25. Spices

1. Definition of Category

Spices is a general term for seeds, fruits, buds, bark, and plant roots, especially those from tropical areas, which enhance food by adding color, fragrance and a spicy taste, stimulating appetite, by eliminating unpleasant food odors, and aiding digestion. Sometimes the term also generally refers to herbs (fragrant plants that grow primarily in warm climates). Spices are classifies as follows according to their physical condition when used and purpose.

1) Fresh spices: beefsteak plant, garlic, ginger and other herbs
2) Dried spices (whole type, powder type): pepper, red pepper, cinnamon, numerous others
3) Mixed dried spices: seven-flavor red pepper, curry powder, five-spice powder
4) Seasoning spices (mixed with table salt, sugar or other flavoring): garlic salt, barbecue spices
5) Flavor-modifying spices: curry roux, hot red pepper oil *(raayu*), Japanese horseradish *(wasabi*)
6) Extracts: nutmeg oil, vanilla essence

This report excludes 1) above, which is mostly domestically grown and is used as a vegetable, and 6), which is produced by another industry and has separate distribution channels. Accordingly, this report focuses on items 2) through 5) above.

HS Numbers	Commodity
0904.11, 12	Pepper
0904.20	Capsicuim or pimento (red pepper)
0906.10, 20	Cinnamon
0907.00	Clove
0908.10, 20	Nutmeg
0908.30	Cardamon
0909.20	Coriander
0910.30	Turmeric
0910.50	Curry
2103.30	Mustard
0909.10, 30, 40, 50 / 0910.20, 40, 91, 99	Other spices

2. Import Trends

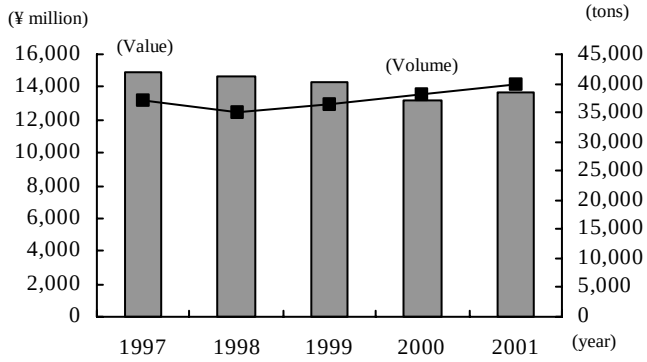
(1) Recent Trends in Spice Imports

Japan relies on imports for virtually its entire supply of unprocessed spice materials. Japanese home consumption of spices used to be limited, but changes in the lifestyle have led to greater diversity in the diet. As a result, the opportunities for use of western spices in the home have grown. The main spices used in the home are pepper, chilies (red pepper), nutmeg, paprika, laurel, saffron, oregano, and garammasala. In recent years, more Japanese consumers have acquired a taste for spicy food. Very spicy processed foods, such as ethnic food and Korean food have gained popularity, which is expected to result in greater demand for spices.

Spice imports are influenced by weather conditions, international supply and demand, and various other factors and fluctuate considerably in terms of individual items, but overall have remained strong. Spice imports dropped off temporarily after prices soared in response to a worldwide supply shortage in 1998. However, imports soon rebounded, and in 2001 reached 39,924 tons (up 4.5% from the year before), the highest total in the past five years. (see Fig. 1)

By species, the leading category is red pepper (29.9%) followed by peppers (20.8%), turmeric (11.0%), coriander (7.6%), and mustard (7.4%). Korean food has been very popular in Japan of late, and Korean food uses large amounts of red pepper. Moreover, red pepper has also gained a following as a variety of health food, since it is said to naturally metabolize fats. As a result, a serious red pepper fad is currently in progress. Prices of pepper had been soaring, but now they are showing signs of settling down again. On a value basis, red pepper (27.4%) and pepper (22.1%) accounted for 49.5% of total spice imports in 2001.

