

## **AIC** *On Line* **ACE AIC Market Briefs: Dried Vegetables**

---

The world market for dehydrated vegetables is generally considered "stable", as there are many suppliers and a constant demand. New suppliers, cautions the author of one study on the market for these products, should consider that "the world market for dehydrated vegetables is likely to remain highly competitive" and that such factors as infrastructure in the producing country, raw material supply, production costs should be taken into account and that quality, reliability, and contact are essential to being successful in this business.

Increasing consumption of processed food items in developing countries may also merit a consideration of the Indian domestic market for these products. A recent Fintrac study, for example, found that given the barriers presented by infrastructure and stiff competition, it made more financial sense in Indonesia for dehydrated vegetable producers to produce for the domestic soup market than to export.

### **Trends in Product Usage**

The soup industry is the largest user of dehydrated vegetables, and is dominated by several large multinational corporations: CPC International Inc. (Knorr), Nestle (Maggi), Unilever (Brook Bond and Lipton), and Campbell Soup. Hot air processed vegetables, used in dried packet soups, account for most product usage, with secondary quantities of freeze-dried, puff-dried, and precooked vegetables used in instant soups. Canned and frozen soups use lesser volumes. Potatoes, onions, tomatoes, leeks, carrots, peas, mushrooms, asparagus, garlic, parsley, bell peppers, cabbage and cauliflower are the most popular dehydrated ingredients, with broccoli quickly becoming another important soup ingredient.

Other food processors use dehydrated vegetables in a variety of manufactured foods from rice mixes, sauces, and microwave meals to bakery, dairy, meat, fish and baby food products. Dehydrated onions and garlic are the most frequently used seasoning components in processed foods. Pet foods use primarily carrots, garlic, and onions.

The institutional food service and catering sector is another important consumer, estimated to use about one-third of all dehydrated vegetables supplied as substitutes for fresh produce. Low preparation costs and spoilage rates are keys to success in this industry. Institutional buyers are also a major market for many of the processed products listed above.

Soups and other processed food products are the primary dehydrated vegetable products sold by the retail sector. However, some dried but not further processed products are sold, namely instant potatoes, dried specialty mushrooms, and sun-dried tomatoes.

### **Packaging Specifications**

Historically, most product was packaged in hermetically-sealed containers of steel or plastic. This method proved expensive and is being replaced by lower cost alternatives such as the "bag-in-a-box", wherein product is placed in a sealed polyethylene bag protected and supported within a cardboard or

fiberboard box, or a multi-walled sack. Rectangular boxes are often used for easy palletization.

Standard pack sizes vary between 5 kilograms and 25 kilograms, with importers preferring 5-10 kilogram packs. The food service sector prefers much smaller package size (500g-3kg), although this demand is usually met through repacking by the importer or processor.

## Major Importers

World trade in dehydrated vegetables reached US\$1.1 billion in 1992, an increase of over 20% since 1988. Developing nations have benefitted most from this market expansion, raising their world market share from 52% to 61% of total world supply over the same period. China has shown the most growth as a supplier of dehydrated vegetables, increasing its market share from 29% (US\$235.0 million) in 1988 to 36% (US\$383.0 million) in 1993. Much of China's growth is directly attributable to Shiitake mushroom exports to Japan.

Japan is the world's largest importer of dehydrated vegetables (US\$208.4 million, or 19% of total world import value). Shiitake mushrooms were its largest import in 1993, followed by bamboo shoots, osmund, Jew's ear mushrooms, and onions. Other non-specified dried vegetables accounted for 24% of total import value. With the exception of onions, which are sourced primarily from the United States, almost all supply is sourced regionally and mostly from China.

Hong Kong is the second largest import market for dehydrated vegetables (US\$171.2 million in 1992). Official trade statistics reveal that dried mushrooms were the largest import category, followed by "other" dried vegetables. Dried onions and potatoes account for less than one percent of total import value. China dominates the market. Hong Kong re-exports more than half of its imports.

Germany is the largest European market for dehydrated vegetables and the third largest world market (US\$107.8 million in 1992). Onions are the single largest imported product, followed by "other" vegetables and mushrooms. Carrots and tomatoes individually accounted for less than 2% of total import value. China, the United States, Hungary, Egypt, Poland and India are the top suppliers.

The United States imported US\$96.1 million of dried vegetables in 1992. Dried tomatoes are the largest import, followed by mushrooms. Together these account for over 60% of dehydrated imports into the United States. An additional 30% are "other" vegetables, with onions and carrots accounting for the remainder. China, Chile, Spain, Japan, Mexico, and Morocco are the largest suppliers.

Singapore imported US\$58.2 million of dried vegetables in 1992, almost all classified as "other" vegetables. Almost all product is sourced regionally.

Other significant importers include Italy (US\$48.6 million), France (US\$46.6 million), the United Kingdom (US\$46.6 million) and the Netherlands (US\$33.2 million). European Union members source almost half of their import requirements from other EU members, although almost three quarters of the two largest imports (mushrooms and onions) are sourced from non-EU suppliers.

