# Tomatoes

## August 2010

## I. What is it?

- A. There has always been a debate whether tomatoes are a fruit or vegetable.
  - 1. Who thinks it's a fruit? Who thinks it's a vegetable?
  - 2. Well, technically it's a fruit but we prepare it and serve it like a vegetable and that's part of the confusion for folks.
  - 3. True story... In a supreme court case in 1893 the tomato was ruled a vegetable even though it is technically a fruit
- B. The fruit is edible, but the leaves are toxic and should not be eaten
  - 1. Typically reaches 3-10 feet in height
  - 2. It is perennial but grows as an annual in temperate climates
- C. The fruit has a subtle sweetness complimented by a slightly bitter and acidic taste. Cooking takes away from the bitter and acidic taste and brings out a warm, rich sweetness.
- D. There are thousands of varieties of tomatoes
  - 1. Tomatoes can be red, pink, yellow, orange, green, purple, or brown in color with a round or oblong shape.
  - 2. They range in size from a small, marble sized grape tomato to a giant Ponderosa which can weigh up to 3 pounds
- E. The tomato is part of the nightshade family and is related to the potato, eggplant, and bell pepper

# II. History of the Tomato

- A. Even though you might have thought that tomatoes originated in Italy or Greece, they actually originated in South and Central America, where the Aztecs cultivated it
  - 1. Seeds were brought from there to Europe, but it was commonly regarded as poisonous to the Europeans in early centuries.
  - 2. Therefore, the plants were used as ornamental garden plants and not as food.
- B. In the United States, M. F. Crone was credited with being the first man to eat a tomato. His fellow citizens dedicated a monument for him in Rhode

Island, since tomatoes were considered poisonous and he dared to eat one.

C. Only in the last century has the tomato become increasingly valuable for its rich health benefits and flavor

### **III. Health Benefits**

- A. An average sized tomato is roughly 35 calories
- B. Tomatoes are full of lycopene, vitamin c, vitamin a, and fiber to help reduce the risk of cancer.
  - 1. Lycopene is a natural compound that gives the tomato its color and recent studies have shown it can reduce the risk of prostate cancer.
  - 2. Lycopene is a powerful antioxidant that neutralizes free radicals present in our bodies. Free radicals are basically "by-products" of living...breathing, using muscles, digesting food, etc. Free radicals move around in our bodies and damage cells.
  - 3. Cooked tomatoes have more lycopene than fresh tomatoes because this nutrient is better absorbed by the body this way. (canned tomatoes, ketchup, tomato sauce)
  - 4. Adding a little oil when cooking will also increase your body's ability to use the lycopene.
- C. Vitamin C and Vitamin A are found in tomatoes and act as powerful antioxidants. They also help to reduce inflammation, and are good for healthy eyes and skin.
- D. Tomatoes are full of fiber, both soluble and insoluble.
  - 1. Soluble fiber protects your heart by helping to lower cholesterol levels.
  - 2. Insoluble fiber can help reduce the risk of cancer, specifically colon cancer.
- E. Tomatoes have niacin, vitamin b6, folate, fiber, and potassium which all work together to make tomatoes a heart healthy food.
  - 1. Diets rich in potassium have been shown to lower high blood pressure and reduce the risk of heart disease
  - 2. Niacin may help protect your heart by reducing cholesterol levels in your body.

- 3. Vitamin b6 and folate help to convert an amino acid, homocysteine into other safe molecules. Too high a level of homocysteine has been linked to heart attack and stroke.
- 4. Folate is also important if you plan to get pregnant anytime soon!
- F. Tomatoes have vitamin k, which is important for maintaining bone health. While many people on blood thinners limit vitamin k, tomatoes are not high enough to worry about...unless you eat a couple of servings a day!

### IV. Fun Facts

- A. More than 60 million tons of tomatoes are produced each year in the world
- B. The term for the word tomato actually means "wolf peach" because tomatoes were regarded as dangerous just as wolves are.
- C. The French referred to the tomato as the love apple and the Germans called it the apple of paradise
- D. China is the largest producer of tomatoes in the world followed by the United States and Turkey
  - 1. Tomatoes are grown in every state in the United States, except Alaska.
  - 2. According to the USDA, Americans eat more than 22 pounds of tomatoes each year, with more than half of that amount in the form of ketchup or tomato sauce.
  - 3. In Arkansas the tomato is both the state fruit and state vegetable because of the controversy
  - 4. Tomato juice is the official state beverage of Ohio
- E. The largest tomato ever grown was seven pounds, twelve ounces
- F. One tomato plant can produce up to 15 tomatoes in a season.
- G. It has been said that bathing in tomato juice can help to quench the stench if you get sprayed by a skunk.
- H. Tomato juice has also been used to get rid of the odors in plastic containers and in the refrigerator by wiping these items out with tomato juice and then rinsing with warm soapy water. (not sure if the tomato juice will then stain your plastic container...Tupperware is certainly not immune to tomato stains!)

- It has been said that tomato juice can temporarily relieve a sore throat. Gargle a mixture of ½ cup tomato juice, ½ cup of hot water, and 10 drops of hot pepper sauce. (what's the chance the hot pepper sauce will burn the inside of your mouth which then makes you forget about the sore throat? ②)
- J. Some people wash their hair with tomato juice after swimming in a pool to get the chlorine out.

#### V. Selection and Storage

- A. Choose tomatoes that have a deep rich color
- B. Tomatoes should be well shaped and smooth with no wrinkles, cracks, bruises, or soft spots
- C. When buying canned tomatoes it is best to buy from the United States because other countries do not have as strict of standards for lead content in the containers. This is important for tomatoes because they are extremely acidic and the metals could possibly migrate into the food. It is also good to be aware of this when cooking. Do not use aluminum cookware because the acidity of the tomato can interact with the metal. In both of these cases it will not only give an unpleasant taste, but it could also be dangerous to your health.
- D. Tomatoes are sensitive to cold, so store at room temperature and out of direct sunlight.
- E. They will keep for up to a week depending on how ripe they were when you bought them. Ripe tomatoes will yield to slight pressure and will have a noticeably sweet fragrance.
- F. Whole tomatoes, chopped tomatoes, and tomato sauces freeze well for future use in cooked dishes
- G. Sundried tomatoes should be stored in an airtight container in a cool, dry place.

#### VI. Some quick serving ideas

- A. Combine chopped onions, tomatoes, and chili peppers for a salsa dip
- B. Add tomato slices to salads and sandwiches
- C. Add tomatoes to bean and vegetable soups
- D. Sprinkle with dry ranch dressing mix for a quick & tasty side dish

## VII. Activity

- A. Cooking/Salad/Salsa preparation
- B. Ranch tomatoes using the dry ranch dressing mix
- C. Samples of already prepared items (perhaps even the Green Tomato Cake!)
- D. Show variety of canned tomatoes available in the store and the seasonings and other vegetables that are often added...onions, garlic, green peppers, green chili peppers, Mexican style, Italian style, stewed.