Fig. 1 Japan's spice imports



	1997		1998		1999		2000		2001	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Pepper	8,221	4,885	7,186	6,028	8,023	5,329	7,766	4,407	8,294	3,009
Red pepper	11,301	4,068	9,881	3,027	10,335	3,231	10,983	3,261	11,952	3,745
Cinnamon	1,809	478	1,797	510	1,480	359	2,052	514	2,285	552
Clove	339	62	339	72	301	122	316	153	319	249
Nutmeg	532	235	416	293	684	552	476	425	535	461
Cardamon	304	350	227	248	348	599	278	343	346	548
Coriander	3,448	480	3,148	661	3,422	590	3,683	360	3,015	262
Turmeric	3,643	460	4,404	759	3,948	551	4,301	432	4,396	432
Curry	91	59	70	47	84	51	63	32	52	34
Mustard	1,680	606	1,888	572	2,327	629	2,933	675	2,955	714
Others	5,832	3,243	5,790	2,477	5,536	2,299	5,372	2,567	5,773	3,637
TOTAL	37,200	14,926	35,145	14,694	36,487	14,311	38,223	13,171	39,924	13,644

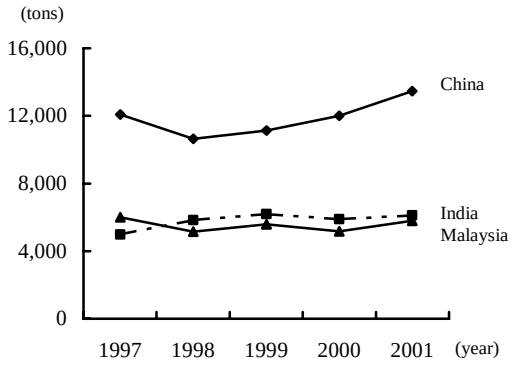
Units: tons, ¥ million *Source: Japan Exports and Imports*

(2) Imports by Place of Origin

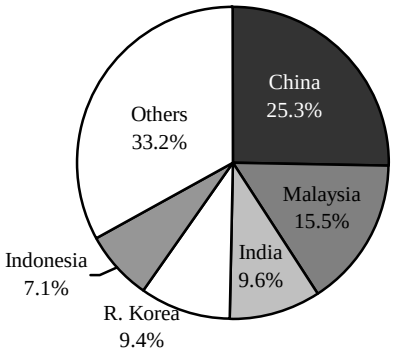
The enormous diversity of spices means that Japan imports spices from virtually every part of the world, including China, India and other countries/areas in Asia, the Mediterranean, the Middle East, Africa, Canada, and Central and South America. The leading exporter of spice is China, which supplies mainly red pepper (share 81.4%) and cinnamon (75.3%), accounts for 33.7% of total spice imports. Next leading exporters are India (15.3%, mainly turmeric) and Malaysia (14.5%, mainly pepper).

Fig. 2 Principal exporters of spices to Japan

Trends in import volume by leading exporters



Shares of spice imports in 2001 (value basis)



	1997	1998	1999	2000		2001			
	Volume	Volume	Volume	Volume	Value	Volume		Value	
China	12,079	10,647	11,137	12,004	2,813	13,465	33.7%	3,447	25.3%
India	4,977	5,835	6,185	5,893	1,366	6,111	15.3%	1,307	9.6%
Malaysia	6,008	5,144	5,591	5,165	2,977	5,803	14.5%	2,116	15.5%
Morocco	3,222	2,483	2,737	3,204	341	2,515	6.3%	230	1.7%
Indonesia	1,654	1,544	1,674	1,736	1,032	2,106	5.3%	964	7.1%
Others	9,260	9,494	9,163	10,220	4,642	9,924	24.9%	5,581	40.9%
TOTAL	37,200	35,145	36,487	38,223	13,171	39,924	100.0%	13,644	100.0%
(E U)	1,954	1,874	1,825	1,965	891	1,998	5.0%	1,013	7.4%

Units: tons, ¥ million *Source: Japan Exports and Imports*

The four most important pepper producers are India, Malaysia, Indonesia and Brazil. Japan imports most of its pepper from Malaysia (5,663 tons, share: 68.3% in volume). Most of cinnamon comes from China (75.3%), coriander from Morocco (78.8%), and mustard from the United States (32.6%) and Canada (31.0%).

