



## California Walnut Industry **FACT SHEET**

### **I. THE WALNUT INDUSTRY**

- The California walnut industry is made up of over 4,000 walnut growers and about 58 walnut processors (marketers).
- The California walnut industry is represented by two organizations, the Walnut Marketing Board (WMB) and the California Walnut Commission (CWC). The WMB was established through a Federal Marketing Order whereas the CWC was established through a California State Assembly Bill.
- Under the rules of a Federal Marketing Order, which established the Walnut Marketing Board (WMB), all walnuts are inspected and certified by the DFA of California as meeting strict USDA specifications prior to shipment.
- The Walnut Marketing Board (WMB)
  - Established in 1948
  - The WMB is comprised of 9 elected walnut growers/handlers and 1 public member.
  - Responsibilities include quality control through the monitoring of grades and standards for walnuts, providing industry with statistical analyses of crop size, shipments, inventory, crop production research and generic domestic market development activities.
- The California Walnut Commission (CWC)
  - Established in 1987
  - The CWC is made up of 8 elected walnut producers, 2 walnut producer/handlers, 2 walnut handlers and 1 public member
  - Primary responsibility is international market development.

## II. WALNUT PRODUCTION

- 99% of U.S. walnuts are produced in California, primarily in the San Joaquin and Sacramento valleys.
- Top 5 walnut producing counties in California:
  1. San Joaquin (62,595 tons)
  2. Tulare (46,518 tons)
  3. Butte (44,397 tons)
  4. Stanislaus (37,091 tons)
  5. Sutter (26,409 tons)
- California produces an average of 334,400 short tons (based on the last 5 years) of walnuts per year. In 2006 the crop was produced on approximately 215,100 bearing acres.

<u>Crop Year</u>	<u>Crop Size (Tons)</u>
2000	239,000
2001	305,000
2002	282,000
2003	326,000
2004	325,000
2005	355,000
2006	346,000
2007	320,000 estimate

- There are over 30 varieties of commercially produced walnuts, all hybrids of English (Persian) walnut (*Juglans Regia*).
- Varieties are developed for various characteristics such as:
  - Early harvest, late harvest
  - Thick shell, thin shell
  - High walnut meat content
  - Pest tolerance, etc.
- The five primary varieties are Chandler, Hartley, Serr, Vina and Payne.
- The Black walnut is native to the U.S. The Eastern American Black walnut is grown east of the Rocky Mountains primarily for wood and veneer. Although its nuts are of high flavor, they are not used for commercial production due to their hard shell and poor hulling characteristics. The Northern California black walnut is used as a rootstock for English walnut cultivars.

- With respect to soil requirements, walnuts are probably the most exacting of California orchard crops. They do best on fertile, deep, well drained, non-stratified, loamy soils. Under ideal soil conditions, roots can be found to depths of 10 feet or more.
- Walnut trees are grown in orchards. The trees bear fruit 5 to 7 years after planting and can continue to produce walnuts for as long as a century.

### **III. WALNUT HARVESTING**

- Walnuts are harvested September through November.
- Walnuts are removed from trees by mechanical shakers that shake the nuts to the ground. They are then swept from the orchard floor by mechanical harvesters and taken to processing plants where they are dried and cleaned before being packed in-shell or cracked to be sold as kernels.

### **IV. WALNUT SALES**

- In 2006, the industry shipped approximately 45% of the harvested crop overseas. Primary markets are Germany, Spain, Japan, Korea, Canada, and Italy.
- Approximately 81.5% of inshell walnuts were exported in 2006, while 38.1% of shelled walnuts went to export markets.
- Competitive walnut producers are China, Turkey, India, France, Italy and Chile.
- In 2006, the U.S. market utilized 61.9% of shelled walnuts and 18.5% of inshell walnuts.
- Walnuts used from tree to shell:
  - Walnuts are sold in the shell or as kernels out of the shell
  - Non-producing trees are used for wood for furniture, gun stocks
  - Heavily burlled walnut wood is highly prized for veneer for furniture, dashboards of foreign and luxury cars.
  - Shells are burned by a walnut handler to produce heat and generate electricity
  - Shells are being used by a Japanese tire manufacturer to improve the grip of their tires
  - Shells have been ground and used as an industrial abrasive
  - Walnut meat is pressed for walnut oil.

### **V. WALNUT NUTRITION**

- Walnuts are the only nut that contain a significant amount of alpha-linolenic acid (ALA), the plant form of omega-3 fatty acid.

- Researchers agree that the unique combination of nutrients in walnuts (fiber, omega-3 fatty acids, antioxidants, etc.) accounts for their scientifically based beneficial effects in lowering cholesterol and improving vascular function. Walnut consumption has proven to significantly lower total cholesterol levels as well as LDL or “bad” cholesterol levels. Current research shows that including walnuts in the diet can also improve the function of arteries, which can further aid in the prevention of heart disease and stroke.
- Walnuts contain no *trans* fat, no cholesterol and no sodium.
- Walnuts are a good source of dietary fiber and protein. They are also a good source of folic acid, vitamin B6, magnesium, phosphorus, and copper. In addition, walnuts contain many antioxidants that may help protect cells from free radical damage.
- Walnuts are one of the best known sources of melatonin, a powerful antioxidant that is associated with reducing risk of developing Alzheimer’s, Parkinson’s Disease, and certain types of cancer.

## **VI. WALNUT HISTORY**

- Walnuts are one of the oldest tree foods known to man, dating back to 7000 B.C.
- Records indicate Persian nuts (the English walnut) were known during the reign of Tiberius. Remains of this nut have also been unearthed in ancient Roman villas.
- In ancient Rome, walnuts were considered food for the gods and called "Juglans Regia" in honor of Jupiter.
- The term "English" applied to the Persian nut is a misnomer. The name "English walnut" refers to the English merchant marines whose ships transported the product for trade around the world.
- There are two major commercial species of walnuts; the English walnut, which originated in Persia, and the black walnut, which is native to the U.S.
- Virtually all walnuts sold commercially in the U.S. are of the English variety.
- The first English walnuts were probably brought to California by Mission Fathers around 1770.
- Joseph Sexton planted the first commercial walnut orchard in California in 1867 near Goleta in Santa Barbara County.