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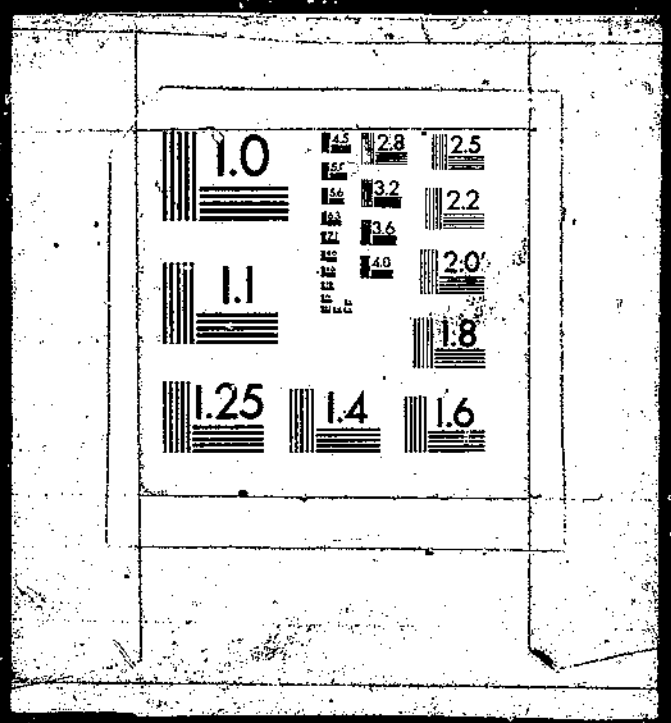

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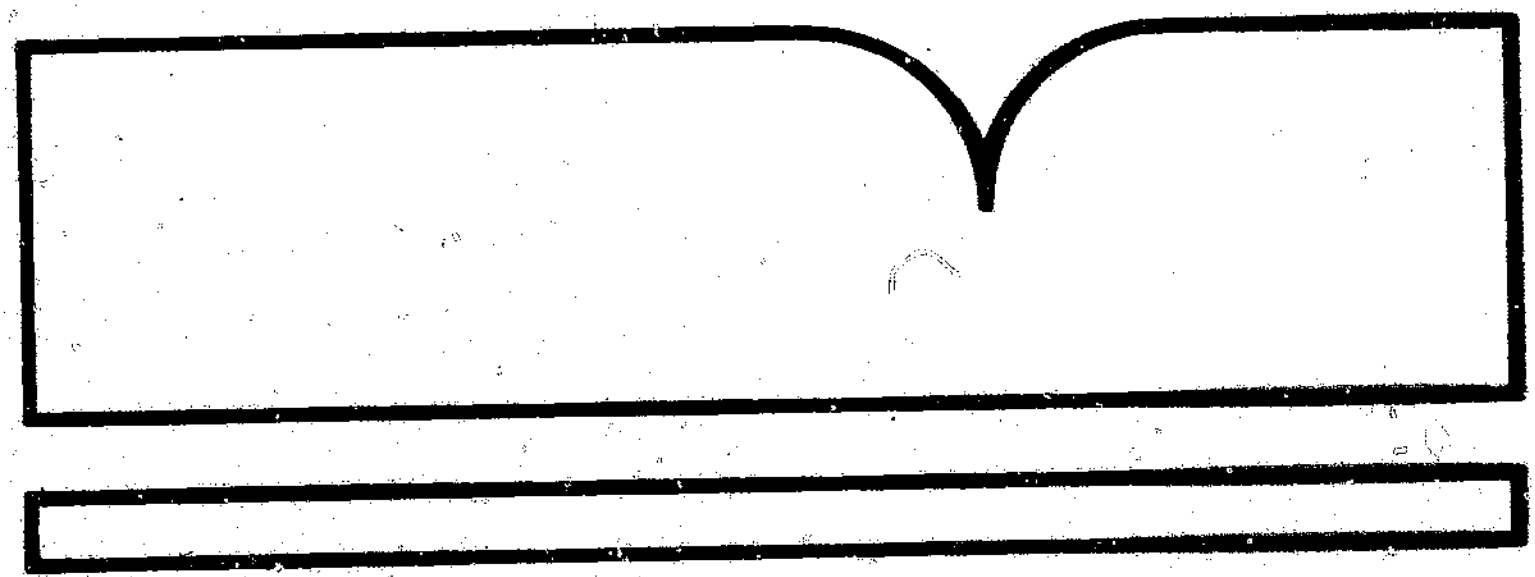

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The 1984 U.S.—Japan Beef and Citrus Understanding: An Evaluation

William T. Coyle

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Abstract

A 1984 understanding between the United States and Japan tempered, at least for the time being, U.S. accusations that Japan unreasonably restricts agricultural imports. The understanding provides for scheduled increases in Japanese imports of beef, oranges, and citrus juice, which will add $35–40 million per year to U.S. agricultural exports to Japan through 1987. Japan's actions on citrus will bring its citrus market close to free trade conditions, but those on beef fall considerably short of the market's free-trade potential.

Keywords: Japan, beef, oranges, citrus juice, agricultural trade, trade liberalization

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July 1986

1.a

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Conversion Chart

The metric units used in this report, with their abbreviations and American equivalents, are given below:

1 tonne (t) = 1 metric ton = 2,204.62 pounds
1 kilogram (kg) = 2.204 pounds
1 hectare (ha) = 2.471 acres

Abbreviations

JFY = Japan fiscal year: April-March
LDP = Liberal Democratic Party
LIPC = Livestock Industry Promotion Corporation
MAFF = Ministry of Agriculture, Forestry, and Fisheries

Summary

Following discussions with the United States, Japan announced in August 1984 that it would expand its import quotas for beef, fresh oranges, and orange juice through March 1988 and liberalize imports of grapefruit juice in April 1986. The expanded quotas will translate to an additional $35-40 million per year of U.S. farm exports to Japan through 1987.

With more liberal trade policies, Japanese imports of beef and to a lesser extent, citrus products, will grow considerably. Japan's 1984 concessions will bring its citrus market closer to free trade by 1987. But beef imports in 1987 will still be 30–60 percent of what they would be under free trade.

The agricultural trade problem between the United States and Japan has centered around beef and citrus for the past 10 years. Japan wants to protect these sectors from international competition because of its general concern about food security, food self-sufficiency, and preservation of an agricultural base. These concerns are articulated by politically powerful interest groups.

The United States views Japan's import quotas on beef and citrus products as symbolic of a broader problem of Japanese protectionism. It also views both the Japanese beef and citrus markets as potentially more lucrative than at present. Recent growth in U.S. exports to Japan reinforces the belief that there would be greater export opportunities with further market liberalization.

This poster, calling for Japanese resistance to farm import liberalization, was distributed throughout Japan in 1982 by the Japanese Central Union of Agricultural Cooperatives. It shows a President Reagan look-alike with beef, citrus products, and rice under his arm swooping down on a defiant Japan.

The 1984 U.S.-Japan Beef and Citrus Understanding:

An Evaluation

William T. Coyle

Introduction

Japan is the largest and one of the most stable overseas markets for U.S. farm products. In 1984, for the first time, the Japanese market surpassed even the 10-country market of the European Community.

Nevertheless, there have been serious frictions between the United States and Japan on agricultural trade issues, the most prominent of which have related to beef and citrus. U.S.-Japanese discussions on Japan's restrictions on beef and citrus date back to the sixties. They were prominent in the Tokyo round of Multilateral Trade Negotiations culminating in the Strauss-Ushiba understanding of 1978 and then again during 1982–1984 leading up to the Brock-Yamamura understanding of August 1984. Beef and citrus have come to symbolize Japan's protectionist agricultural policies.

This paper has three purposes: to outline provisions of the 1984 U.S.-Japan beef and citrus understanding; to put the beef and citrus issue into a historical context; and to evaluate the understanding's measures in terms of how close they bring Japan's beef and citrus markets to "free trade" conditions, the underlying objective of the United States.

Provisions of the 1984 Understanding

In August 1984, after nearly 2 years of discussions, Japan agreed to expand its import quotas through March 1988 for high-quality (grain-fed) beef, fresh oranges, and orange juice. (See appendix for text of this agreement.) Japan also agreed to eliminate all import quotas on grapefruit juice by 1986 (table 1) and to make some modifications in its beef import system. Along with these measures, Japan made a number of concessions on 10 of 13 minor categories of agricultural trade that are restricted by import quotas and made tariff cuts on 36 other agricultural items. Taken together, these actions resolved, at least temporarily, the longstanding dispute with the United States over Japan's restrictive trade policies on agricultural products, particularly those affecting beef and citrus.

Japan agreed to expand its imports of high-quality beef by 6,900 tons per year (a 17-percent annual increase) during 1984–87, slightly faster than the 16-percent rate of the previous agreement period, from 1979–83. According to a November 1984 agreement between Japan and Australia, the total beef quota (the general quota plus a number of small special quotas) will expand by 9,000 tons per year (6 percent) during 1984–87, faster than the 1,625 tons per year (4 percent) of 1979–83. The relatively faster growth in high-quality beef imports, however, guarantees that the grain-fed component of Japan's total beef imports will continue to increase through 1987.

The understanding calls for "a new measure" by the Japanese Government "to facilitate consultations between foreign [beef] suppliers and Japanese users." This commitment led to the "Simultaneous-Buy-Sell" system (SBS), initiated in January 1985, designed to allow Japanese end users to negotiate directly or through Japanese importers with foreign suppliers about product specification and price. The Livestock Industry Promotion Corporation (LIPC), a

Japanese state trading agency that controls beef imports in order to carry out domestic price support and stabilization functions, will continue to retain broad control over who can buy under SBS and within what price range. The new system affects 10 percent of LIPC-controlled beef and veal imports (or about 8 percent of total imports). Although the system will not affect the overall volume of Japanese beef imports, it may affect the mix and quality of imported cuts as well as suppliers' share of the value of beef imports.

With regard to citrus, Japan's imports of fresh oranges will expand by 11,000 tons per year during 1984–87 (11 percent per year), compared with 9,250 tons per year (16 percent) during 1979–83. Concessions on citrus juice include raising the quota on orange juice by 500 tons (5:1 concentrate) per year through 1987 and completely eliminating import quotas and licensing requirements for grapefruit juice by 1986.

Japan, at the same time, took other measures that were not specifically a part of the beef and citrus understanding. It eliminated or expanded import quotas for specific products within 10 quota-restricted categories of farm trade. In return, the United States agreed not to bring the case of these items before the GATT for 2 years. Trade in these products amounted to $232 million in 1985, with a U.S. share of $66 million (app. table 9). In addition, Japan reduced its tariffs on other agricultural imports: some were cut by 10 percent or more, others were eliminated completely. Trade in those products was estimated at $1.2 billion in 1984, including $358 million of U.S. origin. On a trade-weighted basis, the most significant tariff cuts for the United States were those on beef offals, feathers and down, frozen sweet corn, and egg albumen (app. table 11).

The 20-percent tariff cut on beef offals and continued, although somewhat expanded, import quotas on major categories of beef (chilled and frozen) may give further impetus to Japanese beef offal imports, a category unrestricted by quota and very significant since 1975.[1] U.S. exports of this commodity to Japan have grown from an annual average of $12 million in 1975–77 to $86 million in 1982–84.

Historical Background

The beef and citrus problem is not of recent vintage; it goes back almost 20 years. Its intensity rises and

[1]The Japanese definition of offal includes liver, tongue, heart, etc. and certain diaphragm meat (hanging tenders and outside skirts).

Table 1—Japanese beef and citrus quotas, Japan fiscal years 1979–87

Japan fiscal year (April-March)	Total beef[1]	High-quality beef[2]	Fresh oranges			5:1 concentrate juice	
			Annual[3]	Off-season[4]	Total[5]	Orange[6]	Grapefruit
			Metric tons				
1979	134,500	16,800	22,500	22,500	45,000	3,000	1,000
1980	134,800	20,800	33,000	35,000	68,000	5,000	3,000
1981	126,800	24,100	34,000	38,500	72,500	5,500	4,000
1982	135,000	27,400	35,000	42,000	77,000	6,000	5,000
1983	141,000	30,800	36,500	45,500	82,000	6,500	6,000
1984	150,000	37,700	44,750	48,250	93,000	7,000	[7]
1985	159,000	44,600	53,000	51,000	104,000	12,500[8]	[7]
1986	168,000	51,500	[9]	[9]	115,000	8,000	[7]
1987	177,000	58,400	[9]	[9]	126,000	8,500	[7]

[1]Includes the general as well as five smaller quotas (see appendix table 4).
[2]As defined around the time of the 1978 agreement, is from cattle no more than 30 months of age which have been fed for 100 days or more on a nutritionally balanced, high-energy food concentrate ration containing not less than 70-percent grain. Average feeding rate must be at least 9 kg of total feed per day. High-quality beef does not comprise a separate quota category. It was agreed in both 1978 and 1984 that the Japanese Government would import high-quality beef under the hotel and general quotas.
[3]Annual quota valid for 10 months from the date of issuance. This can be distributed throughout the year but in practice is concentrated during March-September.
[4]Quota valid only for June-August.
[5]Excludes special quota for Okinawa.
[6]All imported orange juice is required to be marketed in blended form with domestic mandarin juice.
[7]Japan eliminated import quotas and licensing requirements on grapefruit juice on April 1, 1986. In fiscal years 1984 and 1985, import licenses were issued to meet any amount of domestic demand.
[8]As a result of a reduced Japanese mandarin orange harvest in the 1984/85 season, which caused a shortage of fruit for processing, the Ministry of Agriculture, Forestry, and Fisheries issued an emergency orange juice quota of 5,000 tons for JFY 1985, adding to the scheduled 7,500-ton quota.
[9]Japan will allocate the total import quota between the annual and off-season quota, taking into consideration the demand and supply conditions in both countries.

falls with changing economic and political variables. The historical background is critical to understanding the issue's current dimensions.

The Japanese Position

Japan's restrictive trade policies on beef and citrus reflect a historical commitment to protect its agriculture. Preserving an agricultural base in Japan, as in many countries, is perceived to be in the national interest. That interest has been articulated by the Liberal Democratic Party (LDP), which has been in power since 1955. The LDP derives much of its political strength from rural districts delineated after the Second World War and reflecting the predominantly rural character of Japan at the time. Despite tremendous migration of people to the cities, voting districts have changed little so rural areas now have a disproportionate amount of political power in the Diet (Japan's Parliament). Rural political power has led to farm programs that have often restricted imports and have, in general, improved the welfare of rural people.

Rural welfare has benefited even more from growth in employment opportunities in the nonfarm sector. Adjustment through farmland consolidation has been constrained by land tenure laws that have helped to keep average farm size at about 1 hectare. Most farmers in Japan are now part-time, deriving much of their income from off-farm employment. Only 13 percent of the 4.6 million farmers are full-time.

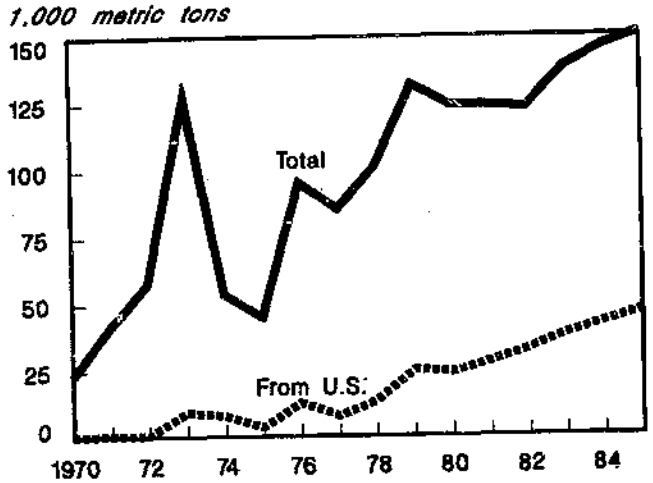
It is not just the Liberal Democratic Party, backed by its rural constituency, that has lobbied for the protection of Japanese agriculture. Other political parties support protection of agriculture, and many urban voters still have close family ties with rural areas and identify with rural issues.

Just as rural welfare and agricultural protection have come to be perceived as synonymous, so have food security and food self-sufficiency. Food shortages and hunger during and immediately after the Second World War are clearly remembered by the older generation. Japan's concern about its limited agricultural resources and about dependence on other countries for food goes back many decades and continues to sustain an intense interest in maximizing the country's food self-sufficiency.