Fig. 3 Leading exporters of spice to Japan by category (2001)

	Total volume	First	Volume	Share	Second	Volume	Share
Red pepper	11,952	China	9,733	81.4%	Spain	817	6.8%
Pepper	8,294	Malaysia	5,663	68.3%	Indonesia	1,467	17.7%
Turmeric	4,396	India	2,990	68.0%	China	1,133	25.8%
Coriander	3,015	Morocco	2,376	78.8%	Egypt	268	8.9%
Mustard	2,955	U.S.A.	964	32.6%	Canada	916	31.0%
Cinnamon	2,285	China	1,721	75.3%	Vietnam	443	19.4%
Nutmeg	535	Indonesia	515	96.1%	Malaysia	18	3.4%
Clove	319	Madagascar	136	42.6%	Tanzania	126	39.6%
Cardamon	346	India	296	85.3%	Vietnam	32	9.3%
Curry	52	Singapore	20	38.5%	U.K.	9	18.0%

Unit: tons *Source: Japan Exports and Imports*

(3) Imports' Market Share in Japan

Virtually almost all of Japan's spice supplies come from abroad. Japan produces less than 10% of its own spice supplies, and the percentage is declining steadily. The only spices Japan produces in any quantity are Japanese horseradish *(wasab*i), Japanese pepper *(sansh*o), red pepper and garlic. Nevertheless, virtually all spices sold in Japan both to household and commercial and industrial users is processed and packaged in Japan. Industry observers claim that less than 1% of all spices is imported into Japan pre-packaged and ready for retail sale.

3. Key Considerations related to Importing

(1) Regulations and Procedural Requirements at the Time of Importation

Importation of spices is subject to provisions of the Plant Protection Law and the Food Sanitation Law.

1) Plant Protection Law

Under the Plant Protection Law, in order to prevent the entry and spread into Japan of harmful microorganisms, insect pests, and parasites that would cause serious damage to crops and forest resources of Japan,

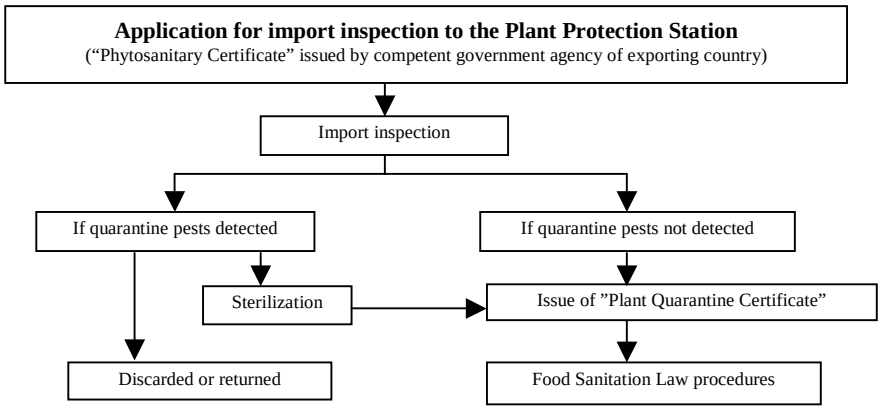
- No root crops with soil attached can be imported into Japan.
- No host fresh (frozen) vegetables of the Mediterranean fruit fly, the Colorado leaf beetle, the citrus burrowing nematode, etc. from or through the infested area are allowed into Japan.

There is a separate list of import-prohibited items for every infested area. If one of these import-prohibited items is brought to Japan, an order will be issued to burn and the like.

Spice imports are subject to provisions of the Plant Protection Law. Upon arrival at the port of entry, the importer must promptly submit to the Plant Protection Station an "Application for Import Inspection of Plants and Import-Prohibited Articles" along with a "Phytosanitary Certificate" issued by the competent government agency of the exporting country. Importers should note that only certain ports of entry equipped with plant quarantine facilities are designated for plant imports. If an infestation is detected, and then the importer will be ordered to decontaminate, discard, or return to the shipper.

Dried turmeric and dried pepper seeds are covered by the quarantine system, but do not require a certificate of the exporting country for import. Dried spices that are sealed in retail use containers are exempt from the plant quarantine regulations.

