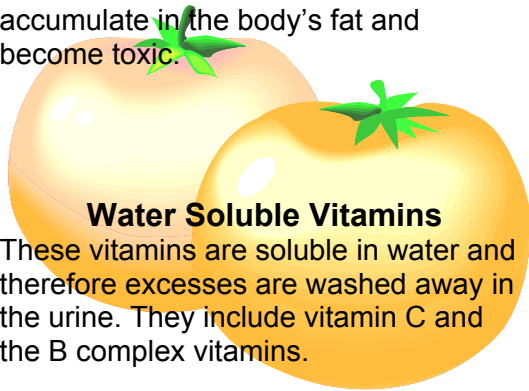


# FIRE FITFACTS

FROM THE PHOENIX FIRE DEPARTMENT  
AND THE AMERICAN COUNCIL ON EXERCISE

## Fat Soluble Vitamins

These vitamins are ingested with fats in the diet. They include vitamin A, D, E and K. Although they have widely different functions one thing is common: Too much of these vitamins will accumulate in the body's fat and become toxic.



## Water Soluble Vitamins

These vitamins are soluble in water and therefore excesses are washed away in the urine. They include vitamin C and the B complex vitamins.

## Minerals

Minerals are important for enzyme and cellular activity and some hormones, for bones, for muscle and nerve function, and for acid-base balance. They include iron, zinc, magnesium, calcium, chromium and others. Minerals are available in many food sources, but concentrations are higher in animal sources.

**Warning: Vitamins and Minerals are essential for numerous bodily functions but they are also very dangerous when taken in excess. Be very careful not to overdose by taking too many supplements.**

## Essential for Life

Vitamins and Minerals are the source for lots of misinformation. You are surrounded by advertising that implies that if a vitamin or mineral is essential than the more the better. The truth is that vitamins and minerals are called "micronutrients" because they are only required in small amounts.

There is very little research to support the claims that taking mega doses of vitamins can improve an athlete's performance. In fact, too much of most vitamins can be very toxic.

The recommended dietary allowance (RDA) is a liberal guideline for daily requirement averages of most nutrients. It was developed by the National Research Council/ National Academy of Science and has been revised 10 times since its inception in 1943. The RDA represents a probability statement for adequate nutrition: as nutrient intake falls below the RDA, the statistical probability for malnourishment increases.

Because nutrient balance and nutrient absorption is very complicated, it is recommended to get most of your nutrients from a variety of healthy foods. It leads to better absorption and prevents imbalances. If you are in doubt of the status of your nutrition, you should have a professional analyze your diet and evaluate your deficiencies.