

Vitamins

Vitamins are organic micronutrients which do not yield energy, but rather help our bodies carry out necessary and important physiological processes. As our bodies cannot synthesize enough vitamins to meet our daily physiological needs, our diet provides us with the bulk of these essential nutrients. Vitamins are either water-soluble (water is required for absorption and are excreted in urine) or fat-soluble (requires fat for absorption and are stored in fat tissue).

WHY ARE VITAMINS SO IMPORTANT?

Many vitamins work together to regulate several processes within the body. As each of the following vitamins play a unique role in the daily function of our bodies, a lack of vitamins or a diet that does not provide adequate amounts of certain vitamins can upset the body's internal balance and lead to serious consequences.

Vitamins are measured in milligrams or micrograms/day based on the Food and Drug Administration's recommended dietary allowances (RDAs). RDAs are based on the level of essential nutrients that the Food and Nutrition Board judges to be adequate to meet the known nutritional needs of healthy people.

A THOUGHT ON MULTI-VITAMINS:

The best way to ensure a healthy diet rich in vitamins is to eat balanced, colorful meals based on the food pyramid. While this can easily be done on campus, some students chose to supplement their natural intake with a daily multi-vitamin.

While multi-vitamins can be an excellent source of vitamins and nutrients, they do not in any way make up for or replace the need for culinary variety. In addition, some multi-vitamins actually give you more daily vitamins that you need. Many people think that if some is good, a lot is better. This is not always the case. In fact, a consistent high dosage of certain vitamins can actually be toxic and lead to serious health consequences such as loss of vision or weakened bone structure.

If you do choose to use a supplemental multi-vitamin, be sure to read the label carefully. By knowing your vitamins, only ingesting what you need, and striving to create balance and harmony on your plate, you will be well on your way to a healthy, wholesome diet.

LINKS

Vitamins Information Guide

<http://www.vitamins-nutrition.org>

Reference Guide

<http://www.realtime.net/anr/vitamins.html>

GOOD SOURCES OF COMMON VITAMINS

VITAMIN	WHAT IT DOES	FOOD SOURCES
Vitamin A (Retinol)	Direct role in vision and retina pigment Essential for the proper function of most body organs Supports the immune system	- meat, milk, cheese - fish oils - dark green leafy vegetables - carrots, sweet potato, squash
Vitamin B1 (Thiamine)	Helps convert carbohydrates into energy Helps metabolize proteins and fat	- fortified breads, cereals - whole grains, pastas - lean meats, fish - dried beans, peas, soy
Vitamin B2 (Riboflavin)	Protects/promotes healthy skin Helps body convert food into energy	- lean meats, eggs, nuts - dairy products - green leafy vegetables
Vitamin B3 (Niacin)	Helps metabolize carbohydrates Promotes healthy gastrointestinal function	- dairy products - fish, chicken, lean meats - nuts, eggs
Vitamin B12	Aids in the development of red blood cells Component of cells in bone marrow, the nervous system, and the GI tract	- eggs, meat, poultry, shellfish - milk, milk products
Folic Acid	Necessary for the synthesis of nucleic acids Aids in the formation of red blood cells	- green, leafy vegetables
Vitamin C (Ascorbic Acid)	Essential in wound healing Important in the formation of healthy bones, tissue, skin, and tendons	- citrus fruits and juices - green peppers, broccoli, tomatoes, and potatoes
Vitamin D	Essential for healthy bone and cartilage structure, and the absorption of calcium	- cheese, butter, cream - fish
Vitamin E	Present in body tissues Aids in proper neuromuscular functioning	- corn, nuts, seeds - green, leafy vegetables
Vitamin K	Necessary for the clotting of blood	- green leafy vegetables - cabbage, cauliflower, soybeans