



# ONCE A DAY KIDS MULTI (CHEWABLE)

For children's growth, immunity & development

# Nutritional Information One chewable tablet provides:

VITAMINS	
Vitamin A	400 μg
Vitamin C	80 mg
Vitamin D3	5 µg
Vitamin E (18 i.u.)	12 mg
Thiamin (B1)	1.1 mg
Riboflavin (B2)	1.4 mg
Nicotinamide (B3)	16 mg
Vitamin B6	1.4 mg
Folacin (Folic Acid) (B9)	200 µg
Biotin (B7)	50 μg
Pantothenic Acid (B5)	6 mg

Vitamin B12	2.5 µg
MINERALS	
Calcium	82 mg
Magnesium	39 mg
Iron	7 mg
Zinc	5 mg
Copper	251 μg
lodine	76 µg
Chromium	20 µg
Selenium	27.6 μg
Potassium	24 μg
Phosphorus	1.2 mg

Take one tablet daily with food.







- Delicious blackcurrant flavour
- One a day dosage

- 12 vitamins and 10 minerals
- From 3 years plus

### **DESCRIPTION**

A delicious tasting children's multi nutrient formula, specifically balanced to help ensure children meet their daily nutritional needs. Providing 12 essential vitamins including vitamin D, which is recommended by the Department of Health for all children under the age of 5, as well as vitamins A, C, E the B family and 10 essential minerals. The minerals included in this formula are chelated to amino acids to greatly enhance absorption while being gentle on the gut.

Children are growing and developing at a rapid rate and require more nutrition per kg of body weight than adults. Nutrition quality in soil and food has significantly decreased meaning that supplementation may be necessary to meet daily requirements.

## WHY DO CHILDREN NEED A MULTI NUTRIENT FORMULA?

**Varying dietary intakes and disease risk:** Children have varying requirements for nutrition, depending on diet, genetics and health conditions. Studies suggest a correlation between low level of antioxidant nutrients including vitamin C and E and the occurrence of asthma in children<sup>1</sup>. Other research indicates that decreased antioxidant vitamin concentrations appear to be a characteristic of obese children. Antioxidant vitamins may modulate the production of obesity related inflammatory markers in children<sup>2</sup>. Other controlled studies have examined blood nutrient levels of children with chronic rhinitis and found that the patients with chronic rhinitis had significantly lower levels of vitamin E, C, copper and zinc when compared to the control group<sup>3</sup>.

**Widespread nutrient insufficiency:** A meta-analysis of European dietary studies of children identified inadequate nutrient intakes, particularly of vitamins E, C and A in children aged 4-14<sup>4</sup>. These nutrients are particularly related to the immune system and antioxidant protection and are needed due to the constant challenges on the childhood immune system and the increased oxidant production related to the higher metabolic rate of rapid growth.

**The nutrient gap:** Over the past 100 years, soil quality has decreased due to intensive farming methods and the use of pesticides, fungicides and herbicides, and the disruption their use has on the natural soil microbiome and subsequently nutrient quality and density. This decrease in soil quality directly leads to a drop in food quality. Another problem is the increasing toxic load on the human body due to the use of chemicals in horticulture and agriculture, drinking water and air. The body requires an increased nutrient intake to deal with these toxins, especially antioxidants.

### WHAT IS IN CHEWABLE KIDS MULTI AND WHY HAS IT BEEN ADDED?

Vitamin A	Vitamin A is needed for the immune system and influences the immune response in highly specific ways. It is found abundantly within the gut associated immune cells <sup>5</sup> . Vitamin A is required for the retina of the eye as it protects the surface of the cornea, and a deficiency can result in permanent damage and night blindness.
Vitamin C	Vitamin C is needed for the normal function of the immune system where it protects the immune cells from oxidative damage. Some children have an increased need for vitamin C if they have a genetic defect that result in a decreased synthesis of glutathione, a recycler of vitamin C. Vitamin C is also needed for hydroxylation lysine and proline in preparation for collagen production. Collagen is an essential structural component of developing bones, teeth, joints, skin and gums.
Vitamin D	Vitamin D is needed for developing bones and teeth in children as it increases the absorption of calcium from the diet. Vitamin D is also needed for the normal functioning of the immune system where it regulates gut associated immune cells and the prevention of developing autoimmunity. Healthy vitamin D levels are especially important for children with atopy and allergies.

