

VITAMINS vs. MINERALS: WHAT'S THE DIFFERENCE?

"Take your vitamins" may have been a familiar refrain throughout your childhood. Well, Mom was right. We require 13 essential vitamins AND 7 major minerals in order for our bodies to function effectively. But what are they, how much do we need, and what sources provide them?

Vitamins are vital nutrients that must be obtained through diet (or by supplement, if dietary sources are inadequate). Our bodies require certain amounts of fat-soluble vitamins (A, D, E, and K) that remain in our bodies, as well as water-soluble vitamins (C and most B's) which pass through us quickly.

- *Vitamin A*, essential for growth, development, immune support, and eyesight, can be found in organ meat (liver and kidney), eggs, and fish.
- The "*B-Complex*" group of vitamins work together to provide energy to the body, metabolize proteins and fats, and support the body's nervous system. *Vitamin B-1/Thiamine* is found in whole wheat, soybeans, blackstrap molasses, and meats, while cheese and milk are the best sources for *Vitamin B-2/Riboflavin*. Fish and chicken are natural sources for *Vitamin B-3/Niacin*, and whole grains provide *Vitamin B-6/Pyridoxine*.
- *Vitamin B-9*, better known as *Folic Acid*, helps form red blood cells. Folate is found in enriched cereals, orange juice, whole grain breads, and dark leafy vegetables.
- *Vitamin B-12*, essential for healthy nerves and red blood cells, is found in shellfish, fish, meat, and dairy products.
- Citrus fruits, tomatoes, kiwi, strawberries, and broccoli provide *Vitamin C* to boost your immune system.
- New Englanders are often deficient in *Vitamin D*, and should consume fatty fish, fortified milk and juices to aide in absorption of calcium.
- *Vitamin E*, known as the "anti-aging vitamin," is found in leafy green vegetables and nuts.
- Plant oils, spinach, cabbage, cauliflower, eggs, and meat are good sources of *Vitamin K*, which is necessary for blood clotting.

By contrast, minerals are not derived from plant or animal sources. The body requires these inorganic substances in order to build strong bones and teeth, maintain chemical levels, and to regulate normal enzyme functioning.

- We require *Sodium* (salt) for muscle and nerve function and to regulate blood and body fluids.
- *Potassium*, found in fruits and vegetables, is needed for heart, kidney, muscle and nerve function and partners with sodium to maintain water balance in the body.
- *Calcium*, our skeleton's primary "building block," is found in milk products, and requires the presence of Vitamin D for absorption.
- Green vegetables, almonds, and whole grains supply the *Magnesium* required for metabolizing energy and maintaining strong bones.
- Our standard diets usually provide required amounts of *Phosphorus*, *Sulfur*, and *Chlorine*.

Vitamins and minerals are both essential for life, but the "Recommended Daily Allowance" varies by gender and age. Consult with your physician to determine exactly what is right for you!