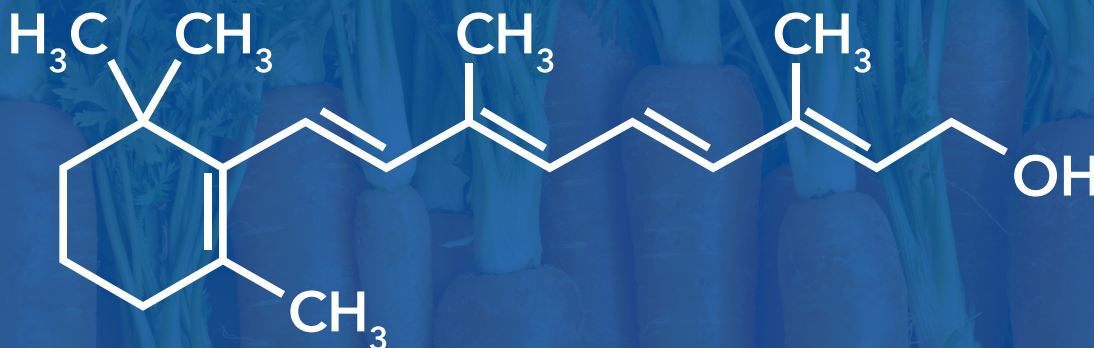


Vitamin A



Vitamin A (Retinol) is a fat-soluble vitamin on the WHO's List of Essential Medicines, it is found in various food and used as a dietary supplement. When referring to dietary allowance or nutritional sources, retinol is usually measured in international units IU (1 IU of retinol is equivalent to app 0.3 micrograms). The method used for determination of vitamin A is HPLC with FLD detection.

Vitamin A = Retinol



Functions/Health effect:

Vitamin A (retinol, retinoic acid) is a nutrient important to vision, particularly night vision, growth, cell division needed for reproduction, normal bone and tooth development and immunity. Vitamin A also acts in the body as an antioxidant, a protective chemical that may reduce the risk of certain cancers.

Sources:

Retinoids are found naturally only in foods of animal origin e.g. cod liver oil, butter, fortified low-fat spreads, liver (beef, pork, chicken, turkey, fish), eggs, cheese, milk. Liver and liver products such as liver pâté is a particularly rich source of vitamin A, so you may be at risk of having too much vitamin A if you have it more than once a week.

Other sources are foods rich in beta-carotene, such as green leafy vegetables, carrots, and cantaloupe. Your body converts beta-carotene into vitamin A.

Did you know that?

There are two sources of dietary vitamin A. Active forms, which are immediately available to the body are obtained from animal products. These are known as retinoids. Precursors, also known as provitamins, which must be converted to active forms by the body, are obtained from fruits and vegetables containing yellow, orange and dark green pigments, known as carotenoids, the most well-known being β -carotene.

The livers of certain animals, especially those adapted to polar environments, such as polar bears and seals, often contain amounts of vitamin A that would be toxic to humans. Thus, vitamin A toxicity is typically reported in Arctic explorers and people taking large doses of synthetic vitamin A.

Retinoids in skin creams can cause skin to become highly sensitive to bright light, so it is advised to apply vitamin A creams at night and to avoid strong sun after their use.

Food
division

