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Facts about Vitamin C[1]

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Why do we need vitamin C?

Vitamin C, also known as ascorbic acid, has a wide variety of functions in the body. It helps to slow down or prevent cell damage. It is needed to keep body tissues and the immune system healthy. Dietary vitamin C also helps the body absorb iron from plant foods.

What happens if we do not get enough vitamin C?

Vitamin C is found in many foods we eat, and deficiency is rare. Scurvy, a disease caused by vitamin C deficiency, was common generations ago. Sailors who lived at sea for months at a time and ate no fresh fruits or vegetables often got scurvy. Today, scurvy is rare in the US, but not getting enough vitamin C may contribute to anemia, and lead to bleeding gums, infections, dry and splitting hair, and poor wound healing.



Figure 1. Fresh herbs are sources of vitamin C. One tablespoon of parsley provides 5 mg of vitamin C.
Credit: MKucova/iStock/Thinkstock.com

How much vitamin C do we need?

The following table lists recommended daily intakes of vitamin C. People who smoke need an additional 35 milligrams of vitamin C every day. Three large strawberries provide 33 milligrams of vitamin C.

How can we get enough vitamin C?

The best way to get enough vitamin C is by eating foods high in this vitamin rather than taking supplements. Fruits and vegetables are the best sources. Rich sources of vitamin C include citrus fruits and citrus fruit juices, sweet peppers, papayas, and strawberries.



Figure 2.
Credit: Dmytro Potapchuk/iStock/Thinkstock.com

What about fortified foods?

Some juices and cereals have vitamin C added. The amount of vitamin C in each product varies. Check the Nutrition Facts label to see how much vitamin C the product contributes to your daily need.

How should foods be prepared to retain vitamin C?

Vitamin C is easily destroyed during preparation, cooking, or storage. To retain vitamin C, follow these tips:

- Eat fresh fruits and vegetables as soon as possible after buying them.
- Cut vegetables just before eating or cooking.
- Cook vitamin C-rich foods quickly in as little water as possible.
- Microwave, steam, or stir-fry to retain the most vitamin C; do not overcook.



Figure 3.
Credit: Viktar Malyshchyts/iStock/Thinkstock.com

What about supplements?

Healthy individuals who eat plenty of fruits and vegetables rarely need vitamin C supplements. Contrary to popular opinion, taking vitamin C supplements does not prevent colds (Hemilä and Chalker 2013). However, some studies show that vitamin C supplements may decrease the duration of a cold (Hemilä and Chalker 2013; Ran et al. 2018).

How much is too much?

If you take a supplement, do not get more than 2000 mg/day of vitamin C from foods and supplements. Although excess vitamin C is mostly eliminated in the urine, high doses can cause headaches, frequent urination, diarrhea, and nausea. People with a history of kidney stones, particularly men, should avoid high levels of vitamin C (Ferraro et al. 2016; Thomas et al. 2013).

Where can I get more information?

Your local UF/IFAS Extension Family and Consumer Sciences (FCS) agent may have more written information and nutrition classes for you to attend. Also, a registered dietitian (RD or RDN) can provide reliable information to you.

Reliable nutrition information may be found on the Internet at the following site:

https://www.nutrition.gov/

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Table 1. Recommended daily intakes (mg/day) of vitamin C by life stage.

Life Stage	Amount (mg/day)
Men, ages 19+	90
Women, ages 19+	75
Pregnancy	
Ages 18 and younger	80
Ages 19 and older	85
Breastfeeding	
Ages 18 and younger	115
Ages 19 and older	120

mg = milligrams of vitamin C

Source: (Institute of Medicine 2000)

Table 2. Food sources of vitamin C.

Food and Serving Size	Vitamin C (mg/serving)
Red or yellow sweet pepper, raw, ½ cup	95
Orange, 1 medium	70
Kiwifruit, 1 medium	65
Broccoli, cooked, ½ cup	50
Strawberries, fresh, sliced, ½ cup	50
Cabbage, cooked, ½ cup	30
Cantaloupe, ½ cup	30
Potato, baked, 1 medium	17

mg = milligrams

Source: (U.S. Department of Agriculture and U.S. Agricultural Research Service n.d.)

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