

South Florida Tropicals: Carambola¹

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Background

The carambola or star fruit (*Averrhoa carambola*) is native to Southeast Asia. It was introduced to Florida about 100 years ago. There are two types of carambola: sweet and tart. "Arkin" is the most common sweet variety. "Golden Star" is the most common tart variety grown commercially in south Florida.

Temperatures below 29°F can damage or kill young carambola trees. Because of this, commercial production is centered in south Florida (i.e., Miami-Dade, Broward, and Lee counties).

Carambola trees produce yellow fruit with four to six ribs that are star-shaped when sliced in cross sections, which is how "star fruit" got its name.

Availability

Carambolas flower and fruit several times during the year. The fruit is generally available from July through March.

Selection

Carambolas vary in length from 4 to 5 inches and are about $2\frac{1}{2}$ to 3 inches in diameter. A waxy rind encloses juicy pulp, which is tart or sweet depending on the variety. The flesh of a carambola is crisp, with a distinctive flavor.



Figure 1. Carambola gets its name "star fruit" from its shape when it is sliced in cross-section. Credits: iStock

Tree-ripened carambolas have superior flavor. The fruit is ready for use when it loses most of the tinges of green and takes on a glowing gold color. If you purchase unripe carambolas, ripen them at room temperature, then refrigerate the ripe fruit in covered containers or plastic bags. Normally they keep two weeks or more in the refrigerator, but they taste better if they are consumed sooner.

Uses

Carambolas are best when they are used fresh in salads or on their own. Although carambolas may be frozen, pickled, or preserved, these preserving methods do not enhance their delicate flavor. Keep in mind that tropicals vary in

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natural pectin, acid, and sugar content from one season to another due to climate variations.

Nutritive Value

Carambolas are a good source of potassium and vitamin C. The low-calorie fruit also contributes small amounts of other minerals and vitamins as well as dietary fiber.

One cup of raw cubed carambola contains approximately:

- 40 calories
- 9 grams carbohydrate
- 1.4 grams protein
- 0.4 grams fat
- 4 grams fiber
- 45 milligrams vitamin C
- 180 milligrams potassium

Source: USDA Nutrient Database Number 09060: https:// ndb.nal.usda.gov/ndb/search/list

Food Safety During Preparation

Following these steps will help reduce your risk of foodborne illness.

- Wash hands with hot, soapy water before and after:
 - handling fresh produce
 - handling raw meat, poultry, or seafood
 - using the bathroom
 - changing diapers
 - handling pets
- Wash fresh carambola fruit with cool tap water just before preparing or eating. **Do not use soap or detergents**.
- Cut away bruised or damaged areas before preparing or eating.
- Wash cutting boards, dishes, utensils, and countertops often. Use hot, soapy water and rinse well. **Sanitize** them after contact with fresh produce, raw meat, poultry, or seafood.

To Sanitize

3/4 teaspoon unscented liquid chlorine bleach in 1 quart water. Pour the mixture onto surface and let sit several minutes. Rinse well with hot running water. Air dry or pat dry with paper towels.

- Do not cross contaminate! Use clean cutting boards and utensils for fresh produce. If you can, use a separate cutting board for raw meat, poultry, and seafood.
- Do not consume ice that was in contact with fresh produce or other raw products.
- Use a cooler with ice or ice gel packs when you take perishable foods outdoors. This includes cut fresh fruits and vegetables.

For more information, visit https://www.fsis.usda. gov/wps/portal/fsis/topics/food-safety-education/ get-answers/food-safety-fact-sheets/safe-food-handling/ cutting-boards-and-food-safety.

To Freeze Carambolas

Pack fresh slices of carambola in airtight containers and cover with cold syrup made from equal portions of water and sugar. Leave a $\frac{1}{2}$ -inch headspace. Seal, label, and store at 0°F.

Alternate method: Instead of using water and sugar, layer the slices and sprinkle with sugar after each layer. Leave a ½-inch headspace and store in the same manner as the water and sugar pack.

NOTE: Freezing carambolas does not improve the look of the outer skin. Use frozen slices in punch or as a garnish.

