# More Color More Health REDS



Eating Red Vegetables & Fruits Ensures Getting the Essential Vitamins, Minerals, Fiber & Phytochemicals that this Color Group Has to Offer

### CDC Recommends Eating a Variety of Colorful Vegetables and Fruits

The National 5 A Day for Better Health Partnership recommends eating deep red or bright pink vegetables and fruits every day. Nutrition research shows that red and bright pink fruits and vegetables contain phytochemicals, such as lycopene and anthocyanins. Phytochemicals, substances found only in plants that may help your body fight disease and promote good health.

Lycopene (pronounced LIKE-oh-peen) is associated with the red color in tomatoes. Concentrated cooked sources of tomatoes such as tomato sauce are associated with greater health benefits. The heating process makes the lycopene more easily absorbed by the body, as well as eating it with a small amount of fat. Lycopene is being studied for its role to help reduce the risk of several types of cancer, including prostate cancer. Watermelons, pink grapefruits, and tomato-based products such as spaghetti sauce, tomato paste, and tomato juice are all good sources of lycopene. Prostate cancer is the second leading cause of cancer death in America men, killing 32,000 annually. Include foods rich in lycopene as part of your recommended 5 to 9 servings of vegetables & fruit a day.

- Gann P. et al. : "Lower prostate cancer risk in men with elevated plasma lycopene levels: results of a prospective analysis." Cancer Research 59 (March 15, 1999):1225-30.
- Gartner C., et al. "lycopene is more bioavailable from tomato paste than from fresh tomatoes." Am J Clinical Nutrition 66 (July 1997):116-22





- Giovanucci E., et al. "intake of carotenoids and retinal in relation to risk of prostate cancer." Journal of National Cancer Institute 87 (Dec.6, 1995):1767-76.
- Sengupta A. Das S: The anti-carcinogenic role of lycopene abundantly present in tomato. Europ J Cancer Prevent 8:325-30, 1990.

Other red vegetables & fruits such as strawberries, raspberries, and beets contain anthocyanins (pronounced an-tho-SIGH-uh-nins), a group of phytochemicals that are being studied for their ability to fight heart disease and cancer, their anti-inflammatory power and to delay several diseases associated with the aging process.

- Wang H, et al. Antioxidant and anti-inflammatory activities of anthocyannins and their aglycon, cyanidin, from tart cherries. J of Natural Products 62 (Feb.1999): 294-96.
- Wang H, et al. antioxidant polyphenols from tart cherries. J. of agricultural and Food Chemistry 47 (March 1999):840-44.

### Best Sources of Lycopene

Spaghetti Sauce Tomato Juice Tomato Paste Tomato Soup Fresh Tomato

Guava Watermelon Pink Grapefruit Papaya

### Best 'Red' Sources of Anthocyanins

Red Raspberries Sweet Cherries Strawberries Cranberries Red Apples

Beets Red Beans Red Cabbage Red Onion Kidney Beans

There are thousands of health promoting phytochemicals found in plants. Research is just beginning to understand how they work to improve health, so it's important to eat a wide variety of colorful orange/yellow, red, green, white, and blue/purple vegetables and fruit every day. By eating vegetables and fruit from each color group, you will benefit from the unique array of phytochemicals, as well as essential vitamins, minerals, and fiber that each color group has to offer alone and in combination.

The best way to include a variety of foods is to eat vegetables and fruits of various colors. Eating a variety of colorful vegetables and fruits is an easy way to achieve the 5 to 9 a day goal. Keep in mind, 5 servings is the minimum, but strive for 5 to 9 servings a day.

For breakfast add  $\frac{1}{2}$  cup fresh strawberries or raspberries to your cereal. Take a snack with cherries or an apple with you as walk out the door. Enjoy a can of tomato juice and a red bean burrito for lunch. Include tomato-based pastas for dinner on a regular basis such as the Creamy Tomato-Pepper Pasta recipe that follows. For dessert the Mixed Berry Crisp is a delicious treat.



