

# Tomatoes

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# What's So Great about Tomatoes?



## Flavorful

Tomatoes add color, flavor, and texture to your favorite sandwich, salad, or omelet.

## Rich in Vitamins and Minerals

Tomatoes are high in vitamin C and are a source of beta carotene, potassium, folic acid, iron, and fiber.

## Fight Cancer

Tomatoes are also high in antioxidants, especially lycopene, which has recently been found to prevent some cancers.

## Easy to Use

Tomatoes combine well with about any type of food, such as, poultry, fish, rice, pasta, as well as other vegetables. Tomatoes make an excellent base for homemade soups or sauces and go especially well with pasta dishes.

## Inexpensive

Canned tomatoes and tomato products are inexpensive and just as healthy as fresh tomatoes.

## Versatile

Tomatoes can be enjoyed raw, stuffed, baked, stewed, or grilled. Tomatoes can be mixed to make a tasty side dish or snack

## Selecting and Storing Tomatoes

### At the Market

Cold temperatures damage tomatoes by keeping them from ripening later on and ruin the flavor, so never buy or store tomatoes that are stored in a cold area. Store tomatoes at room temperature. Depending on the variety, ripe tomatoes should be completely red or reddishorange.

### Look for

Smooth, well ripened, and reasonably free from blemishes or bruises.

- ▷ For fully ripe fruit, look for an overall rich, red color and a slight softness. Softness is easily detected by gentle handling.
- ▷ For tomatoes less than fully ripe: look for firm texture and colors from pink to light red.

Unpackaged tomatoes or those packaged in perforated wraps. This allows for good air circulation, which is needed to ripen tomatoes. Very gently press tomato with thumb. If no mark is left, then the tomato is not ripe; if an indentation appears then disappears, the tomato is ripe; if the indentation remains, then the tomato is overripe.

### Avoid

- ▷ Soft, overripe, or bruised tomatoes, and tomatoes with sunburn (green or yellow areas near the stem)
- ▷ Growth cracks (deep brown cracks around the stem).
- ▷ Decayed tomatoes which will have soft, water-soaked spots, depressed areas, or surface mold.



### Storage

If a tomato is not yet ripe, keep it in a warm place. To speed the ripening process, you can put tomatoes in a paper bag with an apple or banana. Do not ripen tomatoes in direct sunlight, because even though the skin is red, the tomatoes will not be ripe and flavorful inside.

# Varieties of Tomatoes



Tomatoes are grouped by their size and juiciness into three types: cherry, plum, and slicing. See the information below for the best uses of each type.

## << Cherry

Round and bite-sized; their skin may be red or yellow. These go well with any salad.

## Plum >>

Also known as Italian or Roma tomatoes, these are small and egg-shaped. They tend to be less juicy than slicing tomatoes, and so are nice for making sauces and adding to other cooked foods.

## << Slicing

Also called beefsteaks, slicing are the biggest tomatoes. These large, rounded varieties are found in most supermarkets. This tomato has less juice so it holds together well when sliced, and together with their large size, makes them great for adding flavor to your favorite sandwich. Slicing tomatoes also cook down well for sauces.



## Did you know?

Tomatoes are native to the Americas and were grown as early as 700 A.D. by the Aztecs and Incas. In the 16th century, tomatoes became popular in Mediterranean countries. The French called it "The Apple of Love" and the Germans, "The Apple of Paradise." The British liked its bright red color but thought the tomato was poisonous.

Tomatoes are actually fruits. A fruit is the edible portion of the plant that contains seeds. A vegetable is the edible stems, leaves and roots of the plant. In 1893 the U.S. Supreme Court ruled that tomatoes must be considered a veggie because they had lower import taxes.



# Preparation Tips

Always wash tomatoes gently in cold water to remove dirt and residues. For a **stuffed tomato** recipe, cut the tomato in half crosswise, then hold each half cut-side down and squeeze gently. If you need them very well drained, salt them lightly, then place them cut-side down on several layers of paper towel. When **peeling ripe tomatoes**, drop in boiling water for 30-60 seconds, then dip into cold water. The skin will slide off. When **canning**, use firm and ripe tomatoes. Overripe or soft tomatoes have less acid and may be unsafe to can. When **freezing tomatoes**, the skins should be removed because they become tough.



## Fitting Tomatoes into MyPyramid



The **GREEN** triangle of MyPyramid is the vegetable section. Vegetables may be raw or cooked, fresh, frozen, or canned. Age, gender, and level of physical activity determine the daily vegetable need. For a 2000 calorie diet, it is recommended having about 2 ½ cups of vegetables daily. For more information on vegetable serving sizes, go to [www.mypyramid.gov](http://www.mypyramid.gov).