The Japanese beef and citrus sectors, like so much of Japan's agriculture, are often characterized as small-scale, high-cost operations. The average Japanese beef herd, for example, is now only seven animals. Even though Japanese beef production is generally a sideline activity accounting for relatively little farm income, beef producers have succeeded in obtaining substantial government protection. The Livestock Industry Promotion Corporation (LIPC) is empowered to stabilize the domestic beef market through price supports, import quotas, high tariffs (25 percent *ad valorem*), and import surcharges. Beef imports have been limited to about 30 percent of total consumption and have shown little growth in recent years. Imports did not exceed the 1973 level by much until after 1983 (fig. 1). The result has been high wholesale prices of beef relative to import prices and beef consumption per person of about one-tenth the U.S. level (fig. 2).

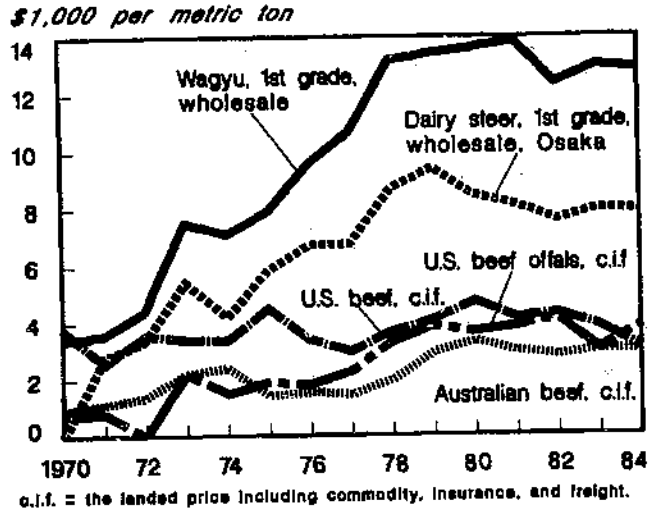
The political success of Japanese beef producers is attributable to their relatively large number in the

Figure 1
Japanese imports of beef and veal[1]



1/ Japanese trade categories (02.01 – 111, 119, 121, 129, 139)

Figure 2
Beef prices, Japan



c.i.f. = the landed price including commodity, insurance, and freight.

context of Japanese agriculture, to the industry's close ties with the dairy industry, and to general public support for agricultural protection. Japan has about 340,000 beef producers, as well as 100,000 dairy producers who earn 10-20 percent of their income from the sale of steers and culled cows for beef production. In addition, the farm cooperative, Nokyo, with sizeable investments in slaughter, processing, and input supply industries, has a large economic stake in protecting local beef production. Distributors who are allowed by the LIPC to purchase imported beef below the price of equivalent-quality domestic beef, as well as pork and chicken producers, have an interest in keeping beef prices high (*1*, p. 2).[2]

Japan's citrus sector is also characterized by many relatively small units (about 0.6 ha per household). About 300,000 farm households produce mainly mandarins[3] and they are concentrated in only a few prefectures (states) in Kyushu, Shikoku, and southern Honshu (80 percent of production is in nine of Japan's 47 prefectures). Others besides citrus growers advocate protecting Japan's citrus sector. Importers (about 95 companies, with the top 10 controlling 50 percent of imported oranges) benefit from high profits in the protected market. Various cooperatives, fruit grower associations, and fruit processors likewise add their support to the status quo. The Ministry of Agriculture, Forestry, and Fisheries, which encouraged the expansion of citrus production some time ago, also feels compelled to protect producers.

The U.S. Position

From the U.S. perspective, beef and citrus are important for symbolic as well as economic reasons.

Japanese restrictions on beef and citrus are highly visible trade barriers, symbolizing to the United States that the Japanese market is more closed than other developed market economies. U.S. complaints have been registered about Japan's capital market restrictions, its exclusive government procurement policies, and state trading practices. In the sixties and early seventies, Japan reduced tariffs and eliminated nontariff barriers affecting many farm products, particularly after 1963 when it revoked its balance of payments justification for using import quotas. In recent years, however, Japan has made less progress in reducing nontariff trade barriers. Since 1974, it has maintained import quotas on 27 categories, 19 of which are agricultural (table 2). Although import quota restrictions are used by many countries, they are criticized as violating the spirit of the General Agreement on Tariffs and Trade.

The beef and citrus issue further symbolizes a specific longstanding irritant in the U.S.-Japan relationship from the U.S. point of view. In the late sixties and early seventies, the import quotas on beef and citrus were high on the U.S. list of items requiring "prompt and favorable" action by Japan. Intensive negotiations in 1977 and 1978 for their removal led to a 1-year interim agreement and then a 4-year agreement under the Multilateral Trade Negotiations that provided for expansion of Japanese imports of grain-fed beef, fresh oranges, and citrus juice.

In 1979, Japan agreed that imports of high-quality grain-fed beef would come under the general and hotel quotas and that the total beef quota would reach 135,000 tons by the 1982 Japanese fiscal year (April 1982 to March 1983), only slightly more than the 134,500-ton quota set in 1979 (table 1).[4]

For citrus, Japan agreed that "with the objective of providing an open market situation in the off season and expanding trade opportunities for citrus," Japan would import fresh oranges and citrus juices according to the schedule outlined in table 1.

Other 1978 concessions included the gradual reduction of tariffs on grapefruit and lemons and limes through 1987 and minor tariff cuts on certain kinds of citrus juice. As part of a May 1982 trade concession package, Japan agreed to implement some of its tariff cuts on citrus products ahead of schedule.

Japan also agreed that discussions on citrus and beef would resume toward the end of the agreement period, and this was done in Honolulu in October 1982. But those negotiations reached an impasse and the meeting ended a day early. Between the first meeting in October 1982 and the understanding reached in April 1984, beef and citrus were given prominence during Prime Minister Nakasone's visit to Washington in January 1983 and again during

[2]Italicized numbers in parentheses cite sources in the References at the end of this publication.

[3]Also known as satsuma oranges and unshu mikans. Mandarins represent about 75 percent of Japanese citrus production. Other citrus varieties include summer oranges (natsudaidai, natsumikan, daidai mikan, and summer grapefruit), navels, and mandarin hybrids such as Iyokan and Hassaku. There is no Japanese commercial production of grapefruit or lemons (*22*, *2*).

[4]In addition to the general quota (90 percent is controlled by the Livestock Industry Promotion Corporation and 10 percent by the private trade), there are five special quotas, one of which is the hotel quota. The hotel quota is administered by the Japanese Meat Conference, which assigns it to the Japan Meat Purveyors Association, which then negotiates with the Japan Hotel Association (*11*, p. 183). See appendix table 4 for annual allocations since 1969.

President Reagan's visit to Tokyo in November 1983.[5]

The purely economic U.S. interest in beef and citrus stems from their growing importance in bilateral trade with Japan and the expected gains from liberalizing the Japanese market.

After the 1978 understanding, the value of U.S. exports of beef, fresh oranges, and citrus juice increased from $122 million to about $430 million in 1985 (table 3). Despite these sharp gains, beef and citrus still represent a relatively small but growing proportion of overall U.S. agricultural exports to Japan. Nevertheless, it has become a matter of U.S. policy to promote exports of value-added agricultural commodities like beef and citrus products (those that embody a greater proportion of their value from processing and handling), which have a greater impact on employment and income per dollar of ex-

[5]More extensive discussion of the political aspects of the beef and citrus issue can be found in (*14*) and (*17*).

Table 2—Import value of agricultural product categories subject to Japanese import quota restrictions

Commodity	CCCN code[1]	1983		1984	
		Total	U.S.	Total	U.S.
		Million dollars (c.i.f.)			
Livestock:					
Meat of bovine animals	0201	446	146[2]	454	153[2]
Milk and cream (fresh)	0401	—	—	—	—
Milk and cream (preserved, concentrated, or sweetened)	0402	95	5	83	5
Processed cheese, curds, and other material	0404	—	—	—	—
Prepared or preserved beef or pork in airtight container	1602	45	14	47	15
Fruits and vegetables:					
Oranges and tangerines (fresh)	0802	63	62	82	82
Oranges and tangerines (temporarily preserved)	0811	—	—	—	—
Fruit puree and fruit paste	2005	1	—	1	—
Canned pineapples and fruit pulp (excluding apricot and nuts)	2006	17	1	22	1
Fruit and tomato juice	2007	25	17	28	20
Tomato ketchup and sauce	2104	2	1	2	1
Sugar and starches:					
Starches	1108	26	—	35	—
Fructose, lactose, etc.	1702	37	3	39	4
Grains:					
Flour of wheat, rice, and barley	1101	—	—	—	—
Groats and meal of wheat, rice, and barley	1102	1	—	1	—
Other:					
Small red beans, broad beans, and peas	0705	64	12	65	14
Ground nuts (except for vegetable oil)	1201	55	24	72	28
Tubers of konnyaku and edible seaweed[3]	1208	50	—	57	—
Food preparations containing added sugar, milk, etc.	2107	34	10	31	13
Total import quota items		960	295	1,019	336
Total agricultural imports		16,765	6,897	18,206	7,647
			Percent		
U.S. share of import quota items		NA	31	NA	33
U.S. share of total agricultural imports		NA	41	NA	42
Quota items as a share of total ag. imports		6	4	6	4

Notes: Exchange rate: Y238 = US$1 for both 1983 and 1984. A dash (—) indicates nil or negligible value. NA = not applicable.
[1]Customs Cooperation Council Nomenclature, Ministry of Finance Notification No. 117 of 1975.
[2]Lower than values in table 3 because some U.S. beef is classified by the Japanese as offal and is not restricted by import quota.
[3]Konnyaku is referred to in English as the "devil's-tongue" plant and comes from farms in Japan and teak forests in Southeast Asia. It is processed and used in a number of traditional Japanese dishes.

Source: Japanese Ministry of Finance, *Japan Exports and Imports, Commodity by Country*, 1983 and 1984 December issues.

ports than do bulk commodities.[6] Furthermore, the Japanese market is extremely important to U.S. beef and citrus interests. More than three-quarters of U.S. beef and veal exports and 40-50 percent of U.S. fresh citrus exports go to Japan (app. tables 1 and 5). In the last 10 years, while growth in total U.S. exports of beef and fresh citrus has slowed, U.S. exporters have counted more on scheduled increases from the Japanese market.

The Potential of the Japanese Beef and Citrus Markets

The growth of U.S. beef and citrus exports to Japan in recent years reinforces the belief that export opportunities would be even greater with further liberalization of Japan's market. This belief is supported by a number of studies that estimate the short to intermediate-term consequences of liberalization on Japanese imports of beef and citrus products. According to these studies, market liberalization measures would increase beef imports over current or baseline levels by two to six times, fresh orange imports by up to four times, and citrus juice imports by up to two times (table 4).

[6]While a dollar of bulk exports generates an additional $1.13 in economic activity, a dollar of high-value and processed agricultural exports generates an additional $1.68. See "U.S. Trade Benefits Economy," *Foreign Agricultural Trade of the United States*, September/October 1985, p. 113.

These increases refer to gains that would occur immediately or soon after market liberalization. They do not reflect the longer term potential of the Japanese market after liberalization which would depend on population growth, economic variables, as well as market development and promotional efforts.

The following sections summarize the findings of these studies and demonstrate the difficulty and complexity of estimating the "free-trade" potential of Japan's beef and citrus markets.

The Japanese Beef Market and Free Trade

Recent research concludes that liberalization of the Japanese beef market would raise Japanese beef consumption substantially, that domestic beef production would likely be maintained, at least in the short run, by some Government program, and that beef imports would expand greatly. There would also be repercussions on other Japanese livestock industries and import demand for feedstuffs.

Prices and Consumption Japanese retail beef prices are relatively high because of strong Japanese demand and Government restrictions on imports. If trade restrictions were removed, Japanese retail beef prices would fall and consumption would expand. Critical to the analyses are assumptions about comparability of domestic beef and imported

Table 3—U.S. exports to Japan of beef, fresh oranges, and citrus juice

Year	(1) Beef, fresh, chilled, and frozen	(2) Fresh oranges and tangerines	(3) Orange juice	(4) Grapefruit juice	(5) Total beef and citrus	(6) Total agricultural exports	(7) Percent beef and citrus, (5)/(6) × 100
	Million dollars						*Percent*
1971	1.5	1.6	0.2	0.2	3.5	1,072.9	0.33
1972	2.0	3.4	.6	.2	6.2	1,427.3	.43
1973	35.0	4.3	.4	.4	40.1	2,997.2	1.34
1974	17.8	4.3	1.0	.4	23.5	3,478.3	.68
1975	26.3	7.7	.6	.5	35.1	3,081.6	1.14
1976	42.2	8.1	1.1	.7	52.9	3,563.1	1.46
1977	52.4	7.6	1.6	.9	62.5	3,856.8	1.62
1978	95.8	22.4	1.8	1.6	121.6	4,435.3	2.74
1979	129.1	29.0	2.4	2.6	168.1	5,255.3	3.10
1980	131.1	27.8	1.4	3.9	164.2	6,110.7	2.69
1981	155.9	44.4	1.2	7.8	209.3	6,562.3	3.19
1982	229.6	51.3	1.3	4.9	287.7	5,555.0	5.18
1983	251.3	51.9	1.7	4.9	309.8	6,251.0	4.96
1984	320.5	62.0	2.4	8.6	393.5	6,782.0	5.80
1985	344.6	73.3	3.2	11.4	432.5	5,409.1	8.00

Source: Bureau of the Census, U.S. Department of Commerce.

Table 4—Liberalization of Japan's beef and citrus sectors: A review of research

Commodity/author/source	Imports		Important assumptions		Notes
	Reference	After liberalization	Change in domestic Japanese price	Price elasticity of demand	
	Metric tons		*Percent*		
Beef (shipped weight)[1]					
Hayami (1979) [*10*]	100,000 (1978)	270,000–380,000	−36	−1.0 to −1.5	Liberalization program phased in over 5- to 7-year period. Deficiency payments to producers to maintain domestic production; payments financed by import levies.
	After 5–7 years 170,000	340,000–470,000	−30		
Sanderson (1982)[2]	122,000 (1980)	300,000–420,000	−28 to −48	−1.5	Deficiency payment system financed by import duties. Proceeds from 75-percent duty would more than offset costs of deficiency payments.
Anderson (1982) [*1*]	100,000 (avg. 1977–80)	383,000–581,000	−65 to −75	−1.0 to −1.25	Provides scenarios of what might happen if important parameters are varied. Figures here refer to full liberalization: Japan's beef production is assumed unprotected and declines dramatically.
Yuize (1982) [*23*]	132,000 (1981)	356,000 (1987)	−25	NA	Uses simultaneous equation system. Estimates that if the import quota were expanded by 18 percent per year (1981–87), the market would be effectively liberalized with the wholesale price of Japanese culled dairy cow beef equal to the average wholesale price of imported beef.
Coyle (1983) [*4*]	125,000 (1979–81) 291,000 (1990)	842,000 (1990)	−70	−1.27	Projects substantial increase in beef imports even without liberalization because of the interrelationship between the beef and dairy sectors. Estimates tradeoff between other meats and beef and the impact of liberalization on Japan's import demand for feed grains. Assumes Japan's beef production is maintained at a constant level.
Fresh oranges					
Mori (1985) [*13*]	85,000 (1983)	116,000–148,000 (1985)	NA	−.86	Orange import liberalization, with the present tariff duty bound, would not have a substantial impact on the demand for Japanese domestic fruits.
Fujitani (1983)[3]	78,000 (1982)	300,000 (1984)	NA	NA	Liberalization would have a very severe impact on Japan's mandarin producers.
Yuize (1983) [*23*]	75,000 (1981)	150,000 (1987) 157,000 (1987)	−60	NA	Similar import levels achieved assuming gradual increase in the total annual import quota (13 percent per year until total imports reach 157,000) or just through expanding the off-season quota and leaving the in-season quota at the 1981 level (17 percent per year until imports reach 150,000 tons).
Coyle (1983)[4]	82,000 (1983)	109,000–164,000	−33	−1.0 to −3.0	Review of limited research suggests that the price elasticity of demand for fresh fruit in Japan is in the indicated range. The estimated decline in Japanese market prices for citrus products is based on comparing c.i.f. to retail markups for already liberalized fresh citrus (lemons and grapefruit).
Orange juice (5:1 concentrate)					
Coyle (1983)[4]	6,500 (1983)	8,650–13,000	−33	−1.0 to −3.0	
Grapefruit juice (5:1 concentrate)					
Coyle (1983)[4]	6,000 (1983)	8,000–12,000	−33	−1.0 to −3.0	

NA = Not available.
[1]Shipped weight is calculated by multiplying the carcass weight by 0.7.
[2]Unpublished calculations used as basis for paper presented to Japan Society, New York, April 1, 1982 [*15*].
[3]As reported in [*23*].
[4]Same methodology as in [*3*] but using the 1983 import quota as a base.

beef, what constitutes market liberalization, the impact on world prices, and the responsiveness of Japanese consumers to lower beef prices.

