2010 Food export Marketing Forum: key trends and opportunities in the Japanese food Market.*
- ▶ *Candy Industry: Ingredient Technology 2010*
- ▶ *Datamonitor International: Country Insight*
- ▶ *Doing Business in Japan: US Commercial Services.*
- ▶ *Euromonitor International: Consumer Lifestyle In Japan (2010)*
- ▶ *Japan Ministry of Agriculture, Forestry and Fisheries*
- ▶ *Japan Ministry of Health, Labour and Welfare*
- ▶ *Nutraceuticals World: Japan Insider*
- ▶ *Research and Markets: Asian Drinks*
- ▶ *The Strategic Marketing Institute : Rapid Opportunity Assessment; Vegetable Sector*

► ANNEX

The following are previously published reports on the Japanese market :

- ▶ *Inside Japan Seafood Trade (Oct. 2009)*
- ▶ *Packaged Food Sales in Japan (Jan. 2010)*
- ▶ *The Japanese Consumer: Behaviour, Attitudes and Perceptions toward Food Products (March 2010)*
- ▶ *Japanese Confectionary: Market Overview (March 2010)*
- ▶ *Inside Japan Processed Food Trade (March 2010)*
- ▶ *Consumer Trends: Noodles in Japan (June 2010)*
- ▶ *Consumer Trends: Pet Food in Japan (Aug. 2010)*
- ▶ *Consumer Trends: Beef and Pork in Japan (Aug. 2010)*
- ▶ *Health and Wellness Trends in Japan (Sept. 2010)*
- ▶ *Consumer Trends: Honey and Maple Syrup in Japan (Oct. 2010)*
- ▶ *Japan Foodservice (Jan. 2011)*

The Government of Canada has prepared this report based on primary and secondary sources of information. Although every effort has been made to ensure that the information is accurate, Agriculture and Agri-Food Canada assumes no liability for any actions taken based on the information contained herein.

Polyphenol Antioxidants in Japan

© Her Majesty the Queen in Right of Canada, 2011

ISSN 1920-6615 Market Indicator Report

AAFC No. **11440E**

Photo Credits

All Photographs reproduced in this publication are used by permission of the rights holders.

All images, unless otherwise noted, are copyright
Her Majesty the Queen in Right of Canada.

For additional copies of this publication or to request an alternate format, please contact:

Agriculture and Agri-Food Canada
1341 Baseline Road, Tower 5, 4th floor
Ottawa, ON
Canada K1A 0C5
E-mail: infoservice@agr.gc.ca

Aussi disponible en français sous le titre :

Le marché des polyphénols antioxydants au Japon

Canada 