### Nutrition Facts

#### Tomatoes

Serving Size 149g

#### Amount Per Serving

Calories 31      Calories from Fat 4

#### % Daily Value\*

<b>Total Fat</b> 0g	1%
Saturated Fat 0g	0%
Trans Fat	
<b>Cholesterol</b> 0mg	0%
<b>Sodium</b> 13mg	1%
<b>Total Carbohydrate</b> 7g	2%
Dietary Fiber 2g	7%
Sugars	

#### Protein 1g

Vitamin A 19% • Vitamin C 65%  
Calcium 1% • Iron 4%

\*Percent Daily Values are based on a 2,000 calorie diet.  
Your daily values may be higher or lower depending on your calorie needs.

[www.NutritionData.com](http://www.NutritionData.com)

## What is Lycopene?

Lycopene is a natural substance in tomatoes, tomato products, and other fruits. It's what gives tomatoes their rich red color. Many studies have shown a reduced risk of prostate cancer from frequent intake of tomato products. Cooked tomato products such as spaghetti sauce, tomato juice and ketchup seem to be the best sources of lycopene.



# Recipe Collection

## Garden Fresh Tomato Sauce

Makes 4 servings

### INGREDIENTS

3 cups chopped tomatoes  
1 Tbsp garlic powder  
1 Tbsp onion powder  
1/4 tsp dried basil (or 2 fresh basil leaves, chopped)  
1/4 tsp dried oregano (or 2 stems fresh oregano, chopped)  
1/4 tsp dried parsley (or 2 stems fresh parsley, chopped)  
1/8 tsp black pepper  
1/2 tsp fennel seed (optional)

### INSTRUCTIONS

1. In a saucepan combine all sauce ingredients.  
2. Simmer on medium heat for 15 minutes or until tomatoes are soft. Serve over cooked pasta.

### VARIATIONS USING TOMATO SAUCE

**To make minestrone:** Add 2 cups of chicken broth, 1 cup of cooked macaroni, 1 cup of any vegetable or leftover vegetables such as cooked and diced carrots, green beans and celery, and turn your sauce into a meal.

**To make chili:** Add 1/2 pound of cooked lean ground meat, 1 cup of pinto beans, 1 tsp of chili powder, 1/4 tsp cumin and one dash of Tabasco sauce.

### Nutrient Data

#### 1 CUP GARDEN FRESH TOMATO SAUCE

Calories 47, Total Fat 0.6g, Saturated Fat 0.1g, Cholesterol 0mg, Protein 2g, Carbohydrates 11g, Dietary Fiber 2g, Sodium 305mg, Calcium 25mg, Iron 0.9mg, Vitamin A 88, Vitamin C 27mg

## Homemade Salsa

Makes 8 servings

### INGREDIENTS

1 cup finely chopped, peeled tomato  
1/2 cup tomato sauce  
1/4 cup yellow or red onion  
1/4 cup finely chopped green pepper  
2 Tbsp. vinegar  
2 cloves garlic, minced  
1-3 jalapeno peppers, seeded and chopped (use caution; wear rubber gloves and do not rub your eyes when chopping peppers)  
Optional Ingredient: 1/2 cup fresh chopped cilantro

### INSTRUCTIONS

Mix all ingredients in a glass bowl. Refrigerate until ready to serve



### Nutrient Data

#### 2 TBSP SALSA

Calories 14, Total Fat 0.12g, Saturated Fat 0g, Cholesterol 0mg, Protein 0.5g, Carbohydrate 3.3g, Dietary Fiber 0.7g, Sodium 95mg



# Grow Your Own Tomatoes



Tomatoes are warm season (spring and summer) plants that need at least six hours each day of direct sunlight. Temperatures are very important; plants should be planted one week after the last frost. Most varieties of tomatoes will not grow fruit unless the average nighttime temperature stays above 55 degrees Fahrenheit. If nighttime temperatures are expected to drop below 55 degrees, protect the plants using plastic. The soil for tomatoes should be well drained and fertile. Water the plants thoroughly and

regularly during dry periods. Plants in containers may need to be watered each day or even more often.

Tomato plants that are bought should have thick stems with 4-6 leaves. Avoid plants with blooms or fruit. As the plant grows, it will need to have more room. When planting, set transplants deep, so that only two or three sets of leaves are exposed. Many gardeners use stakes, trellises or cages to grow tomatoes. Not all varieties need this attention.