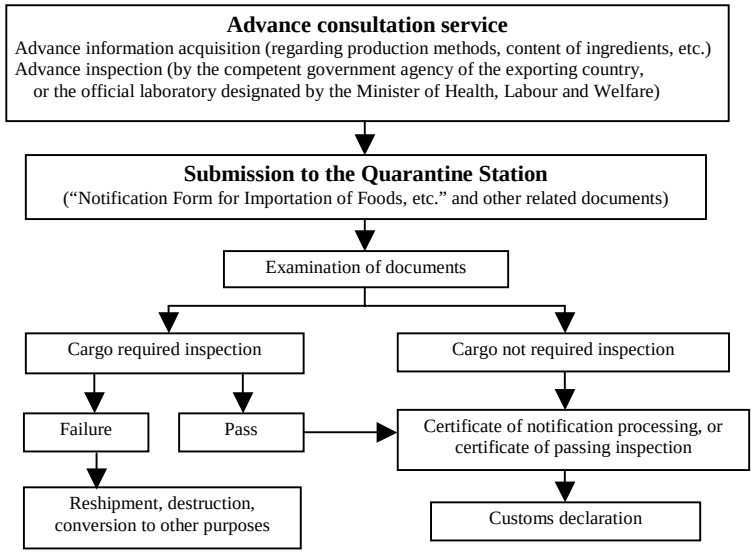
Fig. 4 Plant Protection Law procedures



2) Food Sanitation Law

After clearing quarantine, the importer must submit a "Notification Form for Importation of Foods, etc." to the Quarantine Station at the port of entry, and must have the cargo inspected for safety before bringing it into Japan. Figure below presents a flowchart of the required procedures. In recent years Japan has adopted more stringent criteria for food additives, aflatoxin (a kind of toxic mold), radioactivity and residual pesticides. Spices imported from other Asian countries/areas must be inspected for aflatoxin, while spices imported from Europe must be inspected for radioactivity.

Fig. 5 Procedures required under the Food Sanitation Law



Prior to importing, the importer may take a sample of forthcoming imports to official laboratories designated by the Minister of Health, Labour and Welfare in Japan or in exporting countries. Those test results may be substituted for the corresponding inspection at the port of entry, which expedites the quarantine clearance process. In the case of epidemiological and other constantly changing situation, however, import inspections must take place after reaching Japan even when the merchandise has passed inspection by a foreign designated laboratory.

In addition, importers who wish to submit their notifications by computer may make use of the computerized FAINS (Food Automated Import Inspection and Notification System) for processing import-related documentation. Importers who have the required hardware and software may apply for a security code from the Minister of Health, Labour and Welfare to access the system.

(2) Regulations and Procedural Requirements at the Time of Sale

The sale of spice is subject to provisions of the Food Sanitation Law, the JAS Law, the Measurement Law, the Containers and Packaging Recycling Law, and the Law for Promotion of Effective Utilization of Resources.

1) Food Sanitation Law

The Food Sanitation Law prohibits the sale of foods containing toxic or harmful substances and foods that are unsafe for human health. When selling packaged spice, it must be labeled in accordance with provisions of the Food Sanitation Law. (see 4. Labeling)

2) JAS Law
(Law Concerning Standardization and Proper Labeling of Agricultural and Forestry Products)

The JAS Law establishes quality labeling standard for all food and beverage products sold to ordinary consumers. (see 4. Labeling)

3) Measurement Law

Spice sealed in wrapping or containers is required the labeling of the net content to certain accuracy (range of error specified by Cabinet Ordinance).

4) Containers and Packaging Recycling Law **(Law for Promotion of Sorted Collection and Recycling of Containers and Packaging)**

The Containers and Packaging Recycling Law was enacted to promote recycling of container and packaging waste materials. It provides for sorting by consumers, sorted collection by municipalities, and product reuse (recycling) by product makers and distributors for glass bottles, PET bottles, paper and plastic containers and packaging. Consequently, spice importers incur the obligation for recycling of containers and packaging (although stipulated small-scale importers are exempt). Please consult the competent government agencies listed below for more information.

