

Vim, Vigor, and Vitamins



By Leigh Belanger

Fruits and vegetables are full of vitamins, and now so are many fortified foods. We're always encouraged to seek out vitamins, and we hear plenty about which food carries which vitamin, and this vitamin performs that function.

But often the information just passes us by before we have a chance to absorb what we've heard. What exactly is a vitamin, and why are they good for us?

Vitamins are micronutrients. They are molecules essential to our cells' metabolism, helping to repair cells and regulate their growth.

Our bodies don't manufacture vitamins, so we have to seek them out in foods and in supplement form. While fruits and vegetables are the best concentrated sources of many vitamins, consumers turn to supplements and fortified foods to make sure they are meeting their vitamin needs consistently.

Vitamins are classified in two categories – fat soluble and water soluble. Fat soluble vitamins - A, D, E - are stored in the liver and fatty tissues and don't need to be replenished as often as water soluble vitamins - B and C - which are not stored in the body.

Vitamins B and C move quickly through our bloodstream and are flushed out of the body when we sweat or urinate. These vitamins need regular replenishing.

A Closer Look

To get a better understanding of what functions vitamins perform, we took a close look at these micronutrients.

Vitamin A: Also known as retinol, vitamin A is a fat-soluble vitamin found in some dairy, meat and vegetable products, such as carrots. Unlike water-soluble vitamin C, vitamin A is stored in your fat cells, so you don't need to constantly replenish it.

Vitamin A is important in strengthening vision, bone growth, skin health, reproduction, and helps to strengthen immunity. You'll find vitamin A in organ meats and fatty fish like mackerel, as well as dark green and green-yellow vegetables like collards, pumpkin, sweet potato and spinach. Many processed foods are fortified with vitamin A.

Vitamin B: The B vitamins are a cluster of eight water-soluble vitamins that are thought to strengthen metabolic functions, improve the nervous and immune systems, and strengthen skin and muscle tone.

Each has a specific function. For example, B-6 is needed to manufacture hemoglobin, which resides in red blood cells and carries oxygen to tissues. Vitamin B-12 helps manufacture DNA.

B vitamins must be regularly replenished by consuming a full range of foods. This collection of vitamins can be found in foods ranging from garbanzo beans, chicken, or seafood to fruits and vegetables.

Vitamin C: A known immunity booster, taking a vitamin C supplement at the first symptom of cold or flu can help shorten the amount of time you're actually sick. You'll find vitamin C in citrus fruits, spinach and broccoli, berries - strawberries are especially high in vitamin C - and kiwi, among others.

Keeping a constant supply in your diet can help wounds heal more quickly, prevent cell damage from free radicals, and possibly reduce how often you get a cold.

There's no need to overload on this well-known antioxidant. Recommended daily intake varies from person to person; for example, smokers need more C than non-smokers.

Vitamin C also helps increase iron absorption. For example, if you add grapefruit slices to your spinach salad, the vitamin C will help release the iron from the spinach to be absorbed in the body.

Vitamin D: This fat-soluble vitamin is found in certain foods and can be made by the body with exposure to sunlight. Its major function is to maintain healthy levels of calcium and phosphorus, thus promoting strong bones.

Exposure to sunlight gives most people the levels of vitamin D they need. In the 1930's, milk began being fortified with vitamin D to help prevent the spread of the bone-weakening disease rickets. Today, milk remains a good source of vitamin D, as do many other fortified foods, like breakfast cereal and orange juice.

Vitamin D occurs naturally in egg yolks, fatty fish like mackerel and salmon, and cod liver oil.

Vitamin E: Fat-soluble vitamin E has eight forms, each with a different function. Alpha-tocopherol is form of vitamin E mainly stored in the human body. Vitamin E keeps arteries from clogging by preventing cholesterol from hardening into plaque. Alpha-tocopherol is a strong antioxidant that helps prevent free radical damage.

Vitamin E has long been thought to strengthen skin tone and facilitate healing of skin after cuts or burns. Vitamin E is mainly found in foods high in unsaturated fats, like wheat germ, nuts and plant oils.