The fruit is ready when the tomatoes are firm and fully colored. Tomatoes are at best when they ripen on healthy vines and daily summer temperatures average about 75°F. During hot summer weather (90°F or higher), pick tomatoes each day or two, when color has just started to develop and ripen them indoors. For more information, contact the Cooperative Extension Service at 202 274-7165

## ACTIVITY ALLEY

# Pick Tomatoes, Tomatoes, Tomatoes!



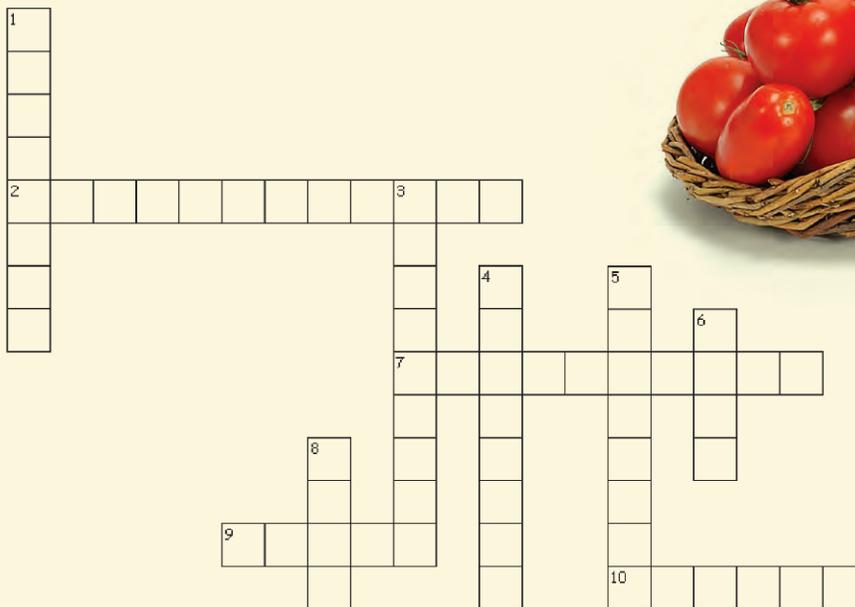
**Directions:** Did you know tomatoes were once thought to be poisonous? Now tomatoes are one of the most popular foods in the world! In the space below, draw your favorite way to eat tomatoes.



## ACTIVITY ALLEY

# Tomato Think Tank

**Directions:** Read the clues about tomatoes and fill in the squares. Be careful, some words go across and some go down.



### Across

- Do not store tomatoes in the \_\_\_\_\_. They will lose their flavor and become mealy.
- Also called slicing, these are the biggest tomatoes. This tomato has less juice so it holds together well when sliced, and together with their large size, make them great for adding flavor to your favorite sandwich.
- A tomato is a \_\_\_\_\_ not a vegetable.
- \_\_\_\_\_ tomato products are a rich source of lycopene. Many studies have shown a reduced risk of prostate cancer from frequent intake of tomato products..

### Down

- To ripen tomatoes, place them in a \_\_\_\_\_ with an apple or a banana. This will help speed up the ripening process.
- When buying tomatoes, use the \_\_\_\_\_ to check if the tomatoes are ready.
- When \_\_\_\_\_ tomatoes, the skins should be removed because they become tough.
- Tomatoes are a good source of this micronutrient. The same nutrient is thought to help prevent the common cold.
- Tomatoes are best grown in \_\_\_\_\_ weather. Tomatoes need at least six hours each day of direct sunlight
- This variety of tomato is also known as Roma or Italian. These tomatoes are small and egg-shaped. They tend to be less juicy than slicing tomatoes.

## References

Pennsylvania Nutrition Education Tracks, Pennsylvania State University, Cooperative Extension, State College, Pennsylvania, 2007.

P. Basiotis, A. Carlson, S. Gerrior, W. Juan, and M. Lino, The Healthy Eating Index 1999-2000, CNPP-12, Center for Nutrition Policy and Promotion, USDA, December 2002.

Prior, R. L. Fruits and Vegetables in the Prevention of Cellular Oxidative Damage, *American Journal of Clinical Nutrition*, 2003; 78, (Supplement) 570S-8S.

Nutrition for Everyone: Eat Your Fruits and Vegetables, Division of Nutrition, Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health Promotion, Center for Disease Control and Prevention: May 2008.

2005 Dietary Guidelines for Americans, Center for Nutrition Policy and Promotion, US Department of Agriculture.

Krebs-Smith, S. M. and others. Fruits and Vegetable Intakes of Children and Adolescents in the United States, *Archives of Pediatrics and Adolescent Medicine*. Volume 50, Number 1, January 1996.

Krebs-Smith, S.M. and others. Choose a Variety of Fruits and Vegetables Daily: Understanding the Complexities, *Journal of Nutrition*. 2001; 131; 487S-501.

Gillman, H. Enjoy Your Fruits and Vegetables, *British Medical Journal*. 1966; 313, 765-766.

Hung, H.C. and others. Fruits and Vegetables Intake and Risk of Major Chronic Disease, *Journal of National Cancer Institute*. 2004; 96: 1577-84.

Krinsky, N.I. Biologic Mechanisms of the Protective Roll of Lutein and Zeaxanthin in the Eyes, *Annual Review of Nutrition*. 2003; 23: 171-201.

Christen, W. G. and others. Fruit and Vegetable Intake and the Risk of Cataracts in Women, *American Journal of Clinical Nutrition*. 2005; 81: 1417-22.



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