There are substantial price differences between domestic and imported beef in Japan. For example, prices of 2nd grade dairy steer beef—a relatively average grade of Japanese beef—are twice the c.i.f. price of U.S. beef and more than twice the c.i.f. price of Australian beef.

Given these price differences, the research concludes that with market liberalization, domestic Japanese beef prices would decline in the range of 30-75 percent. Studies that assume that imported beef is comparable with higher grades of Japanese beef estimate price declines at the upper end of this range. Mori and Yuize argue that imported beef is probably more comparable with the middle and lower Japanese grades of dairy steer and culled cow beef. According to Mori, "it is true that beef prices in Japan are appreciably higher than in America, but wholesale prices of beef imported from the United States are only slightly higher than those of Japanese fed dairy steer of the 3rd quality grade" (*12*, p. 1). Yuize assumes that, under free trade, the wholesale price of culled dairy cow beef would fall by about 25 percent to Y800 per kg, the estimated average wholesale price for imported beef (*23*, p. 6). According to Longworth, U.S. grain-fed beef is comparable in quality to the upper end of the popular beef category (65-70 percent of the market) along with Wagyu beef that does not achieve the "super beef" status (the top 6 percent of the market) and the best of the dairy steer beef. Grass-fed frozen beef from Oceania competes with domestic beef, pork, mutton, and horsemeat for processing, while chilled beef from Oceania competes with dairy steer beef of 2nd grade or below (the processing beef sector is approximately 30 percent) (*11*, pp. 19–20).

The extent to which Japanese beef prices would fall also depends on assumptions about trade liberalization. Much of the reviewed research takes trade liberalization to mean the elimination of Japan's import quota system for beef while import tariffs are retained or even raised. Sanderson contemplates the use of a 25- to 50-percent levy on top of the present 25-percent *ad valorem* tariff to offset the cost of Government deficiency payments to producers. Hayami assumes similar behavior on the part of the Government.

Using the border price as a proxy for the world price also tends to exaggerate the extent to which Japanese prices would fall after liberalization, a general problem in using a partial equilibrium model. Japan currently accounts for about 5 percent of world beef trade and about 70 percent of fed-beef trade. Liberalization of its market would lead to a significant increase in world demand for beef imports and upward pressure on world beef prices, especially in the short run. Taking account of the impact of Japan's action on world prices reduces the estimated decline in Japanese prices. In a world model, Tyers and Anderson estimate that after complete liberalization of the East Asian (Japan, South Korea, and Taiwan) grain and meat markets, average international ruminant meat prices would increase by 9 percent (*20*, table 4). A partial liberalization case shows a much-reduced impact on world ruminant meat prices (*20*, table 5).

Japanese consumers' response to a change in beef prices is probably elastic. The reviewed research assumes that the price elasticity of demand for beef is in the range of −1.0 to −1.6. According to these studies, Japanese beef consumption would rise 40-100 percent immediately or soon after liberalization. Consumption growth after the initial change due to liberalization would depend on population growth, economic variables, and other factors.

Lower Japanese beef prices would also have some impact on the consumption of other meats. Coyle estimates that a 70-percent decline in Japanese beef prices would trigger reduced per capita consumption of pork and chicken by 35 and 14 percent, respectively (*4*). He used cross-price elasticities for pork and beef of 0.5 and for chicken and beef of 0.2 (estimated by Sawada as reported by Hayami). On the other hand, lower beef prices would have a partially offsetting income effect that would tend to strengthen demand for meats in general. Hayami suggests that the negative impact of beef market liberalization on Japan's pork and chicken sectors would be offset by rising fish prices and income growth. Hayami notes that, "for more than a decade, the price of fish has increased much faster than the price of meat, resulting in the doubling of the relative price of fish to meat within a five-year period. Such trends likely will continue in the future, because the cost of fish supply will rise due to the primary resource limitation" (*10*, p. 346).

Livestock Production and Feed Demand Much of the research does not deal with the possible effects of liberalization on Japan's beef production. Instead it assumes that Japan's beef producers would be protected by governmentally administered deficiency payments; that is, a two-price system, with a market-oriented price for consumers and a higher price for producers.

Some research does estimate the effects of liberalization on Japan's beef production. Anderson, for example, calculates that Japanese beef production would decline by about 20-60 percent with full liberalization depending on assumptions about supply response. He uses supply elasticities of 0.4 in his low case and 0.9 in his high case (*1*, p. 16).

Yuize argues that Japan's beef producers could adjust to free trade if imports were allowed to increase by 18 percent per year over a 7-year period (1981–87). This would bring down the price of culled dairy cow beef to the average price of imported beef. The prices of Wagyu and dairy steer beef would fall but still remain above stabilization price levels, and beef and dairy cattle numbers would remain roughly constant.

The possible impact of lower beef prices on the chicken and hog sectors is mentioned in much of the research. Coyle estimates that a consumer shift toward beef would reduce feed grain demand by 8-20 percent (1.1-3 million tons below a baseline level) depending on the extent of adjustment in the hog and poultry sectors. If beef production were not maintained through deficiency payments, the impact on aggregate Japanese feed demand would be much more severe. Beef cattle need more than twice as much feed per kilogram of weight gain as do hogs, and about four times as much as chickens.

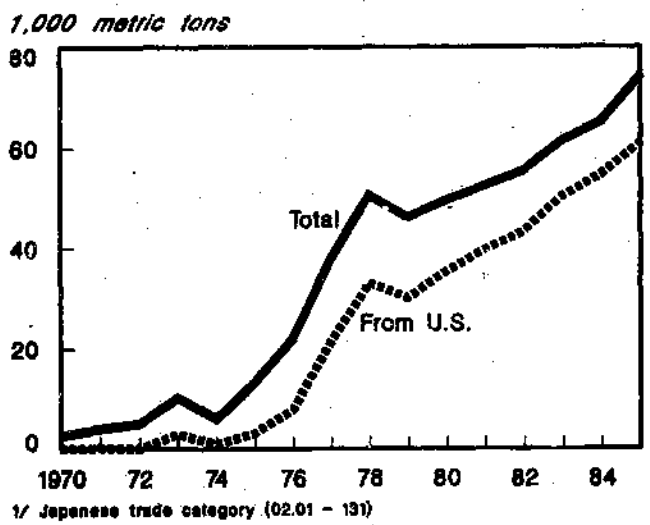
Trade According to the reviewed research, Japanese beef imports would increase by a factor of 2 to 6 immediately or soon after market liberalization. It would also affect trade in other meats and in feedstuffs. Net increases in U.S. agricultural exports of meats, grains, and oilseeds to Japan have been estimated at $184 million. This compares with an estimated increase of $1.1 billion for Australia. The Australian gain is much higher because Australia is likely to have a large share of the increased Japanese beef imports and a relatively smaller share of the decreased Japanese grain, oilseed, pork, and poultry imports (*4*, p. 252).

The reduction in U.S. grain and oilseed shipments to Japan would be offset by increased feeding of U.S. beef for eventual export to a liberalized Japanese market. The estimated $220-million decline in U.S. grain and oilseeds exported to a liberalized Japanese market because of reduced Japanese production of chicken and pork would be roughly offset by increased feedstuffs required to support additional U.S. beef exports (*4*, p. 252).

There is a continuing debate about future shares of a liberalized Japanese beef market. Some speculate that the U.S. share would continue to increase under free trade as it has in recent years under the quota system. This analysis is based on the favorable performance of U.S. beef products in some parts of the Japanese beef trade that are less encumbered by restrictions—the beef offal trade and some components of the private quota trade. Others argue that growth in the U.S. share in recent years is attributable to political, not price and quality considerations. The ultimate outcome would depend on the relative competitiveness of U.S. and other products in a much larger Japanese beef market and on likely changes in Japanese consumer preference for different kinds of beef, given lower prices.

Even without beef liberalization, Japanese beef import requirements could increase substantially. According to estimates released by the Japanese Ministry of Agriculture, Forestry, and Fisheries (MAFF) in November 1980, Japan's beef imports were projected to increase from 105,000 tons in JFY 1978 to 154,000-203,000 tons in 1990 (shipped weight). The Australian Bureau of Agricultural Economics (BAE) (*15*) and Coyle (*4*) also projected increased beef imports without any explicit assumptions about changes in Japanese beef price support policy. These estimates were higher than MAFF's, in the range of 214,000-291,000 tons, because of more conservative estimates of 1990 Japanese beef production and, in the case of Coyle, a higher estimate of Japanese beef consumption. They also considered the interrelationships between Japanese beef and dairy production. Much of Japan's domestic beef supply (60-70 percent) now comes from the dairy herd. Since demand for dairy products is likely to grow more slowly than that for beef, the supply of

Figure 3
Japanese imports of beef offals[1]



1/ Japanese trade category (02.01 - 131)

beef from dairy culls, dairy steers, and even dairy heifers will be limited accordingly. Further expansion of the nondairy beef sector, dominated by the Wagyu breed, is likely to be limited by inherent inefficiencies.

What these estimates do not take into account directly is the growing importance of Japanese beef offal imports, a large proportion of which comes from the United States. Imports under this category are unrestricted by quota and are subject to a 15-percent *ad valorem* tariff. Japanese imports of this relatively freely traded product rose from 13,000 tons in 1975 to 74,000 tons in 1985 (fig. 3).

Since beef offals are relatively freely traded now, one would expect imports to remain at current levels or increase as long as retail prices of quota and domestic beef are kept relatively high. Liberalization of Japan's beef market, however, could lead to a decline in the importance of offals as consumers choose higher-quality beef whose prices would fall to lower levels.

The Japanese Citrus Market and Free Trade

The general consensus on what would happen in a liberalized Japanese citrus market is that there would be adjustment but less than in the case of beef. Fresh orange imports would likely increase to 1.3 to 4 times current levels, and citrus juice imports would rise up to 2 times current levels (table 4).

Citrus Consumption Unlike beef, Japanese consumption of citrus is already at a relatively high level. The Japanese are avid consumers of the domestically produced mandarin, mainly fresh and to a much lesser extent in processed forms. Japan consumes more citrus (fresh and processed) per capita than Hong Kong, Singapore, and Europe, but less than the United States and Canada (table 5).[7]

Comparing the retail prices of imported oranges and domestic mandarins gives us some clues about the Japanese market and what might be expected with liberalization (fig. 4). At the wholesale level, mandarins are consistently cheaper than imported oranges except during the off-season. Free entry for oranges would no doubt lead to reduced marketing margins as more importers, wholesalers, and retailers participate in the market. For other imported citrus not restricted by quota, the retail price is about double the landed price (including tariff). For oranges, the retail price is about triple the landed price (including the tariff). If, under liberalized conditions, the retail price of oranges assumed the same relationship to the landed price (c.i.f., plus tariff) as other unrestricted citrus fruit, then the retail price of oranges in Japan would decline by about a third. This would obviously make the fruit more attractive to consumers, but the retail price would still be about twice that of domestic mandarins from October to April.

In more developed countries, consumers diversify and upgrade their diets as their incomes rise, and also tend to purchase less unprocessed and more processed food. Fresh fruit consumption per person in Japan, for example, expanded rapidly during the sixties, but has remained about the same since the early seventies. Consumption of processed fruit products, however, has grown. Following the pattern of other developed countries, fruit consumption in Japan might shift toward less overall consumption of fresh fruit and more of processed fruit products, a development that would tend to limit the import market for fresh oranges.

Production Japan's citrus production ranks third behind the United States and Brazil. About 300,000 Japanese farm households produce mandarins, mandarin hybrids, navels, and summer oranges.

Japan's citrus production grew rapidly in the late 1960's when a Government program, designed to correct a rice surplus problem, provided incentives for the conversion of riceland to the production of other crops including citrus. A few years later, citrus producers faced their own surplus problem. The Government again intervened in the midseventies, but this time to offer producers incentives to move out of citrus and into alternative crops.

Japan's citrus producers could probably do rather well even without Government assistance. This is particularly evident in the comparison of wholesale mandarin prices with landed orange prices. Over the past decade, the average annual price of mandarins has been consistently below the average landed price of fresh oranges. This contrasts sharply with the prices of Japanese beef and rice, which are often several times higher than the border price of equivalent products.

An analysis of monthly prices gives a slightly different perspective. The greatest volume of mandarins is marketed from October to May. During these months, the wholesale price of the Japanese fruit is almost always below that of imported oranges. During the off-season, the wholesale price

[7]It is important to note that Japan's per capita fresh citrus consumption is higher than the United States while its per capita consumption levels of processed citrus products is much lower.

of mandarins rises sharply. This is the time when imported oranges would be the most competitive (fig. 5). But it is also the time when many other local and imported fruits are marketed in Japan. The gap left by mandarins from June to September is quickly filled by comparably priced fruits like domestic peaches, pears, watermelon, summer oranges, and imported bananas.

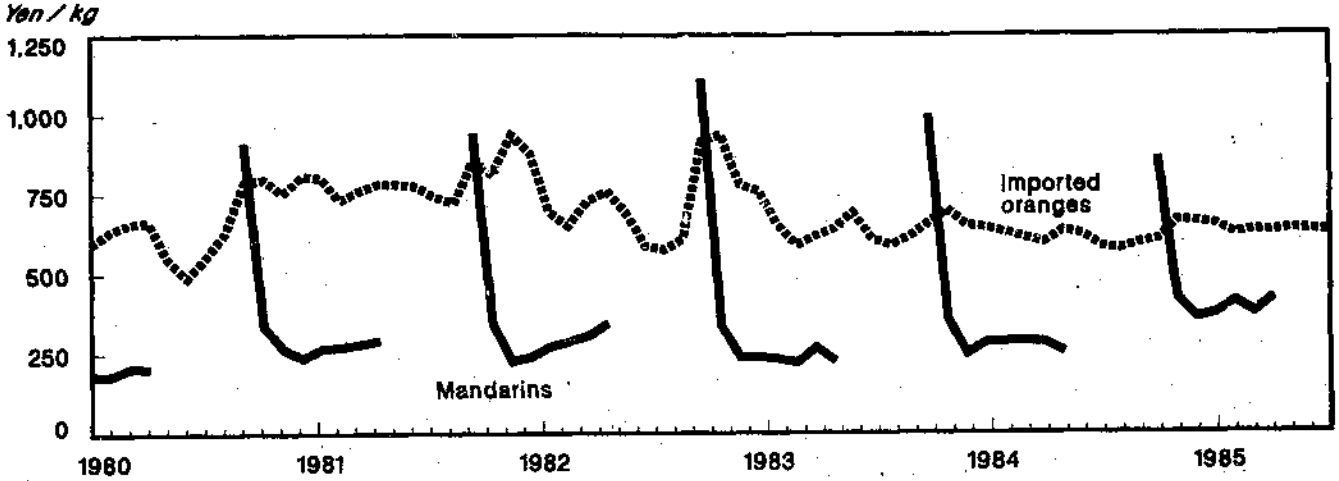
Trade The competitiveness of Japanese citrus producers suggests that the import potential for fresh oranges and citrus juice under free trade would be limited. Research suggests that the free-trade level of fresh orange imports by Japan would be in the range of 109,000-300,000 tons per year, and that for orange and grapefruit juice would be 1⅓ to 2 times current levels (table 4).

