

Nutrition VITAMINS	PHOENIX FIRE DEPARTMENT HEALTH & FITNESS M. P. 1-A03.05 01/2012-R Page 1 of 1
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TYPES

Fat soluble

Fat-soluble vitamins require the presence of fats to be absorbed by the body. They are stored in the liver if present in excessive amounts resulting in the potential for toxic levels to be reached.

Water Soluble

Water-soluble vitamins require the presence of water to be absorbed. They can not be stored and if present in excess, are eliminated in the urine.

FUNCTION

The role of vitamins can be divided into two broad categories: prevention of disease and participation in the regulation of body processes. The first category is self-explanatory. The second involves the concept that vitamins are essential to facilitate the various chemical reactions that occur in the body. This can include reactions that produce energy to chemical reactions that build muscle.

RDA

Listed below are the major vitamins, their function and their RDA. The RDA for vitamins can easily be obtained if a well-balanced diet is consumed. Supplementation with a multi-vitamin has some merit only if consuming a well-balanced diet is not possible.

<u>VITAMIN</u>	<u>TYPE</u>	<u>FUNCTION</u>	<u>RDA</u>
A	Fat Soluble	Maintains eye and skin health. Aids in resistance to infections	3000 I.U
D	Fat Soluble	Aids to absorption of Calcium	600 I.U.
E	Fat Soluble	Protects vitamins and essential fatty acids from destruction	33 I.U.
K	Fat Soluble	Needed for blood clotting	120mg
C	H ₂ O Soluble	Strengthens body cells. Promotes healing of wounds	90mg
B ₁	H ₂ O Soluble	Used in cells utilization of carbohydrates. Promotes normal appetite	1.2mg
B ₂	H ₂ O Soluble	Used in energy metabolism. Promotes good vision and healthy skin	1.3mg
Niacin	H ₂ O Soluble	Used in fat and carbohydrate metabolism. Promotes healthy skin, nerves and digestive track	16mg
B ₆	H ₂ O Soluble	Used in protein and fatty acid metabolism. Needed for red blood cell formation	1.7mg
Folacin	H ₂ O Soluble	Used in protein metabolism. Promotes red blood cell formation	0.4mg
B ₁₂	H ₂ O Soluble	Used in energy metabolism. Assists in red blood cell development. Assists in maintenance of nerve tissue	2.4ug