



Vitamin B Complex

Overview

Vitamin B complex is essential for a wide variety of functions in the human body, its deficiency can also lead to several disorders including chronic neurological ones. Biochemically, different structures are grouped together under the B complex on the basis of their natural occurrence in the same type of food and solubility in water. Since humans are not able to synthesize vitamins in the B complex on their own and these vitamins are easily excreted from the body through urine, their regular intake is essential to maintain energy production, DNA/RNA synthesis/repair, genomic and non-genomic methylation as well as the synthesis of numerous neurochemicals and signaling molecules. B complex deficiency is normally caused due to four possible reasons; high consumption of processed and refined food, with a lack of dairy and meat-based food in diet, excessive consumption of alcohol, impaired absorption from the gastrointestinal tract or impaired storage and use by liver.

Vitamin B1 (Thiamine HCl): It plays an important role in energy metabolism, immunity boosting, and functioning of the nervous system. It can help avoid type 2 diabetes, several cardiovascular diseases, some vision and kidney disorders, and neurodegenerative diseases like Alzheimer's disease.

Vitamin B2 (Riboflavin-5-Phosphate Sodium): It is a powerful antioxidant and plays a vital role in maintaining healthy blood cells and boosting metabolism.

Vitamin B3 (Niacinamide): Niacin plays a critical role in the proper functioning of the nervous and digestive systems. Like other vitamins from the family, it is necessary for energy production and metabolism of fatty acids. It also provides healthy skin, nails, and hair.

Vitamin B5 (Dexpanthenol): Pantothenic acid is essential for the healthy development of the central nervous system. It is involved in energy production and through different metabolic and anabolic cycles in the development of amino acids, blood cells, vitamin D3, and other fatty acids.

Vitamin B6 (Pyridoxine HCl): Vitamin B6 has a very influential role in the synthesis of neurotransmitters and is essential for good mental health. It also has a direct effect on immune function. It plays a role in the metabolism of amino acids and is a necessary co-factor in the folate cycle, a lack of which can lead to anemia.

Side Effects

Side effects include skin rash, nausea, facial flush, nausea or vomiting, headache, palpitations, difficulty breathing, or diarrhea. Some may be related to allergic reactions. Rare anaphylactic shock has been reported due to intravenous administration. Monitoring symptoms during infusion is recommended.