

## Commodity Fact Sheet

# Artichokes

Information compiled by the California Artichoke Advisory Board

**How Produced** – The artichoke is a perennial plant in the thistle group of the sunflower (Compositae) family. The vegetable we eat is the plant's flower bud.

The historical method for propagation is vegetative, where plant root sections attached to basal stem pieces called "stumps" are planted into the ground. More recently, growers are planting from seed on an annual basis. Generally, perennial artichoke plants are maintained for five to ten years. Each cropping cycle is initiated by "cutting back" the plant tops several inches below the soil surface to stimulate new shoot growth. The fern-like plants commonly grow to be four feet high and six feet wide.

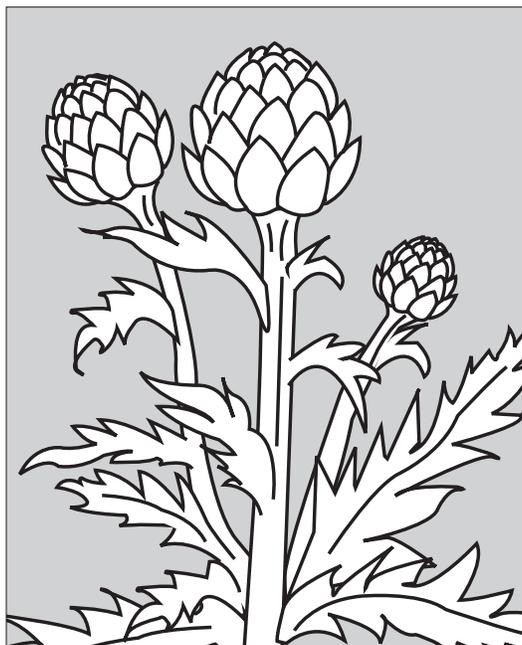
Artichokes are an extremely labor intensive crop with labor representing 40 to 60 percent of the growing costs. Artichokes are harvested entirely by hand. Because artichokes on the same plant mature at different times, the same field will be harvested every seven days and even more often during the peak season of March through May. Artichokes are sorted and packed in the field, by hand, into waxed cartons and immediately trucked to cooling facilities where they are refrigerated to 34 degrees Fahrenheit and 98% humidity.

**Varieties** – The thorny Green Globe® is the predominant variety grown on California's central coast from south of San Francisco to Monterey. Other varieties such as Imperial Star, Big Heart®, Desert Globe®, and other proprietary varieties grow in the Central Valley, the desert areas in the state, and along the coast. They are characterized as "thornless" and "semi-thornless."

Although not a different variety, "Frost-Kissed" artichokes caused by winter frosts are available in stores for a limited time. Frost causes the outer layer of the artichoke to turn brown, flake and peel, much like we do after being sunburned. Artichokes are "frost-kissed" when the temperature drops below 32 degrees. Following a freeze, artichoke plants take two to three weeks to start producing "frost-free" artichokes again. Many believe frost enhances the flavor of the artichoke resulting in a nutty taste.

**Commodity Value** – California produces virtually 100 percent of the nation's supply of fresh artichokes. The artichoke

industry provides hundreds of jobs and annually contributes more than \$150 million to the state's economy. The 2014-2015 crop year produced more than 2,932,251 cartons of artichokes, averaging 22 pounds each, on 6,199 acres statewide.



**Top Producing Counties** – The artichoke was named the official vegetable of California and is also the official vegetable of Monterey County where approximately 75 percent of the state's artichokes are grown. In 2014, artichokes ranked 17th in crop value for this agriculturally rich area. Other top producing counties include San Luis Obispo, Ventura, San Mateo, and Santa Cruz.

**History** – Artichokes are one of the oldest known foods. They were cultivated in the Mediterranean basin thousands of years ago. Theophrastus, an Ancient Greek philosopher and naturalist (317 B.C. – 287 B.C.), wrote of them being grown in Italy and Sicily.

During the late nineteenth century, California's first commercial artichoke fields were planted by Italian immigrants south of San Francisco near Half Moon Bay. The modern artichoke industry started during the 1920s in Castroville, California. Today, Castroville is the self-proclaimed "Artichoke Center of the World."