Table 5—Fruit consumption in selected countries, 1979-81 average

Item	Japan			Hong Kong	Singapore	South Korea	Malaysia	Australia	New Zealand	Canada	United States	Brazil	United Kingdom	West Germany	Spain
	1972-74	1975-77	1979-81												
	Kilograms per capita per year														
Oranges	2.5	2.6	3.1	20.5	14.6	4.2	1.9	25.0	7.4	49.3	41.5	12.7	12.2	12.0	19.0
Tangerines and mandarins	27.3	26.5	22.1	1.7	2.6	.1	.3	1.8	1.2	—	2.2	2.3	1.5	3.8	4.5
Lemons and limes	.7	.7	.8	1.0	1.3	—	—	2.8	.5	1.8	3.0	.6	.7	1.7	3.5
Grapefruit	1.2	1.5	1.1	.1	.6	—	.1	1.9	1.2	6.0	7.5	.1	3.3	2.3	.1
Other citrus	1.2	1.6	2.2	.9	.3	—	.4	.2	1.8	—	—	—	.5	.7	—
Total citrus	32.9	32.9	29.3	24.2	19.4	4.3	2.7	31.7	12.1	57.1	54.2	15.7	18.2	20.5	27.1
Apples	7.1	6.6	6.3	7.5	8.7	10.6	1.4	15.9	19.6	19.2	14.7	1.4	10.0	32.2	21.4
Pears	3.8	3.7	3.5	7.6	7.0	1.5	.7	5.6	2.1	2.4	3.1	.5	1.7	7.3	8.4
Peaches and nectarines	2.0	2.0	1.8	—	.1	1.6	—	4.0	3.6	2.9	6.1	.8	.8	3.6	6.9
Bananas	7.3	6.3	5.3	3.7	8.8	.4	24.1	8.3	10.9	10.2	9.4	39.2	5.4	8.3	11.0
Strawberries	1.3	1.2	1.4	—	—	2.0	—	.2	1.0	1.6	1.3	—	1.0	1.6	2.0
Watermelon	8.8	8.5	7.2	—	4.9	7.3	1.0	3.0	.7	—	4.3	2.4	—	—	11.9
Grapes	1.8	1.9	2.7	2.3	2.4	1.5	.4	6.6	8.6	9.5	5.5	1.6	7.6	6.7	10.9
Other[1]	7.5	6.4	7.5	20.7	28.9	5.8	17.2	15.1	18.9	16.4	14.3	13.4	10.8	24.6	27.4
Total	72.5	69.5	65.0	68.0	80.2	35.0	47.5	90.4	77.5	119.3	112.9	75.0	55.5	104.8	127.0

— = zero or negligible.
[1]Includes other fresh fruit, and fruit preparations.
Source: Food and Agriculture Organization of the United Nations, *Food Balance Sheets, 1979-81 Average*, Rome, 1984.

Figure 4
Retail citrus prices, Tokyo



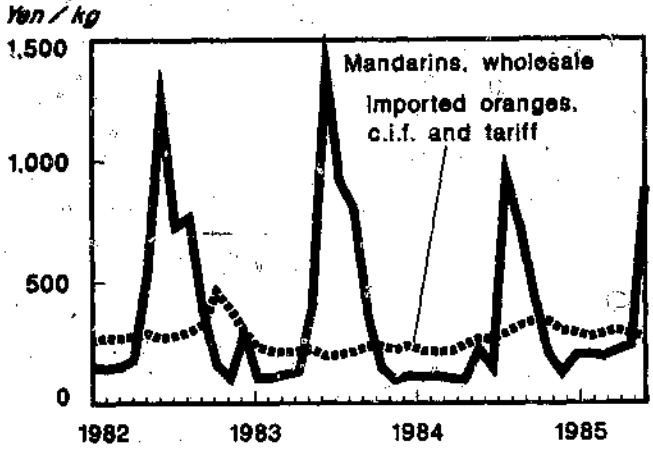
Note: One U.S. dollar exchanged for an average of 221 yen in 1981, 249 yen in 1982, 238 yen in 1983 and 1984, and 239 yen in 1985.

Japan's import liberalization of other citrus products led to large initial increases in imports and gradual growth thereafter. Imports of grapefruit, liberalized in 1971, at first grew rapidly, but then reached an average level of about 150,000 tons (fluctuating from 120,000-170,000 tons because of price and other factors) during 1974–85. Imports of lemons and limes, liberalized in 1964, grew rapidly as well, reaching a level of about 100,000-120,000 tons after 1977 (fig. 6). Imports of lemon and lime juice, liberalized in 1970, amounted to about $8 million in 1985. High tariffs on many of these products (app. table 10) are inhibiting further import growth.

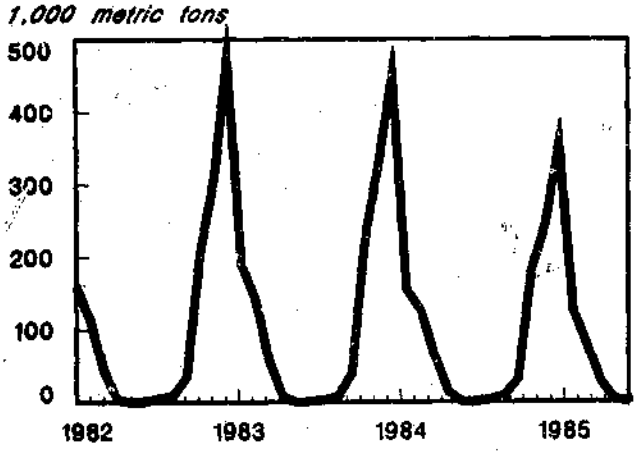
Figure 5

Japanese orange and mandarin market

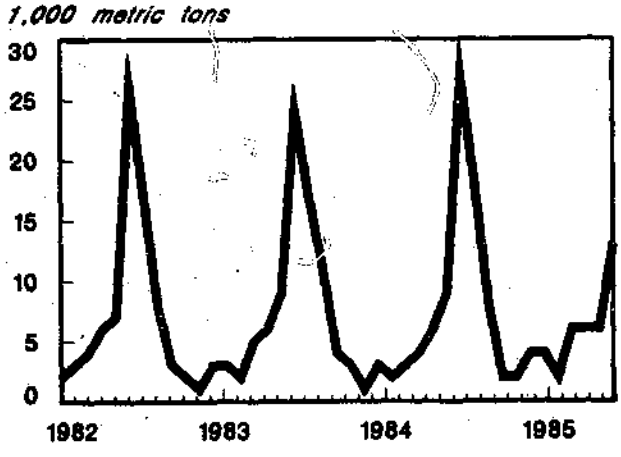
Price Comparisons



Marketings of Japanese Mandarin Oranges



Imports of Oranges

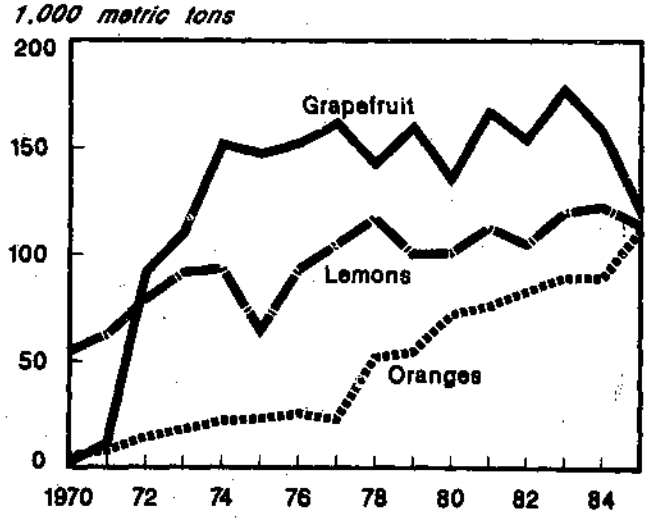


Additional evidence that Japan's citrus producers are relatively competitive is that they are able to compete modestly in foreign markets. Japan exports about 25,000 tons of fresh mandarins (mainly to Canada) and 40,000 tons (fresh fruit equivalent) of canned mandarin sections (mainly to the United States and Europe). It has also succeeded in marketing mandarin fruit drink in the Middle East in the past 8 to 10 years. Total value of these citrus product exports in 1984 was about $100 million, about 10 percent of Japan's total agricultural exports.

One qualification must be added. Whereas Japanese fresh mandarins appear to be competitive with imported citrus, mandarin juice may be less so. The problem with mandarin juice is that it is quite acidic and requires blending with something sweeter to make it palatable. Measures taken by the Japanese to expand imports of orange juice, the product most likely to compete with mandarin juice, have been the most cautious. Furthermore, the Japanese require that all imported orange juice be blended with domestic mandarin juice, thus avoiding the opportunity for foreign suppliers to preserve the identity of their product and develop a consumer recognition and taste for it. Perhaps there is a well-grounded fear that free access for orange juice would provide

Figure 6

Fresh citrus imported by Japan



formidable competition for mandarin juice manufacturers, and in turn hurt mandarin producers who rely on processors to buy surplus fruit and who will have to rely increasingly on processors as Japanese consumers follow the pattern in other developed countries toward consuming less fresh and more processed fruit.

The 1984 Understanding and Implications for the United States

The U.S.-Japan beef and citrus understanding of 1984 can be evaluated from different perspectives: its impact on domestic farm groups in both the United States and Japan, how close it brought each side toward its objectives, or its effects on bilateral relations. This section compares the main market-opening measures made by Japan with estimated free-trade levels for Japanese beef and citrus imports. This will give us some notion as to how close the United States reached its objective of liberalizing the Japanese market for beef and citrus imports.

Table 6 compares 1987 quota levels for the four products covered by the 1984 understanding with a range of free-trade estimates derived from studies by American, Australian, and Japanese researchers that are summarized in table 4. The import estimate range in table 6 for beef and oranges has been narrowed by eliminating the highest and lowest estimates from table 4. The estimates vary because of differing assumptions about the Japanese beef market and differing views about what constitutes free trade or more liberalized market conditions. Since all markets are affected by Government institutions, terms like "free trade" or "liberalized trade" are always subject to qualification.

Table 6—New quota levels for Japanese beef and citrus imports compared with estimated free-trade levels

Item	Total imports, 1982–84 averages		Unit value total imports, 1982–84 avg.	Imports from the United States, 1982–84 averages		Unit value, imports from U.S., 1982-84 avg.	U.S. share of value, 1982–84 avg.	Quota levels for JFY 1987 as specified in 1984 understanding[1]	
	Quantity	Value		Quantity	Value				
	Metric tons	*Million dollars*	*Dollars/ ton*	*Metric tons*	*Million dollars*	*Dollars/ ton*	*Percent*	*Metric tons*	*Million dollars*
Total quota beef	135,670	431.4	3,180	37,627	145.4	3,864	34	177,000	583
High-quality beef	[4]	—				—	—	58,400	
Fresh oranges	86,990	73.4	844	86,599	73	843	99	126,000	106
Orange juice (5:1 concentrate)	6,500[5]	7.9	1,215	1,399	1.7	1,215	22	8,500	10
Grapefruit juice (5:1 concentrate)	6,000[5]	6.2	1,033	5,613	5.8	1,033	94	Liberalized	
Total value		519			226		44		679

	Free trade levels[2]		1987 quota levels as a percent of free trade potential		Implied net increase (or potential) above scheduled 1987 levels[3]			
					Total		U.S. share	
	Low	High	Low	High	Low	High	Low	High
	Metric tons		*Percent*		*Million dollars*			
Total quota beef	300,000	580,000	59	31	391	1,281	156	513
High-quality beef								
Fresh oranges	116,000	164,000	109	77	0	32	0	32
Orange juice (5:1 concentrate)	8,650	13,000	98	65	0	5	0	1
Grapefruit juice (5:1 concentrate)	8,000	12,000	100	100	0	0	0	0
Total value					391	1,319	156	546

[1]1987 values are estimated by multiplying 1987 quota levels with 1982–84 average import unit values.

[2]Based on research summarized in table 4. The highest and lowest estimates for beef and orange imports are eliminated to narrow the estimate range.

[3]Japan's free trade imports from the United States are computed by multiplying the total "free trade" value by the average U.S. share in 1982–84 for citrus products. For beef, 40 percent is used because of the likely increase in the U.S. share of Japanese beef imports by 1987. The increase above scheduled 1987 levels is computed by subtracting the 1987 quota values from the free trade values except when the quota exceeds the free trade level, the potential for further expansion is nil.

[4]Precise data on Japanese high-quality beef imports are not available. Most of this beef is assumed to have U.S. origin. The United States also supplies other categories of beef.

[5]Average quota levels for Japan fiscal year 1982–84 are used because quantity values for juice are not reported on a standard basis.

The most general conclusion that can be drawn from table 6 is that Japan's measures on citrus products will bring those markets closer to free trade by 1987 than those on beef (table 6). According to the reviewed research, Japan's beef market by the end of the current understanding (March 1988) will still fall considerably short of being a free market.

Beef and Veal Japan is accelerating its expansion of beef and veal imports, but by the end of the present understanding, Japan's beef and veal imports will still be only 30-60 percent of what they would be in a free market.

It is even questionable whether Japan's measures for beef constitute a step toward liberalization. Instead, Japan's expansion of beef and veal import quotas as outlined in the understanding may reflect expected or even less than expected growth in the market. The 1987 import quota (177,000 tons, shipped-weight basis) falls within a range of import levels (154,000-203,000 tons) projected by MAFF in 1980 for 1990. These projections contained no explicit assumptions about market liberalization during the eighties. The 1990 projections assumed that annual growth in Japan's population and real gross national product (GNP) during the 1980's would average 0.8 percent (actual average, 0.7 percent per year for 1980–85) and 4.5 percent (actual average, 4.2 percent per year for 1980–85); those assumptions may yet prove true.

The 1990 projections also assumed that beef production would reach 441,000 tons (shipped weight) by 1990 which is now unlikely because of continued slow growth in Wagyu beef production and a slowing in production from dairy steers and culls after dairy herd adjustments were made in the late 1970's and early 1980's to alleviate dairy product surpluses (*15*). Reaching the midpoint (620,000 tons) of the range in projected consumption levels (595,000-644,000 tons) would, therefore, require some acceleration in import quota expanson after 1987.

With regard to high-quality or grain-fed beef, Japan will accelerate import expansion slightly over the previous 4-year agreement period. The growth rate will continue to exceed that for the total beef quota, which means that the grain-fed share of total beef imports will continue to rise. The free trade potential for grain-fed beef imports has not been estimated because of insufficient data for this segment of what is a relatively small industry in Japan's agricultural economy. Despite the attention given to beef in U.S.-Japan agricultural trade discussions, beef represents a small percentage of total Japanese gross farm income (4 percent). Beef is consumed in rising but small amounts, and it is very much at the periphery of the Japanese diet.

Fresh Oranges Japan's import quota for fresh oranges will expand more rapidly than that for beef. However, the growth rate for the orange quota in 1984–87 is somewhat slower than under the previous agreement (1979–83). According to the range of estimates reported in table 6, the 1987 quota level will bring orange imports to between 77 and 109 percent of what they would be under free trade. Even after liberalization, Japan's imports of fresh oranges would increase little if at all. Its imports would not likely reach the levels of countries like West Germany, France, and the United Kingdom, which produce very little citrus of their own.

The more limited potential for orange imports is a reflection of greater efficiency in Japan's citrus sector than in its beef sector. Japan's willingness to liberalize its citrus market more rapidly is perhaps also explained by a political awareness that Japan's citrus growers can more easily adjust to the economic pain resulting from liberalization.

Citrus Juice Japan's actions on citrus juices were mixed. On the one hand, imports of grapefruit juice were liberalized in 1986. On the other, the expansion of import quotas for orange juice will slow under the current understanding.[8]

It is difficult to evaluate the effects of Japan's measures on citrus juices, the least studied of the commodities covered by the understanding. Japan is able to export certain processed citrus products like canned mandarin sections and mandarin fruit drink. This suggests that Japan is reasonably competitive in production of fresh mandarins, as well as in the manufacture and marketing of processed products. We can presume, therefore, that, like fresh oranges, there is probably more limited potential for increased citrus juice imports than for beef under free trade.

