List of essential vitamins

There are 13 essential vitamins that the human body needs to function correctly. These include (Colorado State University Extension, n.d.; MedlinePlus, n.d.):

- **Vitamin A:** Important for healthy vision, immune function, and cell growth.
- **Vitamin B1 (Thiamine):** Supports energy production and nerve function.
- **Vitamin B2 (Riboflavin):** Helps convert food into energy and maintain healthy skin and eyes.
- **Vitamin B3 (Niacin):** Essential for metabolism, DNA repair, and nervous system function.
- **Vitamin B5 (Pantothenic Acid):** Plays a role in producing hormones and red blood cells.
- **Vitamin B6:** Aids in protein metabolism, hormone regulation, and immune function.
- **Vitamin B7 (Biotin):** Important for hair, skin, and nail health.
- **Vitamin B9 (Folate):** Essential for cell growth and development during pregnancy.
- **Vitamin B12:** Required for producing red blood cells and proper nerve function.
- **Vitamin C:** An antioxidant that boosts immune function and collagen production.
- **Vitamin D:** Helps with calcium absorption for strong bones and teeth.
- **Vitamin E:** A powerful antioxidant that protects against cell damage and supports immune health.
- **Vitamin K:** Plays a role in blood clotting and bone health.

Signs of vitamin deficiency

A balanced diet should provide enough vitamins for the body, but certain factors such as age, health conditions, and lifestyle choices can affect the absorption and utilization of vitamins. It is essential to pay attention to signs that may indicate a vitamin deficiency, such as (Harvard T.H. Chan School of Public Health, n.d; Rush University Medical Center, n.d.):

- Fatigue or weakness
- Slow wound healing
- Dry or dull skin
- Vision problems
- Changes in mood or behavior
- Hair loss
- Frequent illness or infections

Tests like blood work, a Vitamin Deficiency test, a Vitamin E assessment, or a nutrient panel can help determine if there is a deficiency and which specific vitamin may be lacking. If a deficiency is detected, it is important to make dietary changes and potentially supplement it with vitamins to address the issue.