5) Law for Promotion of Effective Utilization of Resources

As of April of 2001, new identifier labeling requirements apply to paper (not including beverage containers not containing aluminum) and plastic container materials, in addition to previously existing labeling requirements for steel and aluminum cans. (see 4. Labeling)

(3) Competent Agencies

- Food Sanitation Law
  Policy Planning Division, Department of Food Sanitation, Pharmaceutical and Medical Safety Bureau, Ministry of Health, Labour and Welfare
  TEL: 03-5253-1111 http://www.mhlw.go.jp
- Plant Protection Law
  Plant Protection Division, Agricultural Production Bureau, Ministry of Agriculture, Forestry and Fisheries
  TEL:03-3502-8111 http://www.maff.go.jp
- JAS Law
  Standards and Labeling Division, General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries
  TEL: 03-3502-8111 http://www.maff.go.jp
- Measurement Law
  Measurement and Intellectual Infrastructure Division, Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry
  TEL: 03-3501-1511 http://www.meti.go.jp
- Containers and Packaging Recycling Law / Law for Promotion of Effective Utilization of Resources
  Recycling Promotion Division, Industrial Science and Technology Policy and Environment Bureau, Ministry of Economy, Trade and Industry
  TEL: 03-3501-1511 http://www.meti.go.jp
  Recycling Promotion Division, Waste Management and Recycling Department, Ministry of the Environment
  TEL: 03-3581-3351 http://www.env.go.jp
  Food Industry Policy Division, General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries
  TEL: 03-3502-8111 http://www.maff.go.jp

4. Labeling

(1) Legally Required Labeling

When selling spice sealed in wrapping or containers, following items must be listed all together on the label, under provisions of the Food Sanitation Law, the JAS Law, and the Measurement Law.

<Labeling items to be listed all together>

1) Product name
2) List of ingredients
3) Net content
4) List of food additives (if used)
5) Date of minimum durability or best-before date
6) Preservation method
7) Country of origin
8) Importer's name and address

<Curry Roux>

In addition to the above, the Tokyo Metropolitan Consumer Resources Ordinance requires the following items for curry roux. This regulation applies formally only to products sold in the city of Tokyo, but in practice all products sold throughout Japan carry this type of labeling.

- Ingredient names
- Date of minimum durability (best-before date)
- Preservation method
- Usage warnings

<Labeling under the Law for Promotion of Effective Utilization of Resources>

When paper or plastic is used as a packaging material for wrapping of individual product items, or for labels, external packaging or elsewhere, a material identifier mark must be displayed with information where the material is used.

< Example >

External packaging **Individual packaging**

(2) Voluntary Labeling based on Provisions of Law

There is no voluntary labeling based on provisions of laws for spice.

(3) Voluntary Industry Labeling

The Japan Curry Manufacturers Association and the All Nippon Spices Association have no labeling guidelines, but spice manufacturers and distributors sometimes voluntarily include the best-before date and a list of ingredients as needed for curry roux and other processed food products containing spices.

5. Taxes

(1) Customs Duties

Spices are subject to different tariff rates for each product category according to the country of origin. (see Fig. 6)

(2) Consumption Tax

(CIF + Customs duty) x 5%

6. Product Characteristics

(1) General Characteristics

Roughly 500 different varieties of spices are produced around the world, of which about 100 are used in Japan. The same spice may have somewhat different flavors depending on the exact variety and the place of origin. Spices are noted for three primary characteristics: aroma, hot taste, and color. All spices have some distinctive aroma produced by what is known as the extract, an ingredient with very high volatility.

Since the active ingredients of aromatic spices are volatile, and since the spices with natural coloration are all sensitive to light (especially ultraviolet light), spices should be packaged in tin cans or in bottles covered with large labels. While in storage spices must be kept tightly sealed against moisture.

Fig. 6 Customs duties on spices

HS No.	Description	Rate of Duty (%)			
		General	WTO	Preferential	Temporary
0904.11, 12	Pepper				
-100	(1) Put up in containers for retail sale	4.2%	3%	Free	
-200	(2) Other Pepper	Free	(Free)		
0904.20	Fruits of the genus Capsicum or of the genus *Pimento*				
-100	(1) Put up in containers for retail sale	7%	6%	Free	
-210, -220	(2) Other Capsicum or *Pimento*	Free	(Free)		
0906	Cinnamon	Free	(Free)		
0907, 0908.10~30, 0910~40,91, 99	Cloves, nutmeg, cardamoms, turmeric and other				
-100	(1) Put up in containers for retail sale	4.2%	3.6%	Free	
-210,-220	(2) Other Capsicum or *Pimento*	Free	(Free)		
0909.10~50	Coriander and other				
-100	(1) Put up in containers for retail sale	7%	6%	Free	
	(2) Other coriander				
-210	a. Neither crushed nor ground	Free	(Free)		
-220	b. Crushed or ground	3.5%	3%	Free	
0910.50	Curry	12%	7.2%		
2103.3	Mustard				
-100	(1) Put up in containers for retail sale	12.2%	9%		
-200	(2) Other Mustard	10.3%	7.5%		

Note: Refer to "Customs Tariff Schedules of Japan" (published by Japan Tariff Association) etc. for interpretation of tariff table.

