

Facts about Vitamin A¹

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Why do we need vitamin A?



Vitamin A is a fat-soluble vitamin that is essential to our health. It helps us see normally in the dark. Vitamin A also promotes normal growth and health of body cells, and keeps skin healthy.

There are animal sources (retinol) and vegetable sources (carotenoids) of vitamin A in foods. Only a few of the carotenoids in foods are converted to vitamin A in the body. Beta-carotene is the most familiar carotenoid.

Beta-carotene, and several other carotenoids, act as antioxidants. Antioxidants help slow down or prevent cell damage. By protecting cells from damage, antioxidants may reduce risk for certain cancers and heart disease.

What happens if we don't get enough vitamin A?

Inadequate intake of vitamin A can cause night blindness, dry scaly skin, increased risk for infections, and poor growth.



How much vitamin A do we need?

Recommended intakes for vitamin A are given as “Retinol Activity Equivalents.”

This helps to account for the differences between carotenoids and retinol. It takes about 12 units of beta-carotene or 24 units of other carotenoids to make 1 unit of retinol in the body.

The following table lists recommended daily intakes of vitamin A:

| Life Stage | Vitamin A ($\mu\text{g/day}$ as RAE) |
|--|--|
| Men, ages 19+ | 900 |
| Women, ages 19+ | 700 |
| Pregnancy | 770 |
| Breastfeeding | 1300 |
| μg = micrograms RAE = Retinol Activity Equivalents | |

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How can we get enough vitamin A?

We get vitamin A by eating a variety of fruits and vegetables that contain carotenoids, and from dairy products fortified with vitamin A. Vitamin A also is found in liver and egg yolks.



Here are some foods and the amount of vitamin A they contain:

| Food | Vitamin A (RAE*) |
|---|------------------|
| Sweet potato, cooked, 1 medium | 1240 |
| Carrot, raw, 1 medium | 1010 |
| Pumpkin, cooked, ½ cup | 660 |
| Cantaloupe, cubed, 1 cup | 260 |
| Apricots, 3 medium | 140 |
| Egg yolk, cooked, 1 large | 100 |
| Cheese, cheddar, 1 oz | 90 |
| Milk, 1 cup | 80 |
| Broccoli, pieces, 1 cup | 70 |
| * Retinol Activity Equivalents oz = ounces | |

What about supplements?



We don't need supplements since vitamin A is so widely available in foods and easily stored in the body. Pregnant women especially should avoid taking retinol supplements. High doses during pregnancy can cause birth defects. Look for beta-carotene as the vitamin A source in prenatal supplements.

How much is too much?

Taking large doses of retinol can cause severe health problems. These include vomiting, bone and joint pain, dry scaly skin, and liver damage. Vitamin A toxicity can kill you! **Keep your total vitamin A intake less than 3,000 µg per day from retinol.**

Where can I get more information?

The Family and Consumer Sciences (FCS) agent at your county Extension office may have more written information and nutrition classes for you to attend. Also, a registered dietitian (RD) can provide reliable information to you.

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

<http://fyics.ifas.ufl.edu>

<http://www.eatright.org>

<http://www.nutrition.gov>