The 5 A Day Program encourages all Americans to eat 5 to 9 servings of vegetables and fruit a day to promote health and reduce risk of cancer and other chronic diseases. For additional information on the 5 A Day For Better Health Program and Partnership, visit: <u>http://www.cdc.gov/nccdphp/dnpa/5ADay/index.htm</u>

<u>www.5aday.gov</u>. <u>www.5aday.org</u>\*

## **Red Recipes**

## Creamy Tomato-Pepper Pasta

This creamy pasta dish is *nearly* as easy as opening a jar. Bright and fresh both in color and flavor, it's power-packed with fresh tomatoes and red bell pepper.

Makes 4 servings Each serving equals two 5 A Day servings

1 small onion, chopped

- 2 tbsp. garlic, minced
- 2 tbsp. olive oil
- 1 large red bell pepper, chopped
- 3 cups fresh tomatoes, seeded and chopped
- $\frac{1}{4}$  cup non-fat half-and-half (available in the dairy section)
- $\frac{1}{4}$  cup Parmesan cheese, grated
- $\frac{1}{2}$  tsp. black pepper

1 pound dry bowtie or penne pasta (red pasta, if you can find it), cooked and drained

Sauté garlic and onion in oil on medium-low heat until the onion is translucent, splashing in a few drops of water midway through cooking, if necessary, to prevent burning. Add bell pepper and sauté until tender-crisp, about 2 minutes. Stir in tomato and bring to a simmer. Turn the heat off, let mixture cool down for a minute or two, and gradually stir in half-and-half. Add cheese and pepper, stir, and turn heat to low. Cook until heated again, and serve over pasta.

Nutritional analysis per serving: Calories 365, Protein 13g, Fat 6g, Calories From Fat 15%, Cholesterol Omg, Carbohydrates 64g, Fiber 4g, Sodium 86mg.



## Jeweled Watermelon Soup

Serve this beautiful soup chilled in shallow bowls as an appetizer or light dessert.

Makes 4 servings Each serving equals three 5 A Day servings

1 pink grapefruit 1 pomegranate 6 cups 1-inch cubes watermelon, seeded Juice of 1 lime 2 teaspoons confectioners' sugar

Peel grapefruit. Slice horizontally into thin, attractive slices; discard (or eat) end pieces. Set aside. Seed pomegranate and discard peel and membrane. Set aside.

Place watermelon, lime juice and sugar in a blender or food processor and puree until very smooth. Pour into shallow bowls and garnish with a grapefruit slice or two and a sprinkle of pomegranate seeds. Serve chilled.

Nutritional analysis per serving: Calories 125, Protein 2g, Fat 1g, Calories From Fat 8%, Cholesterol Omg, Carbohydrates 30g, Fiber 2g, Sodium 6mg.



## **Mixed Berry Crisp**

This is an excellent recipe that uses all the colorful summer berries. Serve it with vanilla ice milk for a richer taste.

Makes 6 servings Each serving equals two 5 A Day servings Source: Produce for Better Health

1 cup all-purpose flour
<sup>1</sup>/<sub>2</sub> cup sugar
1 teaspoon cinnamon
4 tablespoons butter, unsalted
6 cups mixed frozen berries, thawed (blueberries, blackberries, strawberries, and raspberries in any combination)
Vanilla ice milk (optional)

Pre-heat over to 375°F. Combine flour, sugar, and cinnamon in a bowl; blend in butter until mixture is crumbly. Place berries in non-stick baking dish and sprinkle crumb mixture over them. Bake for 20-30 minutes. Serve warm with vanilla ice milk, if desired.

Nutritional analysis per serving: Calories 288, Protein 5g, Fat 5g, Calories From Fat 16%, Cholesterol 14mg, Carbohydrates 59g, Fiber 6g, Sodium 33mg.

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