This is probably more the case for grapefruit juice, however, than for orange juice. Japan's reluctance to expand its orange juice imports may be a sign of graver concern about free trade in orange juice than in fresh oranges. With the Japanese consuming less fresh and more processed citrus products, mandarin growers will have to sell an increasing proportion of their crop to processors to be made into juice and

[8]The orange juice quota for JFY 1985 was expanded to 12,500 tons (5:1 concentrate basis) on an emergency basis, well above the scheduled 7,500 tons, because of a reduced Japanese mandarin orange harvest in the 1984/85 season. The quota for JFY 1986 is 8,000 tons.

other processed products. Mandarins alone, however, make a fairly acidic juice, which in most cases must be blended with something sweeter to make it more palatable. Imported orange juice concentrate for blending or for use in reconstituted juice or drink could become quite competitive with mandarin juice or drink under free trade.

The 1984 beef and citrus understanding has the following principal implications for the United States:

1. ***The expansion of the beef, fresh orange, and orange juice quotas, and the elimination of the grapefruit juice quota should add about $35-40 million a year to total U.S. agricultural exports to Japan during 1984–87*** (table 7). By 1987, U.S. exports to Japan of these four products should approach $450-500 million, or 5-6 percent of total U.S. agricultural exports to Japan. Although this represents a relatively small amount of additional trade with Japan, it is significant to U.S. citrus growers and beef exporters, who depend greatly on the Japanese market and its growth.

   More than three-quarters of the annual increases will be accounted for by grain-fed beef. The United States should continue to dominate this part of Japan's beef imports in the short to intermediate term. There may be some potential for other suppliers to compete in this area as Japanese beef imports continue to expand.

   About a fifth of the increase will be fresh oranges, mainly benefiting California orange growers whose product has dominated the Japanese fresh orange market for many years and should continue to maintain more than 95 percent of that market. Some increased competition will come from Australia, and steady but minor competition will continue from Taiwan and South Africa.

   Expected U.S. gains in citrus juice exports are less significant. The United States, which had a 94-percent share of Japanese grapefruit juice imports in 1982-84, will benefit more from Japan's measures on grapefruit juice. The increase in the orange juice quota will be of less direct interest because of significant competition from Brazil since the midseventies. The U.S. share of Japan's modest orange juice imports dropped from 81 percent in 1975-78 to 22 percent in 1982-84.

2. ***Continued stability in the trade of these commodities.*** The 1984 understanding, like the 1978 one, provides for scheduled, predictable increases in imports of the four commodities. Prior to 1978, Japanese beef import quotas were announced semiannually and at times fluctuated dramatically leading to increased risk and uncertainty for those doing business with Japan (fig.1).

Table 7—Estimated U.S. gains from 1984 understanding with Japan

	Annual increase	U.S. share	1982-84 avg f.o.b. price	Annual increase in value
	Metric tons	*Percent*	*Dollars*	*Million dollars*
Grain-fed beef	6,900	98	4,275	28.9
Oranges	11,000	99	635	6.9
Orange juice	500	22	1,000	.1
Grapefruit juice	500-1,500	94	1,000	.5-1.4
Total				36.4-37.3

3. ***The remaining potential is mainly in beef.*** Based on the estimates of a number of studies, the 1984 understanding falls considerably short of freeing up Japan's beef market. According to these studies, there would still be potential for $400 million to $1.3 billion in beef imports after 1987, if Japan's beef market were more fully liberalized. The U.S. share of that amount is estimated to be $156-513 million.

   However, these figures do not take account of the effects that Japan's beef market liberalization would have on other sectors of the country's livestock economy and resulting changes in its import demand for feedstuffs. Although the free-trade potential for increased sales of U.S. beef and citrus products after 1987 is estimated at $156-546 million (table 6), the net increase in U.S. farm exports to Japan would likely be somewhat less because of reduced Japanese import demand for U.S. feedstuffs resulting from adjustments in its livestock industry.

   These increases as mentioned before refer to gains that would occur immediately or soon after market liberalization. They do not reflect the longer term potential of the Japanese market after liberalization which would depend on population growth, economic variables, as well as market development and promotional efforts.

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EMBASSY OF JAPAN
WASHINGTON, D. C.

August 14, 1984

The Honorable William E. Brock
United States Trade Representative
Office of the U.S. Trade Representative
600 17th Street, N.W.
Washington, D.C. 20506

Sir:

I have the honor to refer to the recent consultations held between the Government of Japan and the United States Government in accordance with the notification of July 30, 1979 and to inform you, on behalf of the Government of Japan, that it intends to implement certain measures concerning imports of fresh oranges, orange juice, grapefruit juice, and beef as indicated in the Annex hereto, in accordance with the relevant laws and regulations in force in Japan.

Accept, Sir, the renewed assurances of my highest consideration.

Yoshio Okawara

Yoshio Okawara
Ambassador of Japan

EMBASSY OF JAPAN
WASHINGTON, D. C.

ANNEX

I. Fresh Oranges and Orange Juice

(1) Fresh Oranges

(a) The Government of Japan will increase its import quotas on fresh oranges in accordance with the following schedule:

	(metric tons)
JFY 1984	93,000
JFY 1985	104,000
JFY 1986	115,000
JFY 1987	126,000

For these purposes, "fresh oranges" means oranges and tangerines classified under headings Nos 08.02 and 08.11 of the Japanese customs tariff schedules.

(b) The Government of Japan will allocate the increment in import quota over the JFY 1983 level between the annual quota and the off-season quota, taking into consideration the supply and demand situation in both countries.

(2) Orange Juice

The Government of Japan will increase its import quotas on orange juice in accordance with the following schedule:

	(metric tons)
JFY 1984	7,000
JFY 1985	7,500
JFY 1986	8,000
JFY 1987	8,500

For these purposes, "orange juice" means 5 to 1 concentrate or equivalent, classified under Statistical Code Nos. 20.07-111, 121, 131, and 141 of the Japanese customs tariff schedules.

II. Grapefruit Juice

The Government of Japan will eliminate import quotas and licensing requirements on grapefruit juice on April 1, 1986.

In preparation for the elimination, the Government of Japan will issue licenses for imports to meet any amount of domestic demand for JFY 1984 and JFY 1985.

For these purposes, "grapefruit juice" means grapefruit juice classified under Statistical Code Nos. 20.07-112, 122, 132, and 142 of the Japanese customs tariff schedules.

III. Beef

(1) The Government of Japan will exert efforts to exploit the demand for high-quality beef with a view to realizing in JFY 1987, the importation of 58,400 metric tons of high-quality beef, within the special and general quotas on a global basis. The increase of 27,600 metric tons over the JFY 1983 level will be phased in incrementally in even amounts each year.

"High-quality beef" will be defined according to the definition agreed to in April 1978.

(2) The hotel quota will be increased from the current 3,000 metric tons per year to 4,000 metric tons per year in JFY 1984 and will be maintained at that level through JFY 1987.

(3) The Government of Japan will introduce a new measure in the Livestock Industry Promotion Corporation's transactions in beef so as to facilitate consultations between foreign suppliers and Japanese users, within the framework of the principle of unified management of beef importation by the Livestock Industry Promotion Corporation.

IV. Beef (Customs Duties)

(1) The Government of Japan has no intention to initiate any increase in the customs duty on beef (Statistical Code Nos. 02.01-111, 119, 121, 129, 139) (the rate of 25 percent is applied currently) under the present price stabilization system of beef.

(2) In the event that a situation makes it impossible to maintain the customs duty on beef at the above mentioned level, the Government of Japan will notify the United States Government of such developments in advance where possible and be prepared to enter into consultations with a view to reaching a mutually acceptable solution, which may include the possibility of appropriate adjustments of the GATT concessions.

V. Other

The Government of Japan will be prepared to consult with the United States Government at a mutually convenient time during JFY 1987 on matters related to the importation in JFY 1988 and thereafter concerning fresh oranges, orange juice, and beef.

THE UNITED STATES TRADE REPRESENTATIVE
WASHINGTON
20506

August 14, 1984

His Excellency Yoshio Okawara
Ambassador to the United States
The Embassy of Japan
2520 Massachusetts Avenue, N.W.
Washington, D.C. 20008

Dear Mr. Ambassador:

I have the honor to acknowledge receipt of your letter of today's date, regarding the implementation of measures concerning fresh oranges, orange juice, grapefruit juice, and beef by the Government of Japan.

Accept, Excellency, the renewed assurances of my highest consideration.

Very truly yours,

William E. Brock

WILLIAM E. BROCK

WEB:tdc

Appendix table 1—U.S. beef exports to Japan and the world

Year	Beef and veal		Beef and veal, preps.		Beef tongue		Beef liver		Beef offals		Veal offals		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Metric tons	*$1,000*	*Metric tons*	*$1,000*	*Metric tons*	*$1,000*	*Metric tons*	*$1,000*	*Metric tons*	*$1,000*	*Metric tons*	*$1,000*	*Metric tons*	*$1,000*
U.S. exports to Japan														
1970	455	1,384	26	39	4	4	23	11	61	37	0	0	569	1,475
1971	768	1,549	18	17	59	60	55	34	90	67	0	0	990	1,727
1972	700	2,044	6	6	0	0	0	0	185	132	19	24	910	2,206
1973	11,120	34,955	116	98	2,506	3,092	308	337	415	503	28	75	14,493	39,060
1974	6,023	17,756	37	81	577	854	279	356	561	892	0	0	7,477	19,939
1975	7,944	26,250	82	373	261	384	296	429	858	1,831	0	0	9,441	29,267
1976	15,521	42,225	33	115	1,737	3,405	1,108	810	2,870	5,507	17	31	21,286	52,093
1977	20,160	52,364	38	176	1,231	1,691	1,916	1,944	9,126	19,251	17	21	32,488	75,447
1978	27,733	95,820	6,111	21,775	1,411	2,531	2,235	3,679	14,990	42,007	0	0	52,480	165,812
1979	31,371	129,099	3,882	20,594	1,846	4,862	3,100	4,865	16,870	55,669	15	14	57,084	215,103
1980	32,194	131,084	2,068	11,299	3,137	8,448	3,682	5,196	21,748	70,491	47	48	62,876	226,566
1981	42,422	155,858	1,273	7,461	3,383	9,325	3,556	6,056	25,167	84,091	83	174	75,884	262,965
1982	51,741	229,568	1,434	8,088	3,722	10,105	3,864	5,780	23,818	80,939	99	169	84,678	334,649
1983	59,205	251,345	1,369	7,582	4,564	10,976	4,683	5,000	24,378	67,972	27	49	94,226	342,924
1984	77,398	320,519	1,566	8,015	6,783	16,252	6,291	7,222	21,269	53,180	195	287	113,502	405,475
1985	81,280	344,598	2,386	11,372	6,852	17,881	5,946	6,039	23,536	52,062	76	156	120,076	432,108
U.S. exports to all destinations														
1970	8,550	20,094	4,728	4,474	27,910	22,380	16,862	11,218	9,005	5,362	501	339	67,556	63,867
1971	13,900	30,688	5,169	5,331	31,432	25,611	22,439	14,484	12,878	7,122	532	317	86,350	83,553
1972	19,265	44,397	4,033	4,923	33,164	37,160	18,716	15,179	16,245	9,643	483	306	91,906	112,108
1973	32,381	92,759	3,510	4,937	32,666	48,552	17,322	17,432	22,770	17,280	1,142	1,085	109,791	182,045
1974	21,292	62,710	1,658	2,145	31,102	31,035	18,934	19,600	19,965	14,177	382	421	93,333	130,088
1975	20,364	69,348	330	726	33,532	38,945	21,334	17,020	23,598	15,196	802	849	99,960	142,084
1976	36,093	109,367	462	688	38,125	55,223	27,717	16,856	37,846	30,047	1,000	1,206	141,243	213,387
1977	40,982	120,633	517	814	37,475	52,167	29,983	18,764	43,117	45,337	960	1,072	153,034	238,787
1978	40,190	144,958	14,878	49,272	37,612	52,653	33,419	27,307	48,675	69,175	1,200	1,345	175,974	344,710
1979	45,908	190,314	11,495	51,354	31,141	71,919	27,205	32,349	49,550	94,573	500	796	165,799	441,305
1980	48,256	201,287	11,248	48,059	31,776	78,593	32,089	38,976	68,662	126,250	801	1,275	192,832	494,440
1981	62,371	247,834	12,297	52,163	29,872	70,220	31,939	38,507	83,325	142,183	475	787	220,279	551,694
1982	71,621	319,540	14,045	53,649	31,920	64,691	36,094	35,276	90,555	146,215	660	1,001	244,895	620,372
1983	80,976	340,984	12,071	50,837	32,114	54,253	45,874	42,071	86,923	120,681	993	969	258,951	609,795
1984	99,207	417,885	12,322	51,708	30,617	57,180	51,795	49,542	89,227	121,864	1,125	1,687	284,293	699,866
1985	99,922	426,895	9,604	40,284	32,070	64,129	57,569	48,841	99,072	134,147	957	1,441	299,194	715,737

Continued—

See footnotes at end of table.

Appendix table 1—U.S. beef exports to Japan and the world—Continued

Year	Beef and veal		Beef and veal, preps.		Beef tongue		Beef liver		Beef offals		Veal offals		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Share to Japan							*Percent*							
1970	5	7	1	1	0	0	0	0	1	1	0	0	1	2
1971	6	5	0	0	0	0	0	0	1	1	0	0	1	2
1972	4	5	0	0	0	0	0	0	1	1	4	8	1	2
1973	34	38	3	2	8	6	2	2	2	3	2	7	13	21
1974	28	28	2	4	2	3	1	2	3	6	0	0	8	15
1975	39	38	25	51	1	1	1	3	4	12	0	0	9	21
1976	43	39	7	17	5	6	4	5	8	18	2	3	15	24
1977	49	43	7	22	3	3	6	10	21	42	2	2	21	32
1978	69	66	41	44	4	5	7	13	31	61	0	0	30	48
1979	68	68	34	40	6	7	11	15	34	59	3	2	34	49
1980	67	65	18	24	10	11	11	13	32	56	6	4	33	46
1981	68	63	10	14	11	13	11	16	30	59	17	22	34	48
1982	72	72	10	15	12	16	11	16	26	55	15	17	35	54
1983	73	74	11	15	14	20	10	12	28	56	3	5	36	56
1984	78	77	13	16	22	28	12	15	24	44	17	17	40	58
1985	81	81	25	28	21	28	10	12	24	39	8	11	40	60
	Beef and veal		Beef and veal, preps.		Beef tongue		Beef liver		Beef offals		Veal offals		Total	
	Japan	World	Japan	World	Japan	World	Japan	World	Japan	World	Japan	World	Japan	World
Export unit values							*Dollars per ton*							
1970	3,042	2,350	1,500	946	1,000	802	478	665	607	595	—	677	2,592	945
1971	2,017	2,208	944	1,031	1,017	815	618	645	744	553	—	596	1,744	968
1972	2,920	2,330	1,000	1,221	—	1,120	—	811	714	594	1,263	634	2,424	1,220
1973	3,143	2,865	845	1,407	1,234	1,486	1,094	1,006	1,212	759	2,679	950	2,695	1,658
1974	2,948	2,945	2,189	1,294	1,480	998	1,276	1,035	1,590	710	—	1,102	2,667	1,394
1975	3,304	3,405	4,549	2,200	1,471	1,161	1,449	798	2,134	644	—	1,059	3,100	1,421
1976	2,721	3,030	3,485	1,489	1,960	1,448	731	608	1,919	794	1,824	1,206	2,447	1,511
1977	2,597	2,944	4,632	1,574	1,374	1,392	1,015	626	2,109	1,051	1,235	1,117	2,322	1,560
1978	3,455	3,607	3,563	3,312	1,794	1,400	1,646	817	2,802	1,421	—	1,121	3,160	1,959
1979	4,115	4,146	5,305	4,468	2,634	2,309	1,569	1,189	3,300	1,909	933	1,592	3,768	2,662
1980	4,072	4,171	5,464	4,273	2,693	2,473	1,411	1,215	3,241	1,839	1,021	1,592	3,603	2,564
1981	3,674	3,974	5,861	4,242	2,756	2,351	1,703	1,206	3,341	1,706	2,096	1,657	3,465	2,505
1982	4,437	4,462	5,640	3,820	2,715	2,027	1,496	977	3,398	1,615	1,707	1,517	3,952	2,532
1983	4,245	4,211	5,538	4,211	2,405	1,689	1,068	917	2,788	1,388	1,815	976	3,639	2,355
1984	4,141	4,212	5,118	4,196	2,396	1,868	1,148	957	2,500	1,366	1,472	1,500	3,572	2,462
1985	4,240	4,272	4,766	4,195	2,610	2,000	1,016	848	2,212	1,354	2,053	1,506	3,599	2,393

— = No trade.
Source: Bureau of the Census, U.S. Department of Commerce.

