Children'sMulti

Maximum bioavailability

Code: FE1935 - 150 g

This is a complete formula of 18 essential nutrients based on vitamins and highly bioavailable minerals, especially designed for children and adolescents from 3 to 12 years old. Its administration supports children's general health, preventing nutritional imbalance which can cause weakened immunity, physical and mental fatigue and poor concentration.

Its powder presentation facilitates administration, allowing for better adaptation to the appropriate dosage and meeting the nutritional requirements for every stage of growth. With a pleasant flavour and sweetened with stevia, it can be added to water, juice or shakes, making it easy for even the youngest children to take.

Ingredients: Natural berry flavour, natural lemon flavour, acidulant (malic acid), calcium citrate (100 mg Ca), magnesium bisglycinate (50 mg Mg), L-ascorbic acid (vit. C), sweetener (steviol glycosides from Stevia choline citrate, antioxidant (tocopherol-rich extract, 1,26 mg α-TE), D-biotin, thiamin hydrochloride (vit. B1), riboflavin 5´-phosphate sodium (vit. B2), nicotinamide (vit. B3), D-pantothenate calcium (vit. B5), pyridoxal 5´-phosphate (vit. B6), ferrous bisglycinate (2 mg Fe), zinc citrate, calcium L-methylfolate, cholecalciferol (vit. D3), cupric citrate.

Nutritional information:	**1 scoop (6 356 mg)**
Vitamins:	
Thiamin (vit. B1) (from 10 mg thiamin hydrochloride)	8,9 mg (809%*)
Riboflavin (vit. B2) (from 10 mg riboflavin 5´-phosphate sodium)	7,5 mg (536%*)
Niacin (vit. B3) (nicotinamide)	10 mg NE (63%*)
Pantothenic acid (vit. B5) (from 10 mg D-pantothenat calcium)	9,2 mg (153%*)
Vit. B6 (pyridoxine) (from 10 mg pyridoxal 5´-phosphate)	6,9 mg (493%*)
Folate (calcium-L-methylfolate)	400 µg (200%*)
Vitamin B12 (methylcobalamin)	500 µg (20.000%*)
Vitamin C (L-ascorbic acid)	250 mg (313%*)
Vitamin D3 (cholecalciferol) (400 IU)	10 µg (200%*)
Biotin (D-biotin)	300 µg (600%*)
Minerals:	
Copper (from cupric citrate)	200 µg (20%*)
Iodine (from kelp)	70 µg (47%*)
Zinc (from zinc citrate)	2 mg (20%*)
Calcium (from calcium citrate)	100 mg (13%)
Iron (fom ferrous bisglycinate)	2 mg (14%)
Magnesium (from magnesium bisglycinate)	50 mg (13%)
Nutraceutics:	
Choline (choline citrate)	40 mg

*NRV: Nutrient Reference Value in %

Contains no: Preservatives, artificial flavour or colour, sugar, milk or milk products, starch, wheat, or yeast.

Size and format:

150 g

Recommended daily dose:

Mix 1 scoop daily (approx. 6,3 g) in unsweetened fruit juice. Stir well until dissolved.

Do not exceed the stated recommended daily dose.

Indications and uses:

Different studies have shown that the ingredients in CHILDREN'S MULTI can be helpful for:
Stages of development and growth, situations of increased physical and mental requirement like back-to-school or stress situations.
It also avoids deficiencies caused by poor or loss of appetite, convalescence, weakened immunity, or fatigue.

Cautions:

This product is Not recommended for children taking anticoagulants or antiplatelet medication. For children under 4 years old, consult a health-care practitioner before use.

VIITAMIN C: Vitamin C carries out a fundamental role as an antioxidant. It deactivates free radicals in an aqueous environment and regenerates vitamin E. It supports tissue development and favours iron absorption, and is fundamental for efficient immune response, being effective at reducing the symptoms and duration of the common cold in winter[1].

CALCIUM: This is a necessary mineral for the formation and maintenance of bone structure, muscle contraction and cell membrane balance (potential for action), and it participates in blood coagulation[1,2]. CHILDREN'S MULTI contains an optimal proportion of calcium to magnesium (2:1) for appropriate muscle formation, nerve cell signalling, hundreds of enzymatic reactions and the generation of cell energy.

IRON: Iron is an important mineral for the production of haemoglobin in red blood cells and the formation of muscle tissue. It improves cognitive development in children and academic performance in adolescents. Iron supplementation prevents or reduces iron deficiency anaemia, which leads to delayed mental and physical development, fatigue or lower activity levels, and lower immunity against infections. In our formulation, iron has been incorporated in its chelated form for greater bioavailability[1].

VITAMIN D3: This vitamin is fundamental for calcium metabolism and bone development, as well as proper immune function. A deficiency of this mineral causes rickets (lack of bone and cartilage mineralization during growth)[3].

