



VITAMIN A

Creating a Clear View



VITAMIN A BASICS

Vitamin A also known as: Retinol

Provitamin A also known as: β -Carotene (beta-carotene)

Important for: Vision, growth, development, skin, reproductive organs, immune system

Animal Sources: Liver, egg yolk, butter, whole milk, cheese

Grain/Fruit/Vegetable Sources: Orange-colored fruits and vegetables (apricot, carrots, melon, pumpkin), green leafy vegetables (spinach, broccoli), palm oil

OVERVIEW

Vitamin A is a group of fat-soluble compounds. Vitamin A, or retinol, comes from animal products, while Provitamin A, or β -Carotene (beta-carotene), comes from fruits and vegetables and is converted in the body into retinol.

DISCOVERY AND HISTORY

As many as 3,500 years ago, Egyptians and other cultures had noticed that eating liver cured night blindness, but retinol was not discovered until 1909. It was then isolated in 1931. Beta-carotene was discovered and isolated in 1831.

VITAMIN A DEFICIENCY

Vitamin A deficiency occurs due to inadequate consumption of foods high in vitamin A or beta-carotene. Vitamin A deficiency is still common in Southeast Asia, Central America and Sub-Saharan Africa. Symptoms include:

- Night blindness
- Delayed growth and development
- Eye lesions
- Abnormal eye dryness
- Dry and rough skin
- Impaired immune system
- Damage of epithelial tissue (e.g. lungs, intestines, urinary tract, genitals)

POPULATIONS AT RISK OF VITAMIN A DEFICIENCY

- Pregnant and breast-feeding women
- Newborns
- Children with frequent infections
- The elderly
- Vegetarians
- Populations suffering from poor nutrition (e.g. only rice, maize, potatoes as staple foods)