Vitamin E	Vitamin E is the main plasma antioxidant. It is essential for the protection against oxidative damage to fat in the cell membranes, allowing them to function properly and communicate with other cells and receive signals from the body in the form of hormones, including growth hormones.
Vitamin B1	Vitamin B1, also known as thiamin is required for the normal function of the nervous system as it is needed directly for the myelin sheath. This is important for brain and muscle function as well as mental focus and learning,
Vitamin B2	Also known as riboflavin, vitamin B2 is important for normal skin and mucous membranes. Skin and mucous membranes are the first line of defence of children, especially against commutable diseases such as colds and flu.
Vitamin B3	Also known as niacin, vitamin B3 is required for normal energy production and it converts into NADH and is used directly for the energy production cycle. Energy requirements are higher in children as growing, developing and learning places large demands on them.
Vitamin B6	Vitamin B6 contributes to the regulation of hormonal activity. Hormones are essential for growth and development of children as they regulate metabolism and contribute to bone density. Hormones affect learning and mental performance.
Folacin	Folacin (folate) is required for normal psychological function and brain development. Folate is also needed for the creation of healthy blood cells required for oxygen transportation.
Vitamin B12	This is required for the normal formation of red blood cells and tissue oxygenation. The rise in veganism is also seeing a rise in children consuming a vegan diet. Vegan diets are naturally void of vitamin B12, so supplementation is essential.
Biotin	Biotin, is needed for the metabolism of other nutrients making it an essential addition to a multi nutrient supplement. Biotin is also required for fast turnover cells such as the skin and mucous membranes.
Pantothenic acid	Vitamin B5 is required for normal mental performance in children. It is also required for adrenal hormones which help to control blood sugar balance and moods.
Calcium	As well as being needed for bones and teeth, calcium is needed for the body to create digestive enzymes, essential for the utilisation of nutrients from foods and for a comfortable digestive process.
Magnesium	Magnesium is needed for the creation of new protein structures within the body. This is a vital part of growth and physical development. It is also one of the most abundant minerals in bones and teeth and works in balance with calcium. Magnesium is required for the utilisation of vitamin D.
Iron	Iron is required for the production of haemoglobin which is the part of the red blood cells that carries oxygen. Iron works with the other B vitamins for healthy red blood cells. Iron is also required for normal cognitive function.
Zinc	Zinc is a mineral that is required for the synthesis of DNA and protein structures. It is also essential for immunity and normal histamine levels within the body.
Copper	Copper is required for the normal pigmentation of skin and hair. It is also required for the immune system where it works in balance with copper. Copper specifically works to protect against free radical damaged caused by metabolic processes within the body, and for the protection of immune cells from toxins.
lodine	lodine is needed for normal cognitive and neurological function. This nutrient is especially important for children who are developing mentally and learning. lodine is also needed for a normal thyroid function. The thyroid controls metabolism, growth and development. lodine deficiency caused retardation in growth and development.
Chromium	Chromium contribute to normal blood glucose levels. Maintaining normal blood glucose levels ensures a steady supply of energy and may help to prevent poor behaviour. Steady glucose and therefore insulin levels are needed as serotonin is transported into the brain with insulin.

### Selenium

Selenium is a mineral that contributes to the normal function of the immune system. It works as an antioxidant to protect the cells, particularly the immune cells from oxidative damage caused by the environment and normal biological processes. Selenium levels are particularly low in European soils and even more so in organic soils.

# WHAT ARE AMINO ACID CHELATED MINERALS AND WHY ARE THEY SUPERIOR?

Minerals chelated to amino acids have a greater absorbency within the gut compared to other forms of the minerals. Each mineral has different stability within the gut and when joined to various compounds. Inorganic mineral forms such as oxides, sulphates and carbonates are not used effectively by the body. They are also disassociated from each other in the presence of stomach acid and can cause irritation to the gut. Amino acid chelated minerals however have a neutral charge, and an increased bond to each other allowing them stay intact as they move further into the gut and bind to specific receptor sites, optimising mineral absorption.

### ARE THERE ANY PRECAUTIONS BEFORE OR DURING GIVING CHEWABLE KIDS MULTI TO A CHILD?

Chewable kids multi is intended exclusively for children above the age of 3 years. Do not swallow whole.

### **FEATURES**

- Amino acid chelated minerals One a day dosage 22 essential nutrients Gluten and dairy free
- Made from non GM ingredients

# **HEALTH NEEDS**





EVERYDAY HEALTH AND WELLBEING

CHILDREN'S HEALTH

### **SCIENTIFIC REFRENCES**

- 1. The Turkish Journal of Pediatrics [01 Jan 2000, 42(1):17-21]
- 2. The American Journal of Clinical Nutrition 2006, 748
- 3. Journal of Trace Elements in Medicine and Biology 2004 189-192
- International Journal for Vitamin and Nutrition Research (2001), 71, 325-331.
- 5. Nat Rev Immunol. 2008 Sep; 8(9): 685–698.