About one-tenth of all spices, or tens of the spices commonly used in Japan, feature a hot, spicy taste. The balance between its flavorful and spicy ingredients determines the quality of a spice. Spice differ in subtle ways depending on the exact variety and grade of plant used to make the spice, as well as the soil and climate conditions of the place of origin. Only a few spices are known for their color, but those spices can greatly enhance the visual appeal of food. Some of the best-known color spices are listed in the following table.

Fig. 7 Spices known for color appeal

Color	Spice
Yellow	Turmeric, curry powder, saffron, gardenia
Red	Paprika, cayenne pepper, chili powder
Green	Parsley, mugwort, herbs generally
Purple	Beefsteak plant

There is no unified grading system for spices in Japan at the present time, and the only grading system at all consists of manufacturer specifications. Neither are there any unified international standards. However, American Spice Trade Association and American military procurement specs are sometimes used as reference standards for their import purposes.

(2) Pricing

Spices are consumed in small quantities and are noted for slow product turnover. Prices fluctuate considerably with changing weather conditions, political situations, international supply and demand and inventories in Japan.

7. Domestic Distribution System and Business Practices

(1) Domestic Market Conditions

Japan imports virtually almost all its spices from abroad. However, almost all spices imported into Japan are processed after arrival. Of the spices consumed in Japan, just a small 10% or so is consumed in the home. The majority is used by the food processing industry, the food service industry, and other industries and for medicinal applications. In terms of sales value, however, home consumption accounts for just fewer than 70% due to the high added value.

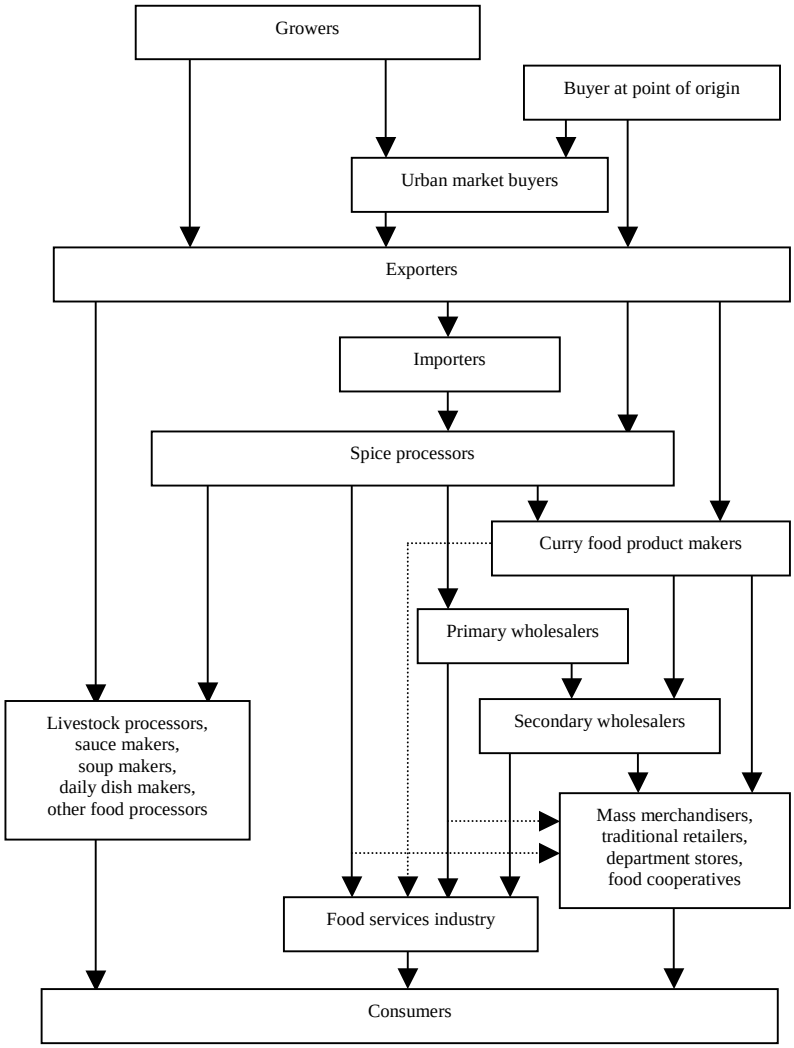
Overall demand for spices is increasing. Use of spices in home cooking is increasing, partly the result of an increasingly diversified Japanese diet, and partly the result of more people eating at home because of the recession. In addition, TV shows and magazine articles have highlighted the antibacterial properties and medicinal benefits of spices, which has helped raise consumer awareness.