VITAMIN E: Vitamin E participates in the synthesis of sex hormones and helps prevent oxidative stress. An insufficient intake is related with immune deficiency[1,2].

THIAMIN (Vitamin B1): Thiamin is essential for carbohydrate metabolism. It participates in the diverse metabolic routes of protein and fat, the synthesis of acetylcholine, the transmission of nerve impulses and the maintenance of normal growth[1,2].

RIBOFLAVIN (Vitamin B2): Riboflavin has a fundamental role in energy metabolism and is required for fat, carbohydrate and protein metabolism, as well as a wide variety of cellular processes[1,2,4].

NICOTINAMIDE (Vitamin B3): Nicotinamide is essential for cell energy metabolism and DNA repair. A deficit causes pellagra, a disease characterized by the onset of mucocutaneous lesions and alterations to the nervous system[1,2,4].

PYRIDOXINE (Vitamin B6): Pyridoxine acts in numerous biochemical reactions as an enzymatic cofactor. It is involved in protein and amino acid metabolism, and to a lesser extent, fat and carbohydrates metabolism. It also participates in the synthesis of nucleic acids and haemoglobin[1,2,4].

FOLIC ACID (Vitamin B9): Folic acid participates in the biosynthesis of nucleic acids, so it is essential for the processes of cell division and red blood cell and leukocyte formation[1,2,4].

METHYLCOBALAMIN (Vitamin B12): This acts as a coenzyme in cell replication and in the maintenance of the myelin sheath of the CNS. A deficit causes megaloblastic anaemia, digestive alterations and nervous disorders. In our formulation, the most active form of this vitamin on the neurological system has been included[1,2,4].

BIOTIN (Vitamin B8): Biotin acts as a coenzyme in carboxylation reactions, so it is absolutely necessary in several metabolic functions for obtaining energy. It helps produce fatty acids and protein, activating their metabolism in hair and nails, and is important for the maintenance of the skin and mucous membranes[1,2,4].

PANTOTHENIC ACID (vitamin B5): This is important for cellular respiration as well as the biosynthesis of fatty acids, cholesterol and acetylcholine, among others, making it essential for obtaining energy, mental performance and the metabolism of certain hormones and vitamin D. A deficit can cause fatigue, insomnia, depression, digestive disorders and upper respiratory tract infections[1,2,4].

IODINE: Iodine is fundamental for the development of the thyroid hormone and cell metabolism, as well as the function of all organs, especially the brain, making it essential during childhood, as it can improve learning skills and intellectual potential, providing an increase of up to 13 points in the IQ score. A deficit can have repercussions on a child's neurological development[1,2,4,5].

MAGNESIUM: Magnesium forms part of the bone matrix and pays a primordial role in muscle relaxation. A deficiency can also cause vomiting, nervousness and insomnia. It has been included in this formulation in its most bioavailable form[1,2,4,5].

ZINC: Zinc is necessary for optimal folic acid absorption. It participates in the process of cell division, reducing the risk of delayed growth. It also reduces the frequency and severity of diarrhea. A lack of zinc is related with skin lesions, slow wound healing, hair loss and nail fragility, but a chronic deficiency can cause hypogonadism (small reproductive organs) and delayed sexual maturation[1,2,4,5].

COPPER: Copper is necessary for a multitude of enzymatic processes, and its deficit alters ATP production, lipid oxidation, hormone activity, angiogenesis and pulmonary and skeletal structures[1].

CHOLINE: Choline participates in multiple metabolic reactions. It is present in cell membranes in the form of lecithin or phosphatidylcholine, a substance that plays an important role in the metabolism of fat, carbohydrates, amino acids and purines. It is also a precursor of acetylcholine, a brain neurotransmitter that is fundamental for nerve transmission and correct brain function[5].

References:
1) Guía de Alimentación y Salud. Alimentación en las etapas de la vida: Infancia. UNED. Facultad de Ciencias. Nutrición y Dietética. Available in: http://www.uned.es/pea-nutricion-y-dietetica-I/guia/etapas/infancia/loque_necesidades_de_.htm
2) Nutrición y Salud: Nuevos alimentos para nuevas necesidades. Instituto de Salud Pública de la comunidad de Madrid. Available in: http://www.nutricion.org/publicaciones/pdf/nuevos_alimentos.pdf
3) Misra M, Pacaud D, A Petryk A, Ferrez P, Kappy M. Vitamin D Deficiency in Children and Its Management: Review of Current Knowledge and Recommendations. *Pediatrics*. 2008; 122(2): 398-417.
4) Guía de nutrición de la familia. Organización de las naciones unidas para la agricultura y la alimentación. Rome, 2006. FAO. Available in: http://www.fao.org/docrep/008/y5740s/y5740s00.HTM
5) Food Supplements Europe. Facts about vitamins, mineral and other food components with health effects. 2013. Available in: http://www.foodsupplementseurope.org/sites/0023/uploads/content/publications/facts-about-vitamins-minerals.pdf