Selected Uses of Carambolas Starfruit Shrimp Stir-Fry

2 carambolas, sliced into ¼-inch stars (discard seeds)

- 1 lb medium shrimp, deveined
- 1 teaspoon cornstarch
- 1 tablespoon rice vinegar
- 1/4 cup orange juice
- 1 tablespoon low-sodium soy sauce
- 1 tablespoon canola oil
- 1 teaspoon fresh ginger, peeled and minced
- 2 teaspoons garlic, minced

Whisk the cornstarch and the rice vinegar together in a bowl, then add the orange juice and soy sauce. Toss the shrimp in the marinade and let sit 15–20 minutes. Heat a large skillet. When ready, sauté the garlic and ginger over medium high heat for about 1 minute until fragrant. Add in the shrimp, marinade, and the carambola slices. Toss to coat and stir while cooking. Cook for about 2 minutes until shrimp is ready. Serve over rice or vegetables. Makes 4 servings.

Adapted from Brooks Tropicals: http://www.brookstropicals.com/

NUTRITION INFORMATION

170 calories
7 grams carbohydrate
30 grams protein
4 grams fat
1.5 grams fiber
22 milligrams vitamin C
410 milligrams potassium

Carambola Bread

6 to 8 carambolas 1¾ cups all-purpose flour 1 teaspoon salt ½ teaspoon **each**: cinnamon, nutmeg, allspice 1½ teaspoons baking soda 2 eggs, slightly beaten 1/3 cup vegetable oil ¾ cup brown sugar, unpacked 1 teaspoon vanilla

Cut and remove seeds from fruit and process in a blender to fine puree. Retain juice to make 2 cups. Sift the flour, salt, spices, and baking soda, then set aside. Mix the eggs, oil, sugar, vanilla, and fruit puree together. Add the dry ingredients into the wet ingredients in 2 installments and blend well. Pour into a greased loaf pan (9x5x2½ inches) and bake at 350°F for 1 hour or until done (soft). Makes 9 servings.

NUTRITION INFORMATION

240 calories
35 grams carbohydrate
5 grams protein
10 grams fat
3 grams fiber
24 milligrams vitamin C
160 milligrams potassium

Carambola Fruit Salad

sliced, seeded carambola with brown edges removed
 orange, peeled and sliced
 banana, sliced
 Juice of 1 lime

Lightly mix fruit with lime juice. Serve cold over lettuce leaves or as fruit cups. Makes 4 servings.



Figure 2. Add carambola to your favorite fruit or vegetable salad. Credits: praisaeng / iStock / Getty Images Plus

NUTRITION INFORMATION

50 calories 13 grams carbohydrate 1 gram protein 0.25 gram fat 2.5 grams fiber 30 milligrams vitamin C 207 milligrams potassium

Carambola Pickles

4 cups carambola slices 1½ cups sugar ½ cup white vinegar 1 stick cinnamon ½ teaspoon whole cloves

Place carambola slices in glass jar or bowl. Make a syrup of sugar, vinegar, and spices. Bring to a boil and pour over carambola slices. Let stand overnight in the refrigerator. Next day, drain off syrup and bring to a boil. Place carambola slices in hot, sterilized jars and pour boiling syrup over, leaving a ½-inch headspace. Wipe jar mouths and adjust lids. Process in boiling water-bath canner 10 minutes. Makes 16 servings.

NUTRITION INFORMATION

80 calories 20 grams carbohydrate 0.25 gram protein 0.25 gram fat 1 gram fiber 10 milligrams vitamin C 40 milligrams potassium

Carambola Slices

Float carambola stars in a punch bowl or in beverage glasses.

Garnish baked ham or turkey with sugared carambola slices. Brown in oven before serving.

Sauté with chicken, shrimp, or meat.

Chicken Salad with Carambola

Prepare a standard chicken salad recipe. Cut the ribs off one or two carambola (do not use central part with seeds). Then dice these ribs, making small chunks. Add to chicken salad. The piquant carambola and bland chicken make a refreshing combination. Serve with romaine or iceberg lettuce.

Carambola Juice



Figure 3. Carambola can be included in a variety of juices and smoothies. Credits: triocean / iStock / Getty Images Plus

2 quarts sliced carambola

Wash carambola carefully in cold water. Cut into small pieces. Blender chop a few pieces at a time until carambolas are converted into a thick puree. Strain juice through a fine sieve. Serve carambola juice as:

CARAMBOLADE—Dilute with water (use about 1 cup of juice for every 2 cups of water). Add sugar or other

sweetener if carambolas are sour. Serve over cracked ice. Garnish with thin carambola slices.

CARAMBOLA PUNCH—Sweeten juice to taste and freeze in ice cube trays. Serve 2 or 3 frozen carambola cubes in ginger ale. Garnish with fresh carambola slices.

References

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