---

## INDIVIDUAL PRODUCTS

## **Onions**

### **United States**

The U.S. is, in fact, a large exporter of dried onions so its imports are minimal. In 1995, only US\$476,000 worth were imported.

### **EU**

EU nations imported 24,142 metric tons of dried onions in 1994, worth US\$50.5 million. The U.S. accounted for about 40 percent of these imports, and had a unit value of US\$2.43/kg. Egypt which accounted for an additional 25 percent, and had a unit value of US\$1.87/kg. India was the third-largest supplier, sending 2,393 metric tons with a unit value of US\$1.50/kg.

### **Japan**

Japanese dried onion imports (4.8 thousand MTs, ¥1.4 billion) are sourced primarily from the United States (79%) and China (15%). Bulgaria, Romania, and India supply most of the remainder.

### **Hong Kong**

Hong Kong reports importing only 345 MTs (HK\$5.6 million) of dried onions in 1993, with more than 80% supplied by China and most of the remainder from the United States.

## **2. Mushrooms**

### **United States**

Imports are divided between air and sun-dried mushrooms, and mushrooms dried by other processes. Imports have risen significantly in the last five years, and in 1995 over 2,100 metric tons were imported worth almost US\$23 million. Though volumes have increased, the value is about the same as prices have slipped. China and Japan are the leading suppliers, followed by Korea and Europe. India sent less than US\$500,000 worth of dried mushrooms to the U.S. in 1995. The unit value of air or sun-dried product from product from China was US\$8.64/kg.

### **EU**

Mushrooms are the highest value dried vegetable imported in the EU. With an average unit value of US\$15.76/kg, 4,212 metric tons were imported in 1994 worth US\$66.4 million. China accounted for almost two-thirds of all supply in volume terms, but less than one-half in value. The unit value of Chinese product was US\$11.63/kg. Macedonia was the second-largest supplier, followed by India and Pakistan, which each supplied about US\$5.6 million worth of high-value mushrooms (unit values of US\$60.46/kg and US\$83.82/kg, respectively).

## **Japan**

Japan's official trade statistics break down dried mushroom imports into the following categories: shiitake, Jew's ear, and "other." Shiitake mushroom imports totaled 7.2 thousand MTs (¥8.0 billion) in 1993, with China supplying the vast majority (98%). China is also the major supplier for Jew's ear mushrooms, with a 75% share of total 1993 import volume (2.2 thousand MTs, ¥2.0 billion). Taiwan is the only other major supplier. The import market for mushrooms other than shiitake and Jew's ear varieties is also dominated by China (74% of total imports of 43 MTs, ¥152.4 million), although product from France, Brazil, and India has a much higher unit value.

## **Singapore**

Singapore reports imports of 1.5 thousand MTs (S\$22.6 million) of shiitake mushrooms in 1993, mainly from China. Additionally, China supplies about three-fourths of other dried mushroom imports (which totaled 903 MTs or S\$9.3 million in 1993), with most of the remainder entering from Vietnam and Hong Kong.

## **Hong Kong**

Hong Kong imported 8.5 thousand MTs (HK\$643.4 million) of dried mushrooms in 1993. China supplies almost all volume imported, although small volumes of much higher value product also enters from Japan.

# **3. Tomatoes**

## **United States**

The U.S. imported 5,668 metric tons of tomatoes in 1995, worth US\$22.9 million. The volume of imports was about the same as five years ago and the price has dropped. One possible reason for the drop in imports is that the popularity of sun-dried tomatoes in the U.S. has led to increased domestic production. Spain and Switzerland are the leading suppliers, followed by Chile, Mexico, Turkey and Italy. The unit value of Spanish product is US\$3.86/kg.

## **EU**

Spain, Switzerland, and Italy are already exporters of dried tomatoes. The EU imported only 1,743 metric tons of product worth US\$6.2 million in 1994. Turkey accounts for about one-third of all supply, followed by Morocco and Chile. Unit value of Turkish product was US\$3.38/kg.

# **4. Carrots**

## **United States**

The U.S. imported only 660 metric tons of dried carrots in 1995, worth US\$2.2 million. This was the smallest amount imported in the last five years. Israel was the leading supplier.

## **EU**

Imported 2,075 metric tons of dried carrots in 1994 worth US\$3.1 million. Poland is the dominant supplier, with lesser amounts arriving from China and the U.S.

## **5. Other**

### **United States**

Imported US\$3.7 million worth of garlic, mostly from China; US\$3.2 million worth of parsley, mostly from Israel; US\$4.2 million worth of celery, mostly from Chile; US\$2.7 million worth of broccoli, mostly from Mexico; and US\$2.1 million worth of spinach, mostly from Germany. Imports of other dried vegetables totaled US\$13.0 million in 1995, and came from many different countries. China and Chile were the biggest sources, followed by Mexico. Chile supplies some specialty products such as dried red bell peppers, which are quite valuable.

### **EU**

Imported 19,331 metric tons of other dried vegetables in 1994, worth US\$43.1 million. China and the U.S. were the largest suppliers, followed by Hungary, Turkey, Egypt, Poland and Morocco.

[Home](#) [Indian Hortibusiness](#) [India Market Info](#) [World Market Info](#) [Hort-Tech Business Connection](#)