"Beef and veal, chilled and frozen" = 0111010, 20 for 1970-77 and 1061025, 60, 80 for 1978 and after.
"Beef and veal, prepared and preserved" = 0129010 for 1970-77 and 1073820, 40, and 1074200, 600 for 1978 and after.
"Beef tongue" = 0116005 for 1970-77 and 1068200 for 1978 and after.
"Beef liver" = 0116010 for 1970-77 and 1068400 for 1978 and after.
"Beef offals" = 0116013 for 1970-77 1068600 for 1978 and after.
"Veal offals" = 0116030 for 1970-77 and 1068800 for 1978 and after.

Appendix table 2—Japanese imports of beef and beef products

Year	Quantity				Value			
	U.S.	Australia	New Zealand	Total	U.S.	Australia	New Zealand	Total
	Metric tons				*1,000 dollars*			
*Beef and veal, fresh, chilled, and frozen (011-100, 1970-'75; 02.01-111, 119, 121, 129 1976-'85)								
1970	362	20,123	2,511	23,227	1,363	18,068	2,522	22,292
1971	507	36,959	4,004	41,572	1,286	40,689	4,118	46,236
1972	597	52,712	3,870	57,609	2,100	71,785	4,880	79,376
1973	9,527	107,271	9,464	127,224	32,151	233,173	18,883	286,084
1974	7,712	42,356	2,929	53,603	25,748	100,718	7,135	134,756
1975	3,545	37,109	3,512	44,923	15,820	51,868	6,219	75,372
1976	11,266	76,138	4,466	92,236	37,919	116,146	8,603	163,544
1977	7,264	71,934	3,858	84,390	21,391	103,158	8,881	136,096
1978	12,745	77,541	7,751	99,887	46,438	151,862	16,554	219,275
1979	23,534	100,430	3,432	129,670	95,342	290,141	11,560	405,043
1980	22,437	92,935	3,924	121,889	105,318	306,412	16,640	436,492
1981	26,464	86,952	6,143	122,432	108,722	256,985	22,677	397,294
1982	31,570	85,998	3,641	122,079	134,701	239,771	12,872	390,179
1983	37,714	90,952	7,724	137,428	144,067	272,184	25,794	444,357
1984	42,238	91,842	7,570	145,558	152,374	267,597	23,059	453,786
1985	46,514	92,925	6,955	150,580	180,377	248,297	22,820	463,623
*Meat offals of bovines, fresh, chilled and frozen, n.e.s. (02.01-139, 1976-'85)								
1976	1,423	1,103	189	3,110	2,629	1,641	316	5,230
1977	263	492	56	883	405	595	68	1,149
1978	407	724	57	1,250	706	1,081	74	1,956
1979	1,317	924	84	2,393	4,223	1,803	152	6,291
1980	1,433	772	71	2,356	4,492	1,372	116	6,185
1981	1,325	198	12	1,544	5,099	381	20	5,517
1982	876	195	7	1,078	3,284	354	13	3,651
1983	444	169	16	629	1,503	319	28	1,851
1984	39	192	6	237	141	307	9	457
1985	183	265	0	461	650	322	20	991
Internal organs and tongue of bovines, fresh, chilled or frozen (011-610, 1970-'75; 2.01-131, 1976-'85)								
1970	29	1,530	1,001	2,560	21	1,211	799	2,031
1971	102	2,553	1,256	3,950	77	2,283	1,031	3,430
1972	0	3,398	1,563	4,986	0	3,667	1,452	5,128
1973	2,928	4,703	1,897	10,199	6,367	8,216	2,911	19,000
1974	952	3,236	1,672	5,942	1,396	4,061	2,110	7,711
1975	3,204	6,538	2,515	13,211	6,003	9,142	3,096	19,978
1976	7,854	9,302	3,673	21,866	13,974	13,661	4,952	34,457
1977	21,203	11,042	3,563	37,953	47,748	19,657	5,702	77,381
1978	32,991	11,077	3,520	50,400	108,084	25,012	6,516	146,800
1979	30,030	9,772	3,320	46,084	114,997	27,294	7,850	159,930
1980	35,267	8,704	2,980	49,466	127,410	25,401	8,586	170,097
1981	39,686	7,190	2,960	52,338	151,560	19,191	7,271	187,410
1982	43,291	6,520	2,524	55,315	176,785	21,120	7,522	218,102
1983	50,301	5,715	2,847	61,324	157,670	12,774	5,905	183,463
1984	54,501	5,337	2,533	65,057	186,525	13,626	5,525	193,160
1985	60,970	5,891	2,752	74,291	234,534	17,317	6,674	274,743

Continued—

Appendix table 2—Japanese imports of beef and beef products—Continued

Year	Quantity				Value			
	U.S.	Australia	New Zealand	Total	U.S.	Australia	New Zealand	Total
	Metric tons				*1,000 dollars*			
Meat of bovines, salted in brine, dried or smoked; n.e.s. (012-930, 1970-'75; 2.06-230, 1976-'85)								
1972	2	0	0	3	6	0	0	8
1973	11	270	1	476	41	701	2	1,099
1974	32	205	0	660	125	393	0	1,269
1975	64	1,548	12	1,624	296	1,785	17	2,098
1976	266	1,623	16	1,921	1,427	2,459	24	4,031
1977	262	2,313	12	2,646	1,392	3,829	21	5,707
1978	393	2,570	269	3,328	2,788	5,459	533	8,938
1979	847	2,480	363	4,752	6,746	8,348	1,310	22,582
1980	428	1,622	169	3,131	3,039	6,901	519	15,551
1981	421	1,856	253	2,683	3,025	8,150	1,194	13,034
1982	569	1,951	156	2,693	3,445	7,870	501	11,973
1983	526	1,520	236	2,410	3,193	5,889	938	11,349
1984	781	1,725	203	2,897	4,705	7,071	1,148	14,412
1985	432	1,367	350	2,327	2,471	4,897	1,627	10,301
***Corned beef, in airtight containers (013-811, 1970-'75; 16.02-221, 1976-'84; 16.02-231, '85)**								
1970	49	43	1	403	77	54	1	527
1971	3	0	2	137	5	0	3	246
1972	2	6	2	276	4	9	4	530
1973	78	13	1	572	119	18	2	1,096
1974	32	17	0	525	70	45	1	1,417
1975	37	38	0	363	53	61	0	1,021
1976	15	12	0	616	35	248	0	1,685
1977	5	77	0	719	8	168	0	2,033
1978	4	82	0	679	13	226	0	1,970
1979	7	65	0	734	20	221	0	2,481
1980	5	41	3	674	37	156	12	2,788
1981	0	45	2	687	1	191	11	2,732
1982	0	22	2	572	0	88	7	2,297
1983	0	13	1	453	0	41	5	1,619
1984	0	13	2	528	0	42	9	1,851
1985	14	6	43	495	49	17	237	1,643
***Preserved meat or meat offals of bovines, in airtight containers, n.e.s. (013-819, 1970-'75; 16.02-222, 1976-'84; 16.02-232, '85)**								
1970	53	2	0	185	55	1	0	227
1971	36	3	0	82	42	3	0	103
1972	10	139	0	214	13	109	0	219
1973	101	921	0	1,078	124	873	0	1,056
1974	199	780	0	1,049	267	975	0	1,349
1975	111	951	0	1,104	152	1,100	0	1,397
1976	93	992	0	1,288	170	1,251	0	1,799
1977	181	1,115	0	1,415	377	1,458	0	2,106
1978	220	1,296	0	1,859	533	2,062	0	3,395
1979	224	1,043	0	1,522	512	2,024	0	[illegible]
1980	248	861	0	1,294	717	1,760	0	[illegible]
1981	225	773	0	1,202	666	1,491	0	2,685
1982	376	876	0	1,335	867	1,657	0	2,758
1983	223	659	0	1,023	520	1,189	0	2,092
1984	262	549	0	1,007	616	997	0	2,183
1985	205	502	0	769	391	858	0	1,389

—Continued—

Appendix table 2—Japanese imports of beef and beef products—Continued

Year	Quantity				Value			
	U.S.	Australia	New Zealand	Total	U.S.	Australia	New Zealand	Total
	Metric tons				*1,000 dollars*			
*Preserved meat or meat offals of bovines, simply boiled in water (16.02-223, 1976-'84; 16.02-233, '85)								
1976	0	1,878	0	2,299	0	3,235	0	4,274
1977	20	3,550	0	3,805	81	6,944	0	7,637
1978	290	5,109	0	5,535	807	11,496	0	12,627
1979	89	6,226	0	6,328	313	22,097	0	22,466
1980	37	3,860	1	3,898	167	15,059	5	15,231
1981	10	3,904	57	3,993	45	15,936	270	16,348
1982	10	4,240	116	4,367	32	13,853	517	14,405
1983	0	4,292	89	4,382	0	14,115	365	14,484
1984	2	3,969	167	4,138	14	12,307	688	13,008
1985	0	3,915	78	4,053	0	10,886	285	11,418
*Preserved meat or meat offals of bovines, n.e.s. (16.02-224, 1976-'84; 16.02-234, '85)								
1976	179	104	0	298	744	183	0	953
1977	495	128	0	633	1,943	278	0	2,248
1978	880	79	2	978	4,242	189	11	4,518
1979	995	40	1	1,054	7,065	96	4	7,306
1980	801	37	3	1,291	6,525	141	10	7,469
1981	1,145	93	2	1,243	9,212	329	4	9,564
1982	1,645	114	0	1,778	14,000	399	0	14,483
1983	1,646	259	15	1,921	13,292	940	66	14,300
1984	1,710	276	19	2,049	14,357	1,160	80	15,639
1985	1,498	341	43	1,881	12,244	1,182	203	13,636
Total beef and beef products								
1970	493	21,698	3,513	26,375	1,516	19,334	3,322	25,077
1971	648	39,515	5,262	45,741	1,410	42,975	5,152	50,015
1972	611	56,255	5,455	63,098	2,123	75,570	6,336	85,261
1973	12,645	113,178	11,363	139,549	38,802	242,961	21,798	308,335
1974	8,927	46,594	4,601	61,779	27,606	106,192	9,246	146,502
1975	6,961	46,184	6,039	61,225	22,324	63,956	9,332	99,806
1976	21,096	91,261	8,344	123,634	56,898	138,824	13,895	215,973
1977	29,693	90,651	7,489	132,444	73,345	136,087	14,672	234,357
1978	47,930	98,478	11,599	163,916	163,611	197,387	23,688	399,479
1979	57,043	120,980	7,200	192,537	229,218	352,024	20,876	629,192
1980	60,656	108,832	7,150	183,999	247,705	357,202	25,888	656,788
1981	69,276	101,011	9,329	186,122	278,330	302,654	31,447	634,584
1982	78,337	99,916	6,446	189,217	333,114	285,112	21,432	657,848
1983	90,854	103,579	10,928	209,570	320,245	307,451	33,101	673,515
1984	99,533	103,903	10,506	221,471	338,732	303,107	30,518	694,496
1985	109,816	105,222	10,226	234,857	430,716	283,776	31,866	777,744

*Categories under import quota restrictions.

[1]Commodity classified for 1970-75 according to the Commodity Classification for Foreign Trade Statistics (CCFTS) and for 1976-85 according to the Customs Cooperation Council Nomenclature (CCCN).

Source: Government of Japan, Ministry of Finance, *Japan Exports and Imports, Commodity by Country*, various December issues.

Appendix table 3—Japan's supply and distribution of beef

Japan fiscal year	Domestic production	Imports	Changes in stocks	Supplies for domestic consumption	Waste	Gross food	Net food	Annual per capita consumption	Population	Self-sufficiency
	1,000 tons							Kg	1,000	Percent
1960	141	6	0	147	3	144	104	1.11	93,419	96
1961	141	6	0	147	3	144	104	1.10	94,287	96
1962	153	4	0	157	3	154	111	1.16	95,181	97
1963	198	5	0	203	4	199	143	1.49	96,156	98
1964	229	6	0	235	5	230	166	1.70	97,182	97
1965	196	11	0	207	4	203	146	1.49	98,275	95
1966	153	14	0	167	3	164	118	1.19	99,036	92
1967	160	20	0	180	4	176	127	1.26	100,196	89
1968	188	19	0	207	4	203	146	1.44	101,331	91
1969	250	23	0	273	5	268	193	1.88	102,536	92
1970	282	33	0	315	6	309	222	2.15	103,720	90
1971	302	62	0	364	7	357	257	2.44	105,145	83
1972	310	77	0	357	8	379	273	2.54	107,595	80
1973	236	170	28	378	8	370	266	2.44	109,104	62
1974	354	40	−18	412	8	404	283	2.63	110,573	86
1975	335	91	11	415	8	407	285	2.55	111,940	81
1976	309	134	−7	450	9	441	309	2.73	113,094	69
1977	371	132	6	497	10	487	341	2.99	114,165	75
1978	406	146	−3	555	11	544	381	3.31	115,190	73
1979	400	189	13	576	12	564	395	3.40	116,155	69
1980	431	172	6	597	12	585	410	3.50	117,060	72
1981	476	172	16	632	13	619	433	3.68	117,884	75
1982	483	198	0	681	14	667	467	3.93	118,693	71
1983	505	208	−11	724	14	710	497	4.16	119,483	70

Sources: Japanese Ministry of Agriculture, Forestry, and Fisheries, *Statistical Yearbook,* annual issues.

Appendix table 4—Japan's beef import quotas

Japan fiscal year	Grand total	General			Special				
		Total	LIPC	Private	Hotel	School lunch	Okinawa	Boiled and canned beef	Demand development
	Metric tons								
1960	4,200	4,200	—	4,200	—	—	—	—	—
1961	3,000	3,000	—	3,000	—	—	—	—	—
1962	3,000	3,000	—	3,000	—	—	—	—	—
1963	5,000	5,000	—	5,000	—	—	—	—	—
1964	3,000	3,000	—	3,000	—	—	—	—	—
1965	10,100	10,100	600	9,500	—	—	—	—	—
1966	10,000	10,000	5,000	5,000	—	—	—	—	—
1967	19,000	19,000	6,000	13,000	—	—	—	—	—
1968	21,438	20,738	2,738	18,000	—	—	—	700	—
1969	23,200	22,000	5,000	17,000	500	—	—	700	—
1970	25,400	24,200	12,000	12,200	500	—	—	700	—
1971	37,200	36,000	22,000	14,000	500	—	—	700	—
1972	77,830	71,500	57,500	14,000	1,000	—	4,330	1,000	—
1973	169,455	160,000	146,000	14,000	1,000	—	6,455	2,000	—
1974	5,650	0	0	0	0	—	5,650	0	—
1975	85,000	75,000	69,900	5,100	1,000	1,000	5,500	2,500	—
1976	96,500	80,000	71,000	9,000	1,000	3,000	5,500	7,000	—
1977	92,500	80,000	73,000	7,000	2,000	2,200	5,200	3,100	—
1978	112,000	95,000	86,500	8,500	3,000	3,000	5,600	5,400	—
1979	134,500	116,500	105,600	10,900	3,000	2,500	5,800	6,700	—
1980	134,800	119,000	106,800	12,200	3,000	2,250	5,850	4,700	—
1981	126,800	111,000	99,900	11,100	3,000	2,250	5,850	4,700	—
1982	135,000	119,200	107,280	11,920	3,000	2,250	5,850	4,700	—
1983	141,000	125,200	112,680	12,520	3,000	2,250	5,850	4,700	—
1984	150,000	133,200	119,880	13,320	4,000	2,250	5,850	4,700	—
1985	159,000	141,400	127,260	14,140	4,000	2,250	5,850	4,700	800

Sources: *(11)* and Foreign Agricultural Service, USDA.

