

NefmaxTM-MV

Folic Acid, Methylcobalamin, Biotin,
Calcium Pantothenate, & Vitamins Tablets

Water-soluble Multivitamins Support

Product Description:

Each film coated tablet contains

- Niacinamide: 20 mg
- Folic Acid 10 mg
- Pyridoxine hydrochloride 10 mg
- Calcium Pantothenate 5 mg
- Riboflavin 1.5 mg
- Thiamine Hydrochloride 1.5 mg
- Biotin 300 mcg
- Methylcobalamin 500 mcg

General Information:

Niacinamide (Vitamin B3)

Niacinamide is the amide of nicotinic acid (vitamin B3/niacin) that can also be synthesized from the amino acid tryptophan. Higher niacinamide doses improve lipid profile by increasing serum HDL and reducing LDL cholesterol fraction and serum triglycerides. The RDA for niacinamide is 16 mg/d for adult males and 14 mg/d for adult females. There is a growing interest on the efficacy of niacinamide for the treatment of hyperphosphatemia not as a phosphate binder, but rather as a direct inhibitor of the Na⁺-Pi-2b sodium-dependent transporter in the gastrointestinal tract.

Folic acid

Folic acid is important in DNA synthesis/cell division and helps to convert vitamin B12 into its coenzyme form. It is also essential for the interconversion of amino acids (i.e., homocysteine to methionine). It is mainly contained in green vegetables, fruits, and meat. The RDA for folic acid is 400 mcg/d for adult males and females.

In dialysis patients, it is cleared significantly during hemofiltration–hemodiafiltration and high-flux as well as low flux haemodialysis but also with peritoneal dialysis. It has been estimated that the serum levels fall by 37% post-dialysis and an oral supplement containing 6mg of folic acid can reconstitute the serum levels.

As the intestinal absorption is inadequate, the recommended dose for dialysis patients is 1 mg/d in order to prevent deficiency and 5–10 mg/d for the potential treatment of hyperhomocysteinemia.

Folic acid therapy reduces the risk of cardiovascular disease by 15%, especially among those with treatment duration over 24 months and a reduction in serum homocysteine levels over 20%.

Pyridoxine (B6)

Pyridoxine (B6) is a family of compounds that, unlike other water-soluble vitamins, can be stored in muscles. It is important for the metabolism of amino acids and fatty acids and influences cognitive development, immune function as well as steroid synthesis.

In dialysis patients, pyridoxine supplementation may significantly correct the high levels of total cholesterol, triglyceride, and LDL and the low HDL. The RDA for vitamin B6 is 1.3 mg/d for adult males and females through age 50.

This daily dose of pyridoxine should be higher in haemodialysis patients as they present increased erythropoietin activity associated with the use of erythropoietin and there are some drugs and other substances that interfere with pyridoxine metabolism. In a study on anaemic dialysis patients, the addition of pyridoxine in the conventional iron treatment has led to a more solid and sustainable correction of haemoglobin levels

Calcium Pantothenate (Pantothenic acid)

Calcium pantothenate (B5) takes part in the synthesis of many lipids, neurotransmitters, steroid hormones, and haemoglobin. It is a part of the coenzyme A and its deficiency rarely occurs as it is contained in a large range of nutritional categories. The RDA for calcium pantothenate is 5 mg/d for both adult males and females.

Riboflavin (Vitamin B2)

Riboflavin is necessary for the release of energy from nutrients and supports normal vision and healthy skin. The RDA for riboflavin is 1.3 mg/d for adult males and 1.1 mg/d for adult females.

Thiamine (Vitamin B1)

Thiamine is a part of the coenzyme thiamine pyrophosphate that promotes the conversion of pyruvate to acetyl CoA. It is useful in many activities such as the conduction of nerve impulses, muscle function or stimulation of appetite.

Biotin

Biotin (vitamin H–B8) participates in energy metabolism as a coenzyme that carries CO₂ and participates in the tricarboxylic acid cycle, in gluconeogenesis, in the metabolism of fatty acids, and the breakdown of amino acids. It can be synthesized by bacteria in the gastrointestinal tract. The RDA for biotin is 30 mcg/d for healthy adult males and females dialysis patients.

Methylcobalamin

Methylcobalamin is a type of Vitamin B12. This vitamin is necessary for DNA and RNA synthesis. The RDA for vitamin B12 is 2.4 mcg/d for adult males and females, including the dialysis patients. There

are studies showing impressive homocysteine reductions (from 11 to 30%) that may even include normalization of its serum levels in haemodialysis and peritoneal dialysis patients

Indication & Usage

Nefmax-MV is a folic acid supplement with additional nutrients used in improving the nutritional status of renal dialysis patients.

Dosage and Administration:

1 tablet OD with meal

Mechanism of Action:

Nefmax-MV provides the water-soluble vitamins that may be lost during dialysis or deficient in patient's diet. These nutrients are important for health including the production of red blood cells.

Contraindication:

Nefmax-MV is contraindicated in patients with known hypersensitivity to any of the ingredients.

Precautions:

Folic acid supplementation may obscure pernicious anemia, in that hematologic remission can occur while neurological manifestations progress.

Keep out of reach of children

Side Effects:

Constipation, diarrhoea, or upset stomach are the common side effects with Nefmax-MV. These effects are usually temporary and may disappear as your body adjusts to this medication.

However, seek immediate medical attention if you notice any of the following symptoms of a serious allergic reaction: rash, itching/swelling (especially of the face/tongue/throat), severe dizziness, trouble breathing.