**Nutritional Value** – One 12-ounce artichoke contains 25 calories, is low in sodium, and contains no fat or cholesterol. One medium artichoke is an excellent source of fiber and vitamin C, and a good source of folate and magnesium. Artichokes also contain phytochemicals, antioxidants in the flavonoid family, which are beneficial in the prevention of certain cancers and boosting the body's immunity. Recent research shows cooked artichokes are a good source of antioxidants. Health professionals recommend a low-fat diet with at least five servings of fruits and vegetables each day to reduce the risk of heart disease, diabetes, and obesity.

**For additional information:**  
California Artichoke Advisory Board  
(831) 633-4411  
Website: [www.artichokes.org](http://www.artichokes.org)



# Artichoke Activity Sheet



◀ #1

Growers plant root cuttings into the ground, cover them with soil and water them.



◀ #2

After about one year, artichoke flower buds are ready for harvest. The largest buds form close to the tops of the stalks.



◀ #3

Artichokes, harvested by hand using small knives, are tossed into packs on the backs of the field workers.

#4 ▶

When the packs are full, the artichokes are transferred to bins or directly to field packing machines.



#5 ▶

Artichokes are sorted and packed by hand into waxed cartons and refrigerated immediately.



#6 ▶

Artichokes are purchased by consumers and can be a nutritious low-fat component of daily meals.



## Lesson Ideas

- Using the data provided under “Commodity Value,” calculate the total weight of artichokes produced annually and determine the yield (in pounds) per acre.
- Brainstorm a list of careers related to this industry.
- Create a picture book showing the cultivation and harvest methods of artichokes.
- Cook and serve artichokes as a snack. Serve with low-fat dips your students create.
- Find out why vitamin C, magnesium, and folate are important in one’s diet.
- Research the climate in your county and determine what variety of artichoke, if any, would best grow in your community.
- Dissect an artichoke and label its parts.
- Research the vegetative propagation methods of artichokes. Find out what other plants are propagated in this way.
- Analyze the geometric arrangement of artichoke leaves on the flower.

## Fantastic Facts

1. California produces virtually 100 percent of the nation’s commercial artichoke crop.
2. Artichoke plants generally stay in the field five to ten years.
3. Artichokes can be a part of a healthy diet because they are low in fat and cholesterol, contain fiber, vitamin C, and other minerals. They also contain phytochemicals.
4. Artichokes are harvested by hand.
5. Labor is the most expensive part of growing artichokes.
6. Monterey county proclaims the artichoke as its official vegetable.
7. Italian immigrants began the commercial production of artichokes in California.
8. Artichoke production is labor intensive because of hand-picking and hand-packing.

## Lesson Plan: Let’s Advertise!

**Introduction:** Many methods are used to promote and advertise products to consumers. This activity encourages students to explore the various persuasion techniques used by advertisers as they develop a commercial for artichokes, artichoke dips or artichoke utensils.

**Objective:** Students will research advertising methods in order to design a commercial advertising California artichokes.

**California Standards:** CC ELA: SL.3-12.1, SL.3-12.4, SL.3-12.5, W.3-8.1, W.3-6.7

**Materials:** Resource materials on various advertising techniques, butcher paper, markers, and other supplies needed to create student-designed props, video camera with tripod.

### Procedure:

1. Research and discuss various methods of advertising used to persuade a consumer to purchase a product. Classify the commercials according to type (TV, internet, print, radio, etc).

2. Brainstorm a list of various food commercials that students feel are successful in their advertising. Discuss why the commercials are successful.
3. Divide students into groups. Have each group decide what they will advertise: artichokes, dip or utensil.
4. Have each group create a 15 to 20 second commercial. They must determine what type of commercial they are producing, write a script, design a slogan and/or logo and prepare any props they will need for the commercial.
5. Assign a filming date and time for each group—30 minutes filming time for each group is appropriate. After taping, share the video-taped commercials with the class. Determine the type of commercial each group created and vote on which commercial would be most effective.