Appendix table 5—U.S. exports of citrus products to Japan and the world

Year	Fresh citrus										Citrus juices				Total citrus products
	Oranges and tangerines		Grapefruit		Lemons and limes		Other citrus		Total fresh citrus		Orange	Grape-fruit	Other	Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value					
	Metric tons	*$1,000*	*Metric tons*	*$1,000*	*Metric tons*	*$1,000*	*Metric tons*	*$1,000*	*Metric tons*	*$1,000*	*$1,000*				
U.S. exports to Japan															
1970	4,393	873	2,117	541	52,379	13,063	0	0	58,889	14,477	412	94	4	510	14,987
1971	7,441	1,561	12,966	3,194	63,152	14,841	10	7	83,569	19,599	174	195	1	370	19,969
1972	16,120	3,368	93,635	22,420	78,110	19,856	23	7	187,888	45,651	569	237	0	806	46,457
1973	18,573	4,272	99,523	22,534	94,410	24,850	103	36	212,609	51,692	413	412	0	825	52,517
1974	18,286	4,302	141,596	32,030	91,208	30,842	66	70	251,156	67,244	1,020	433	0	1,453	68,697
1975	22,427	7,732	143,379	33,136	76,397	45,202	1	1	242,204	86,071	599	514	12	1,125	87,196
1976	25,196	8,130	144,091	30,915	96,951	51,266	153	31	266,391	90,342	1,135	687	27	1,849	92,191
1977	22,990	7,639	148,992	35,581	104,904	40,920	16	4	276,902	84,64	1,628	873	65	2,566	86,630
1978	49,151	22,410	131,963	36,227	120,684	67,781	1,608	1,052	303,406	127,470	1,826	1,634	1,960	5,420	132,890
1979	55,612	29,023	142,189	46,626	101,032	83,941	787	785	299,620	160,375	2,434	2,614	2,382	7,430	167,805
1980	70,796	27,803	128,992	45,606	101,678	63,412	341	173	301,807	137,194	1,400	3,936	2,297	7,633	144,827
1981	76,821	44,449	159,366	59,104	116,876	66,348	437	315	353,500	170,216	1,152	7,763	1,447	10,362	180,578
1982	63,010	51,300	139,792	47,340	107,304	69,061	43	35	330,149	167,736	1,255	4,666	1,840	7,961	175,697
1983	89,762	51,857	166,545	59,688	120,211	74,231	108	69	376,646	185,825	1,662	4,888	1,455	8,005	193,830
1984	87,267	61,977	144,714	51,362	120,129	80,447	1,611	1,176	353,741	194,962	2,359	8,611	2,702	13,672	208,634
1985	108,128	73,317	107,686	51,506	109,760	77,146	1,127	647	326,701	202,616	3,208	11,434	3,786	18,428	221,044
U.S. exports to all destinations															
1970	265,750	52,718	102,769	15,061	128,442	29,311	268	108	497,229	97,198	17,046	10,732	671	28,449	125,647
1971	256,594	53,761	99,346	16,521	136,713	32,643	264	69	492,917	103,014	15,446	10,017	592	26,055	129,069
1972	302,454	61,743	188,143	38,165	156,566	36,594	208	60	647,371	138,562	42,477	10,252	715	53,444	192,006
1973	291,466	65,224	193,567	38,934	201,109	53,071	471	172	686,613	157,401	51,225	11,401	688	63,314	220,715
1974	327,333	79,404	225,399	48,273	202,347	58,934	225	164	755,304	186,775	56,659	10,346	654	67,659	254,434
1975	480,904	117,576	251,478	58,145	183,277	74,722	367	128	916,026	250,571	67,402	11,195	959	79,556	330,127
1976	461,145	118,027	290,523	64,137	225,415	64,708	1,067	370	978,150	267,242	77,487	12,535	876	90,898	358,140
1977	410,141	120,407	266,577	63,643	236,033	75,048	486	172	913,237	259,270	93,767	16,694	937	111,398	370,668
1978	355,818	143,924	270,502	68,904	236,714	103,318	37,838	15,972	900,872	332,118	98,781	18,592	11,400	128,773	460,891
1979	317,645	149,737	272,321	84,755	173,363	116,019	10,302	5,164	773,631	355,675	112,076	24,006	12,814	148,896	504,571
1980	481,385	183,987	287,508	99,370	171,270	95,112	9,441	3,881	949,604	382,350	131,196	31,468	13,539	176,203	558,553
1981	442,668	210,500	291,232	109,623	176,086	92,421	8,909	4,377	918,906	416,921	140,551	31,602	19,546	191,699	608,620
1982	352,644	196,208	260,886	98,420	134,578	83,873	6,616	4,042	754,724	382,543	127,218	25,902	21,499	174,619	557,162
1983	496,524	235,073	307,128	117,269	162,880	94,626	6,091	3,813	972,623	450,781	128,262	20,408	19,745	168,415	619,196
1984	373,480	214,542	247,955	91,541	147,733	94,308	7,486	5,006	776,654	405,397	129,185	24,920	18,503	172,608	578,005
1985	411,302	241,665	204,262	92,431	143,304	93,716	7,191	4,762	766,059	432,574	97,730	24,532	18,804	141,066	573,640
Share to Japan								*Percent*							
1970	2	2	2	4	41	45	0	0	12	15	2	1	1	2	12
1971	3	3	13	19	46	45	4	4	17	19	1	2	0	1	15
1972	5	5	50	59	50	51	11	12	29	33	1	2	0	2	24
1973	6	7	51	58	47	47	22	21	31	33	1	4	0	1	24
1974	6	5	63	66	45	52	29	43	33	36	2	4	0	2	27
1975	5	7	57	57	42	60	0	1	26	34	1	5	1	1	26
1976	5	7	50	48	43	61	14	8	27	34	1	5	3	2	26
1977	6	6	56	56	44	55	3	2	30	32	2	5	7	2	23
1978	14	16	49	53	51	66	4	7	34	38	2	9	17	4	29
1979	18	19	52	55	58	72	8	15	39	45	2	11	19	5	33
1980	15	15	45	46	59	67	4	4	32	36	1	13	17	4	26
1981	17	21	55	54	66	72	8	15	39	45	2	11	19	5	33
1982	24	26	54	48	80	82	1	1	44	44	1	19	9	5	32
1983	18	22	55	51	74	78	2	2	39	41	1	24	7	5	31
1984	23	29	58	56	81	85	22	23	46	48	2	35	15	8	36
1985	26	30	53	56	77	82	16	14	43	47	3	47	20	13	39

Source: U.S. Department of Commerce, Bureau of the Census.

Appendix table 6—Japanese imports of fresh citrus by source

Japan fiscal year	Quantity					Value				
	United States	Taiwan	S. Africa	Other	Total	United States	Taiwan	S. Africa	Other	Total
	Metric tons					*$1,000*				
Fresh oranges (8.02-200)										
1970	4,088	0	266	652	5,006	1,373	0	72	421	1,866
1971	4,840	0	2,073	1,006	7,919	1,751	0	672	425	2,848
1972	12,486	779	976	17	14,258	4,255	372	314	4	4,945
1973	15,258	1,374	798	366	17,796	6,207	786	280	128	7,401
1974	18,631	1,447	1,461	345	21,884	7,697	993	634	135	9,459
1975	20,222	683	1,052	842	22,799	10,135	490	478	386	11,489
1976	24,388	981	0	0	25,369	11,810	700	0	0	12,510
1977	22,290	386	0	0	22,676	11,400	257	0	0	11,657
1978	50,898	595	0	0	51,493	35,176	566	0	0	35,742
1979	53,414	509	0	427	54,350	43,252	600	0	335	44,187
1980	71,150	470	140	53	71,813	42,208	596	85	43	42,932
1981	75,249	270	98	67	75,684	63,844	381	108	55	64,388
1982	82,284	270	62	42	82,658	74,936	368	58	35	75,397
1983	89,048	13	0	129	89,190	62,437	16	0	97	62,550
1984	88,465	0	152	504	89,121	81,660	0	127	490	82,277
1985	110,462	0	0	1,173	111,635	90,201	0	0	984	91,185
	United States	Israel	Swaziland	Other	Total	United States	Israel	Swaziland	Other	Total
Fresh grapefruit (8.02-300)										
1970	2,265	0	0	0	2,265	822	0	0	0	822
1971	10,883	0	0	467	11,350	4,417	0	0	151	4,568
1972	88,507	0	0	2,926	91,433	32,567	0	0	805	33,372
1973	105,230	3,568	0	897	109,695	33,637	966	0	321	34,924
1974	142,869	5,782	0	2,768	151,439	47,795	1,812	0	1,401	51,008
1975	131,845	11,931	1,299	1,627	146,702	53,511	4,735	648	935	59,829
1976	139,871	6,270	3,717	1,899	151,757	55,776	2,456	1,500	947	60,679
1977	146,960	9,218	4,648	416	161,242	66,870	3,722	2,399	204	73,195
1978	129,117	6,355	2,788	3,894	142,154	62,874	2,783	1,776	2,745	70,178
1979	146,702	5,706	4,943	2,057	159,408	81,123	2,689	2,663	1,452	87,927
1980	126,477	3,920	2,992	1,824	135,213	73,228	2,053	1,747	1,463	78,491
1981	156,816	4,201	4,312	1,605	166,934	103,594	2,695	2,880	1,653	110,822
1982	140,541	8,708	3,575	880	153,704	89,319	5,532	2,073	591	97,515
1983	166,635	6,167	0	4,487	177,289	99,118	3,231	0	1,945	104,294
1984	149,884	6,337	0	1,666	157,887	86,609	2,040	0	817	89,466
1985	110,996	6,562	1,927	1,319	120,804	72,996	3,884	891	806	78,577

—Continued—

Appendix table 6—Japanese imports of fresh citrus by source—Continued

Japan fiscal year	Quantity			Value		
	United States	Other	Total	United States	Other	Total
	Metric tons			*$1,000*		
Lemons and limes (8.02-100)						
1970	54,044	0	54,044	24,131	0	24,131
1971	62,176	107	62,283	30,282	9,041	39,323
1972	78,624	35	78,659	37,858	16	37,874
1973	91,114	154	91,268	46,107	76	46,183
1974	92,944	32	92,976	56,651	15	56,666
1975	63,805	246	64,051	49,459	170	49,629
1976	92,768	0	92,768	51,675	1	51,676
1977	104,663	21	104,684	57,280	21	57,301
1978	116,892	53	116,945	82,725	49	82,774
1979	99,810	184	99,994	104,720	192	104,912
1980	100,351	340	100,691	82,456	359	82,815
1981	112,083	445	112,528	85,126	633	85,759
1982	103,641	960	104,601	82,718	1,076	83,794
1983	118,158	1,397	119,555	82,252	1,790	84,042
1984	121,200	1,438	122,638	89,832	1,286	91,118
1985	111,901	2,023	113,924	97,623	3,068	100,691
	United States	Other	Total	United States	Other	Total
Total fresh citrus						
1970	60,397	918	61,315	26,326	493	26,819
1971	77,899	3,653	81,552	36,450	10,289	46,739
1972	179,617	4,733	184,350	74,680	1,511	76,191
1973	211,602	7,157	218,759	85,951	2,557	88,508
1974	254,464	11,835	266,299	112,143	4,990	117,133
1975	215,872	17,680	233,552	113,105	7,842	120,947
1976	257,027	12,867	269,894	119,261	5,604	124,865
1977	273,913	14,689	288,602	135,550	6,603	142,153
1978	296,907	13,684	310,591	180,775	7,919	188,694
1979	299,926	13,826	313,752	229,095	7,931	237,026
1980	297,978	9,739	307,717	197,892	6,346	204,238
1981	344,148	10,998	355,146	252,564	8,407	260,969
1982	326,466	14,497	340,963	246,973	9,733	256,706
1983	373,841	12,193	386,034	243,807	7,079	250,886
1984	359,549	10,097	369,646	258,101	4,760	262,861
1985	333,359	13,004	346,363	260,820	9,633	270,452

Numbers in parentheses refer to the Customs Cooperation Council Nomenclature (CCCN) used by the Japanese since 1975.
Source: Government of Japan, Ministry of Finance, *Japan Exports and Imports, Commodity by Country*, various December issues.

Appendix table 7—Japanese imports of juices and fruit drink and the U.S. share

Japan fiscal year	Orange juice	Grape-fruit juice	Lemon & lime juice	Other citrus juice	Grape juice	Pine-apple juice	Other fruit juice	Tomato juice	Other vege-table juice	Other mixed fruit or vege-table	Total juice	Fruit drink	Juice under quota	Citrus juice under quota
							1,000 dollars							
From all sources														
1970	425	NA	0	NA	58	672	375	97	433	NA	2,167	67	2,061	425
1971	174	NA	0	NA	772	598	333	37	795	NA	3,271	37	2,709	174
1972	591	NA	0	NA	1,442	165	673	132	2,587	NA	6,360	205	5,591	591
1973	210	NA	0	NA	1,148	41	668	273	1,930	NA	5,705	727	4,259	210
1974	551	NA	0	NA	1,986	79	1,582	257	4,140	NA	9,634	1,301	8,596	551
1975	414	NA	0	NA	1,438	54	2,758	182	505	NA	6,394	1,236	5,350	414
1976	1,303	414	1,751	7	892	84	1,845	84	13	2,172	8,566	569	6,815	1,724
1977	1,531	716	1,576	0	2,679	107	996	122	4	1,362	9,092	664	7,517	2,247
1978	2,652	1,371	2,271	0	1,686	86	1,000	276	0	2,210	11,752	2,281	9,481	4,024
1979	5,785	2,146	2,922	5	2,913	137	7,132	466	9	2,712	24,226	8,973	21,306	7,936
1980	4,564	3,286	4,031	44	3,634	163	8,225	427	31	1,947	26,352	8,062	22,322	7,894
1981	6,765	7,023	3,244	18	5,502	154	2,710	281	5	1,213	26,914	8,090	23,670	13,805
1982	8,257	5,466	3,345	0	8,430	133	2,213	217	4	831	28,896	8,920	25,550	13,723
1983	7,987	4,765	3,992	34	7,483	205	3,576	143	25	1,00	29,210	6,483	25,218	12,786
1984	7,332	8,248	8,324	8	6,912	160	3,891	80	4	966	35,924	6,718	27,601	15,538
1985	40,590	12,075	8,159	13	8,176	172	11,544	134	25	1,105	81,992	7,527	73,833	52,678
From the United States														
1970	417	NA	0	NA	44	19	169	86	433	NA	1,258	31	1,169	417
1971	171	NA	0	NA	242	3	202	34	792	NA	1,923	23	1,444	171
1972	492	NA	0	NA	558	3	373	132	2,568	NA	4,703	135	4,125	492
1973	199	NA	0	NA	370	0	387	240	1,911	NA	4,734	251	3,708	199
1974	455	NA	0	NA	1,712	55	1,045	199	4,086	NA	8,428	531	7,562	455
1975	387	NA	0	NA	1,047	0	1,492	141	502	NA	4,323	354	3,569	387
1976	1,051	374	1,259	0	672	3	899	81	0	2,172	6,710	158	5,451	1,424
1977	1,295	594	1,151	0	2,661	18	952	103	0	1,362	8,137	203	6,985	1,889
1978	1,724	1,290	1,452	0	1,267	0	914	262	0	2,200	9,110	614	7,657	3,014
1979	2,292	2,041	1,845	0	2,822	9	831	457	0	2,712	13,009	4,566	11,164	4,333
1980	1,335	3,115	1,758	0	3,498	9	1,493	423	0	1,947	13,577	4,145	11,619	4,449
1981	1,077	6,552	1,448	0	5,457	23	1,385	281	0	1,213	17,434	5,421	15,986	7,629
1982	1,028	5,257	1,506	0	8,137	20	639	217	4	827	17,635	5,394	16,129	6,285
1983	2,029	4,542	1,483	29	7,172	38	2,525	143	4	983	18,950	2,290	17,466	6,601
1984	2,143	7,454	2,790	4	6,563	17	3,029	76	0	954	23,029	1,824	20,239	9,601
1985	3,460	10,109	2,117	8	7,745	29	5,590	71	25	1,079	30,234	2,372	28,117	13,577
							Percent							
The U.S. share														
1970	98	NA	0	NA	76	3	45	89	100	NA	58	46	57	98
1971	98	NA	0	NA	31	0	61	92	100	NA	59	62	53	98
1972	83	NA	0	NA	39	2	55	100	99	NA	74	66	74	83
1973	95	NA	0	NA	85	0	58	88	99	NA	83	35	87	95
1974	83	NA	0	NA	86	69	66	77	99	NA	87	41	88	83
1975	93	NA	0	NA	73	0	54	78	99	NA	68	29	67	93
1976	81	90	72	0	98	4	49	96	0	100	78	28	80	83
1977	85	83	73	0	99	17	96	85	0	100	89	31	93	84
1978	65	94	64	0	67	0	91	95	0	100	78	27	81	75
1979	40	95	63	0	97	7	12	98	0	100	54	51	52	55
1980	29	95	44	0	96	5	18	99	0	100	52	51	53	56
1981	16	93	45	0	99	15	51	100	0	100	65	67	68	55
1982	12	96	45	0	97	15	29	100	100	100	61	60	63	46
1983	25	95	37	88	96	100	71	100	17	98	65	35	69	52
1984	29	90	34	50	95	11	78	95	0	99	64	27	73	62
1985	9	84	26	67	95	17	48	53	100	98	37	32	38	26

NA = Not available.

