

(For consumer information only)

Subneuro[®]-AD

(Methylcobalamin 1500 mcg , Alpha Lipoic Acid 100 mg , Vitamin D3 1000 IU , Pyridoxine Hydrochloride 3 mg , Folic Acid 1.5 mg)

Composition:

Each Film Coated Tablet Contains:

Methylcobalamin I.P..... 1500 mcg
Alpha Lipoic Acid USP.....100 mg
Vitamin D3 IP1000 IU
Pyridoxine Hydrochloride I.P... .. 3 mg
Folic Acid I.P... 1.5 mg
Excipients... q.s

Pharmacology:

Methylcobalamin:

It is also called as Vitamin B12 .It is a water-soluble vitamin that is naturally present in some foods, added to others, and available as a dietary supplement and a prescription medication. Vitamin B12 exists in several forms and contains the mineral cobalt, so compounds with vitamin B12 activity are collectively called “cobalamins”. Methylcobalamin and 5-deoxyadenosylcobalamin are the forms of vitamin B12 that are active in human metabolism. Vitamin B12 is required for proper red blood cell formation, neurological function, and DNA synthesis.

Vitamin B12 deficiency is characterized by megaloblastic anaemia, fatigue, weakness, constipation, loss of appetite, and weight loss. Neurological changes, such as numbness and tingling in the hands and feet, can also occur. Additional symptoms of vitamin B12 deficiency include difficulty maintaining balance, depression, confusion, dementia, poor memory, and soreness of the mouth or tongue. The neurological symptoms of vitamin B12 deficiency can occur without anaemia, so early diagnosis and intervention is important to avoid irreversible damage.

Vitamin B12, bound to protein in food, is released by the activity of hydrochloric acid and gastric protease in the stomach. When synthetic vitamin B12 is added to fortified foods and dietary supplements, it is already in free form and, thus, does not require this separation step. Free vitamin B12 then combines with intrinsic factor, a glycoprotein secreted by the stomach’s parietal cells, and the resulting complex undergoes absorption within the distal ileum by receptor-mediated endocytosis. Approximately 56% of a 1 mcg oral dose of vitamin B12 is absorbed, but absorption decreases drastically when the capacity of intrinsic factor is exceeded (at 1–2 mcg of vitamin B12).

Pyridoxine:

It is a water-soluble vitamin B6 naturally present in many foods. It is an important vitamin used by the body to prevent seizures and symptoms of peripheral neuropathy (which is characterized by a tingling sensation or numbness in the hands and feet.) Some drugs like isoniazid, used in the prevention and treatment of tuberculosis, can cause pyridoxine deficiency. Some conditions such as alcoholism, diabetes, CVD problems and malnutrition may increase the risk for peripheral neuropathy and the need for pyridoxine. Therefore, this drug is used as a supplement to prevent symptoms of pyridoxine deficiency.

Folic acid:

It is the synthetic form of folate, which is a naturally occurring Vitamin B9. Folate helps make DNA and other genetic material. It is especially important in prenatal health. Folic acid is a vitamin needed by the body to manufacture red blood cells. An insufficient amount of this vitamin causes diseases known as macrocytic or megaloblastic anaemia. These diseases are most likely to occur in children and pregnant women. Folic acid may reduce the incidence of neural tube defects (abnormal development of brain and spinal cord) of the baby. Additional amount of folic acid may be required when a patient takes excessive amounts of alcohol or when a patient suffering from chronic kidney diseases that attack the red blood cells and break them down. Patients taking medications to treat certain disease, such as seizures or malaria and women taking birth control pills also may require more folic acid than their normal diets provide.

Alpha Lipoic Acid

Alpha-Lipoic acid (ALA) is a caprylic acid-derived antioxidant. It is synthesized in the mitochondria and plays an essential role as a cofactor, assisting in the enzymatic nutrient breakdown. ALA has many biochemical functions acting as a biological antioxidant, anti-inflammatory properties, metal chelators, reducing the oxidized forms of other antioxidant agents such as vitamin C and E and glutathione, and modulating the signaling transduction of several pathways, like insulin and nuclear factor kappa-light-chain-enhancer of activated B cells (NF-kB)

Vitamin –D3

Vitamin D is hydroxylated in the liver to form 25-hydroxycholecalciferol and then undergoes further hydroxylation in the kidney to form the active metabolite 1, 25 dihydroxycholecalciferol (calcitriol). In its biologically active form vitamin D3 stimulates intestinal calcium absorption, incorporation of calcium into the osteoid and release of calcium from bone tissue. In the small intestine it promotes rapid and delayed calcium uptake. The passive and active transport of phosphate is also stimulated. In the kidney, it inhibits the excretion of calcium and phosphate by promoting tubular resorption. The production of parathyroid hormone (PTH) in the parathyroid is inhibited directly by the biologically active form of vitamin D3. PTH secretion is inhibited additionally by the increased calcium uptake in the small intestine under the influence of biologically active vitamin D3.

Indication of Subneuro AD

❖ Polyneuropathy.

- ❖ Strength up neuron for better conduction
- ❖ Diabetic peripheral neuropathy

Contraindications:

Subneuro AD is contraindicated in patients with hypersensitivity to cobalt and/or vitamin B12 or Pyridoxine or Folic acid, Alpha Lipoic acid and/or any of its excipients.

Drug Interactions:

Absorption of vitamin B12 from the gastrointestinal tract may be reduced by neomycin, amino salicylic acid, histamine H2-antagonists, omeprazole, and colchicine. Serum concentrations may be decreased by use of oral contraceptives. Many of these interactions are unlikely to be of clinical significance but should be taken into account when performing assays for blood concentrations.

For therapeutic use only.

Route of administration: Oral

Dosage: As directed by the Physician.

Storage: Store in a cool, dry & dark place.

Presentation: Subneuro AD is available as 10 x 10 Tablet.

Marketed By:

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