Production of spices packed in tubes, which has been growing rapidly in recent years, is continuing to rise with each coming year and now accounts for close to half of the spices sold to the home. New types of products such as flavored salt and pepper are putting up strong fights as well. Although the curry foods industry has fallen on hard times in recent years, the diversifying food product market is finding more and more uses for spice as a flavoring that gives food more striking fragrance and taste. Makers are developing more and more processed food products that make use of spices.

(2) Distribution Channels

The distribution system, encompassing the retail and bulk quantity import, domestic processing, shipping and marketing phases, is extremely complex. The most common pattern is for unprocessed spices to be imported from abroad, then processed in Japan and marketed by the processor. Please refer to the following figure for the distribution channels for spices.

Fig. 8 Distribution channels for spices



(3) Key Considerations for entering the Japanese Market

The product quality, grading, and place of origin need to be verified at the time of purchase, and steps must be taken to preserve product quality. There are a number of difficulties that any prospective importer should be aware of. First of all, as mentioned previously, personal household consumption of spice is very small, and the market is very small as a result. Spice tends to have low product turnover. In addition, most sales go to a small number of large food processing firms. All of these factors make it difficult to break into the market.

8. After-Sales Service

Responsibility for dealing with defective merchandise may fall either the producer, the distributor or the retailer, depending on the cause.

9. Related Product Categories

<Food flavorings>

These products fall into category 6) in the classification system presented in Chapter 1 of this report. Food flavorings include vanilla, strawberry, melon, banana, orange, butter and cola flavors. These flavorings are widely used in confections and beverages, both alcoholic and non-alcoholic. Food flavorings are considered a form of food additive, and as such are subject to provisions of the Food Sanitation Law.

<Perfumes>

A wide variety of natural fragrances are used in perfumes, perhaps the best-known being musk and rose oil. Customs handling is similar to that for spices, they are subject to provision of the Food Sanitation Law, but are exempt from plant import inspection requirements.

<Medicinal compounds>

Spices are widely used in digestive tract tonics, cold medicines, and mouthwashes. Any product claiming medicinal properties that is imported for sale as a medicinal product is subject to provisions of the Pharmaceutical Affairs Law. Prospective importers must make sure they comply with labeling requirements and all other pharmaceutical regulations. For more information, please refer to “Natural Medicines” (VI-6) in this guidebook.

<Fresh spices>

These items, which fall into category 1) in Chapter 1 of this report, are used in much the same manner as spices. This category includes garlic and ginger, which have long been part of Japanese culinary culture, as well as herbs such as parsley, sage, rosemary, and thyme, plus edible flowers, which have attracted much attention of late. All of these items are consumed as vegetables. Most come primarily from domestic sources, and imports are insignificant.

10. Direct Imports by Individuals

Imports of spices for personal consumption are subject to provisions of the Plant Protection Law, and must be submitted to the Plant Protection Station for import inspection by a plant quarantine inspector.

Imports of quantities of spice deemed appropriate to personal use are exempt from the Food Sanitation Law requirements. However, individuals bringing spices into Japan for their own use should be aware of potential dangers from toxic mold (aflatoxin) and, for European products, of radioactive contamination of nutmeg, white pepper, and chili pepper.

11. Related Organizations

- All Japan Curry Manufacturers Association TEL: 03-5687-1793
- All Japan Mustard Manufacturers Association TEL: 03-3271-4815
- *Wasabi* Association TEL: 03-3271-4815