Source: Government of Japan, Ministry of Finance, *Japan Exports and Imports, Commodity by Country*, various December issues.

Appendix table 8—Japan's supply and distribution of oranges and mandarins*

Item	Unit	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Planted area:																
Mandarins	1,000 ha	163.1	167.1	171.2	173.0	172.4	169.4	163.9	158.6	153.2	147.5	139.6	132.6	125.9	120.7	116.0
Total citrus	1,000 ha	188.0	192.2	196.4	198.8	198.4	195.9	192.1	187.7	183.9	180.7	176.1	171.1	165.7	160.3	156.5
Yield:																
Mandarins	Tons/ha	15.65	14.89	20.84	19.59	19.62	21.64	18.85	22.31	19.75	24.53	20.72	26.26	22.75	23.69	18.85
Average, all citrus	Tons/ha	15.93	15.07	20.72	19.44	19.92	21.61	18.63	21.96	19.75	23.86	19.78	20.26	21.88	22.61	18.93
Production:																
Mandarins	1,000 tons	2,552	2,488	3,568	3,389	3,383	3,665	3,089	3,539	3,026	3,618	2,892	2,819	2,864	2,859	2,187
Total citrus	Do.	2994.3	2896.7	4059.7	3864.8	3952.7	4233	3578.2	4121.7	3632.9	4311.1	3483.2	3466.1	3624.7	3,624	2,962
Domestic production marketed:																
Fresh	Do.	2544.3	2460.1	3383.7	3102.8	3351.5	3399.6	2703.4	3102.9	3793.7	2985.8	2573.2	2028.3	2,834	2,826	2,356
Juice	Do.	193	220	385	455	415	606	623.4	766.8	631.2	1030.8	608	367	515	522	368
Other	Do.	257	216.6	301	307	186.2	227.4	251.4	252	208	294.5	302	270.8	375.7	276	238
Imports:																
Fresh	Do.	5	7.9	14.3	17.8	21.9	22.8	25.4	22.7	51.5	54.4	71.8	75.7	82.7	89.2	89.1
Juice	Do.	9	4	9	5	9	6	12	11	15	39	30	46	51	55	60
Exports:																
Fresh	Do.	24.6	26.3	21.4	24	23.2	18.7	19.9	20.9	14.1	15.5	18.1	21.1	23.6	25.5	24.8
Canned	Do.	98	123.5	89.5	105.4	99.3	83.8	85	62	63.6	38.3	56	47.6	41.7	42.2	40.3
Domestic utilization:																
Fresh	Do.	2524.7	2441.7	3376.6	3096.6	3350.2	3403.7	2708.9	3104.7	2831.1	3024.7	2626.9	2882.9	2893.1	2889.7	2420.3
Juice	Do.	202	224	394	460	424	612	635.4	777.8	646.2	1069.8	638	413	566	577	428
Other	Do.	159	93.1	211.5	201.6	86.9	143.6	166.4	190	144.4	256.2	246	223.2	234	233.8	197.7
Total	Do.	2885.7	2758.8	3982.1	3758.2	3861.1	4159.3	3510.7	4072.5	3621.7	4350.7	3510.9	3519.1	3693.1	3700.5	3,046
Annual per capita consumption	Kg	27.82	26.24	37.01	34.45	34.92	37.16	31.04	35.67	31.44	37.46	29.99	29.85	31.11	30.97	25.29
Total fresh	Kg	24.34	25.22	31.38	28.38	30.30	30.41	23.95	27.19	24.58	26.04	22.44	24.46	24.37	24.19	20.10
Imported	Kg	.05	.08	.13	.16	.20	.20	.22	.20	.45	.47	.61	.64	.70	.75	.74
Total processed	Kg	3.48	3.02	5.63	6.06	4.62	6.75	7.09	8.48	6.86	11.42	7.55	5.40	6.74	6.79	5.20
Self-sufficiency	Percent	103.76	105.00	102.20	102.84	102.37	101.77	101.92	101.21	100.31	99.09	99.21	98.49	98.15	97.93	97.24

*Fresh fruit basis.

[1]Does not account for exports of mandarin fruit drink (CCCN #22.02-011). Although export levels for this product are significant (about $58 million in 1984), it is assumed that the fresh mandarin content of fruit drink is small.

Sources: Foreign Agricultural Service attache reports; Ministry of Finance, *Japan Exports and Imports, Commodity by Country*, various issues; and Horticultural and Tropical Products Division, FAS, *Citrus in Japan*, Oct. 1982.

Appendix table 9—Japan's imports of selected quota items

Item and CCCN No.[1]		1981		1982		1983		1984		1985	
		Total	From U.S.	Total	From U.S.	Total	From U.S.	Total	From U.S.	Total	From U.S.
		Million yen									
Dried leguminous vegetables:											
Small red beans	0705-100	11,911	28	11,606	37	4,500	64	6,404	50	588	22
Broad beans	-210	2,221	9	1,759	20	1,793	33	1,258	0	1,431	0
Dried peas	-220	2,529	491	2,033	427	2,470	525	1,504	401	1,657	500
French beans	-410	7,967	4,593	5,629	3,455	4,183	2,289	4,559	2,833	4,356	2,775
Pegin beans	-420	1,564	0	2,072	0	1,760	0	1,320	0	1,356	0
Not elsewhere specified	-490	996	118	739	94	463	45	487	18	359	6
Groundnuts	1201-290	18,828	2,176	12,745	4,296	13,176	5,661	17,085	6,779	13,039	5,197
Meat of pigs; prep., pres.	1602-225	2,961	93	3,061	68	2,985	44	2,869	34	3,011	57
	-226	144	1	175	2	188	5	514	12	1,289	19
Corned beef	1602-221	604	0	533	0	385	0	440	0	393	0
Other sugars and syrups	1702-429	0	0	0	0	0	0	0	0	0	0
	-823	0	0	0	0	0	0	0	0	0	0
Hi-test molasses	-824	0	0	0	0	0	0	585	0	848	0
Fruit purees and paste	2005-130	28	3	62	10	85	5	59	6	93	5
	-210	262	74	241	25	236	60	204	41	265	42
Fruit pulp	2006	229	83	741	112	675	107	670	145	753	235
Canned pineapple	2006-111	3,365	105	4,069	109	3,282	95	4,395	123	4,068	105
	-119	0	0	0	0	0	0	0	0	0	0
	-210	107	0	123	0	64	3	152	9	265	42
Tomato juice	2007-211	0	0	0	0	0	0	0	0	0	0
	-221	62	62	54	54	34	34	19	18	32	17
Noncitrus fruit juice	2007	1,941	1,609	2,786	2,293	2,786	2,418	2,757	2,432	4,910	3,353
Tomato ketchup and sauce	2104-111	392	336	338	266	256	213	293	240	292	225
	-112	71	71	92	92	134	128	102	101	88	88
Other food preps. w/sugar	2107-219	298	55	651	52	497	56	403	70	881	103
Starch and inulin	1108	6,824	9	7,442	9	6,239	7	8,271	9	8,687	4
Preps. consisting of milk	2107-239	7,299	2,154	6,347	2,646	7,496	2,360	6,987	2,925	6,739	2,865
Total		70,603	12,070	63,298	14,067	53,687	14,152	61,337	16,246	55,400	15,666
(U.S. share of total)			17%		22%		26%		26%		28%
		Million dollars									
Total		319	55	254	56	226	59	258	68	232	66

[1]Customs Cooperation Council Nomenclature.
Source: Government of Japan, Ministry of Finance, *Japan Exports and Imports, Commodity by Country*, various December issues.

Appendix table 10—Japanese tariffs on beef and citrus products

Item and CCCN[1]		1979	1985	1987[2]
		Percent		
Beef and veal:				
Fresh, chilled, and frozen	02.01-111,119,121,129	25	25	25
Internal organs and tongue of bovine	02.01-131	25	15	15
Meat offals of bovine	02.01-139	25	25	25
Meat of bovine, salted in brine, dried or smoked, n.e.s	02.06-230	190 Y/kg.	190 Y/kg.	190 Y/kg.
Corned beef	16.02-221 (-231)[3]	25	25	25
Preserved meat or meat offals of bovine, in airtight containers, n.e.s.	16.02-222 (-232)[3]	25	25	25
Preserved meat or meat offals of bovine, simply boiled in water, n.e.s.	16.02-223 (-233)[3]	25	25	25
Preserved meat or meat offals of bovine, n.e.s.	16.01-224 (-234)[3]	25	25	25
Fresh citrus:				
Oranges:	08.02-200			
June–November		20	20	20
December–May		40	40	40
Lemons and limes	08.02-310	20	6.3	5
Grapefruit:	08.02-340			
June–November		20	12	12
December–May		40	25	25
Citrus juices				
Containing added sugar (not more than 10% sucrose, naturally or artificially contained):				
Orange	20.07-111	30	30	30
Grapefruit	20.07-112	27	27	27
Other citrus	20.07-113	27	27	27
More than 10% sucrose, naturally or artificially contained:				
Orange	20.07-121	35 or 27 Y/kg[4]	35 or 27 Y/kg[4]	35 or 27 Y/kg[4]
Grapefruit	20.07-122	35 or 27 Y/kg[4]	35 or 27 Y/kg[4]	35 or 27 Y/kg[4]
Other citrus	20.07-123	35 or 27 Y/kg[4]	35 or 27 Y/kg[4]	35 or 27 Y/kg[4]
Without added sugar (not more than 10% sucrose naturally contained):				
Orange	20.07-131	25	25	25
Grapefruit	20.07-132	22.5	22.5	22.5
Lemon	20.07-133	22.5	10	10
Lime	20.07-134	22.5	20	20
Other citrus	20.07-135	22.5	22.5	22.5
More than 10% sucrose naturally contained:				
Orange	20.07-141	30	30	30
Grapefruit	20.07-142	30	30	30
Other citrus	20.07-143	30	30	30

[1]Customs Cooperation Council Nomenclature, Ministry of Finance Notification No. 117 of 1975.
[2]Rates currently in effect or final rates scheduled under the 1978 MTN agreement.
[3]Designation changed in 1985.
[4]Whichever is greater applies.

Source: Japan Tariff Association, *Customs Tariff Schedules of Japan*, for 1979 and 1985.

Appendix table 11—Trade in items for which tariff concessions were offered by Japan, August 1984

Item and CCCN No.[1]		1981		1982		1983		1984		Avg. U.S. share 1983-84	U.S. avg. value 1983-84	Tariff rate in effect before Aug. 84	August 1984 offer rate
		Total	From U.S.	Total	From U.S.	Total	From U.S.	Total	From U.S.				
		Million yen								*Percent*	*Mil. dol.*	*Percent*[2]	
Meat offals of bovine	0201-131	41,418	33,495	54,307	44,019	43,664	37,525	45,972	39,633	86	162.10	18.8	15
Pork (carcass)	0201-210	509	201	2,700	24	1,691	26	2,525	10	1	.08	6.9	5
Other	-291	156,024	33,875	131,593	34,822	151,336	36,339	165,846	20,071	18	118.51	6.9	5
Offals	-293	1,978	600	1,165	533	7	6	10	5	68	.02	6.9	5
Electrodialized whey	0402-329	922	280	1,266	368	1,283	432	1,131	342	32	1.63	25	10
	-349	1,050	102	1,496	445	1,274	485	1,718	420	31	1.90	25	10
Feathers and down	0507-200	26,065	2,060	29,155	1,949	28,007	1,059	35,409	2,932	6	8.38	5	0
Pistachios	0805-440	—	—	433	93	682	319	617	242	43	1.18	16	12
Pecans	0805-490	1,949	82	1,063	24	961	23	788	61	5	.18	16	12
Berries	0812-090	642	295	642	260	672	204	660	208	31	.87	15	12
Groundnut oil	1507-220	4	2	4	1	10	—	11	—	0	—	Y23/kg	Y20.7/kg
Sunflower oil	-420	1	—	1	—	—	—	—	—	0	—	Y23/kg	Y20.7/kg
Prepared or pres. meat	1602-227	355	84	268	31	345	53	423	67	16	.25	15.6	10
	-229	261	229	313	286	716	621	3,329	3,171	91	7.97	15.6	10
Tomato puree and paste	2002-210	5,500	156	5,746	167	8,171	135	11,533	84	1	.46	25	20
Frozen berries	2003-090	377	297	571	390	564	297	713	252	44	1.15	23	20
Peaches	2006-123	—	—	—	—	—	—	—	—	—	0	35	25
Stewed berries & prunes	-199	1,002	404	1,319	531	1,142	456	915	333	38	1.66	28	23
Stewed prunes	-299	968	757	743	466	692	323	512	155	38	1.00	20	16

—Continued—

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Appendix table 11—Trade in items for which tariff concessions were offered by Japan, August 1984—Continued

Item and CCCN No.[1]		1981		1982		1983		1984		Avg. U.S. share 1983-84	U.S. avg. value 1983-84	Tariff rate in effect before Aug. 84	August 1984 offer rate
		Total	From U.S.	Total	From U.S.	Total	From U.S.	Total	From U.S.				
		Million yen								*Percent*	*Mil. dol.*	*Percent*[2]	
Tomato juice w/ sugar	2007-211	—	—	—	—	—	—	—	—	—	0	35	25
Tomato juice, other	-221	62	62	54	54	34	34	19	18	97	.11	25	20
Mixture of veg. juice	-222	176	176	104	103	134	134	82	82	100	.45	11	9
Other veg. juice	-229	1	—	6	1	6	1	1	0	8	0	17	12
Tomato ketchup	2104-111	392	336	338	266	256	213	293	240	83	.95	25	20
Peanut butter w/ sugar	2107-212	79	78	84	84	58	58	40	40	100	.21	25	12
Preps. of sweet corn	-213	3,196	3,123	2,405	2,342	1,768	1,676	1,506	1,463	96	6.59	24.1	17.5
Other preps. w/ sugar	-219	298	55	651	52	497	56	403	70	14	.26	35	28
Peanut butter w/o sug	-226	884	200	1,254	390	946	268	1,090	292	28	1.18	23.4	10
Preps. of sweet corn, frozen	-227	6,053	5,027	6,845	5,738	6,319	6,084	5,059	4,677	94	22.61	17.2	12.5
	-228	2,430	2,430	2,834	2,812	2,371	2,360	1,969	1,955	99	9.07	17.2	12.5
Vegetable protein	-234	563	488	1,390	1,259	793	757	924	872	95	3.42	17.5	12.5
Pet foods	2307-210	1,133	994	1,514	1,370	1,347	1,298	1,611	1,533	96	5.95	15	12
Egg albumen	3502-100	5,096	3,896	4,814	4,048	4,342	3,311	3,820	2,105	66	11.38	13.8	10
Protein substances	3504-310	1,405	1,361	2,496	2,397	2,059	1,954	1,876	1,825	96	7.94	10.4	8.5
	-390	2,477	1,183	2,263	1,012	2,053	1,006	2,694	1,691	56	5.67	10.4	8.5
Raw fur skins of mink	4301-220	2,780	245	3,028	204	2,141	146	3,092	382	10	1.11	16.9	15
		Billion yen											
Total		266.050	92.573	262.865	106.541	266.341	97.659	296.596	85.231	33	384.22	NA	NA
		Million U.S. dollars											
Total		1,204	419	1,056	428	1,119	410	1,246	358	NA	NA	NA	NA

— = None or negligible.
NA = Not applicable.
[1]Customs Cooperation Council Nomenclature.
[2]Except where indicated otherwise.

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