



Big Friends® Chewable Vitamin C 250 mg · Tangy Orange

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RESEARCH INFORMATION

Feature summary

Big Friends children's vitamins are back in a big way, and now better than ever. As parents, we want our children to reach their full potential in physical and mental development, yet picky eating habits and busy schedules are real life factors that can compromise children's nutrition and affect their health. Big Friends Chewable Vitamin C combines fun, deliciousness, and quality to help active children maintain strong bones, cartilage, teeth, and gums throughout their growing years. It aids wound healing and supports immune function while also increasing the body's antioxidant intake for the maintenance of good health.

Each chewable tablet delivers a 250 mg dose of vitamin C, supplying a more potent level than can be obtained from an equivalent gummy format. This low-acid formula is gentle on tummies and teeth, while xylitol adds a touch of sweetness and can help prevent cavities. Big Friends is geared for children aged 1 year and older. Children find the Tangy Orange flavour delicious and parents love that they contain no GMOs, gluten, artificial colours, flavours, preservatives, or sugar.

One of Natural Factors' most popular lines, Big Friends returns with updated formulas. This trustworthy brand has maintained its quality, efficacy, and purity, while continuing to keep children excited about taking their vitamins.

How it works

Vitamin C has many physiological actions. As an antioxidant, it releases unpaired electrons to neutralize free radicals and fight oxidation. By reducing oxidative stress it helps moderate the body's inflammatory response, which is a result of acute infections and the mechanism behind many chronic health problems.

These antioxidant activities support overall health, including immunity. When the respiratory tract becomes infected, neutrophils release oxidizing compounds that are toxic to other cells and reduce levels of extracellular vitamin C. Oral vitamin C helps increase the body's antioxidant status to help minimize these harmful effects.

Vitamin C is also required for tissue formation and repair through the synthesis of collagen. This connective tissue supports the attachment of bones and muscles, and is important for healing wounds. Vitamin C is a cofactor in the hydroxylation of amino acid residues, which is a key step in collagen formation. These amino acids are essential for stabilizing the triple helix structure of collagen with strong hydrogen bonds and crosslinks. This helps prevent its disintegration and adds tensile strength to new collagen so that it can stretch without tearing. Collagen is also the main component of the organic matrix of bones on which minerals are deposited.

Research

There is strong evidence to show that vitamin C plays an important role in maintaining children's good health. Because the human body cannot synthesize vitamin C, children and adults must obtain it through their diets.

When antioxidant levels are low, oxidative stress can result and leave the body more vulnerable to chronic inflammatory conditions, including airway disorders like asthma and pneumonia (Heydarian et al., 2016; Kahn et al., 2014). A review of 13 clinical studies identified a clear association between low dietary intake of vitamin C in children and an increased risk of asthma. Researchers also observed that asthmatic children could reduce the severity of their symptoms by consuming more vitamin C (Heydarian et al., 2016). In addition, a placebo-controlled study examined the benefits of vitamin C for children under the age of five suffering from pneumonia. Patients who were supplemented with 200 mg of vitamin C per day experienced a 14% greater improvement in respiratory rate and an 11% greater improvement in oxygen saturation than those supplemented with a placebo (Khan, 2014).

Vitamin C is also helpful during the cold and flu season and has been shown to reduce symptoms of the common cold. Two placebo-controlled clinical studies found that when children with colds received at least 200 mg vitamin C per day, they recovered from symptoms 14% faster than those who received a placebo (Maggini et al., 2012).

Antioxidants also support cognitive health by reducing oxidative stress. Vitamin C intake has been associated with reduced symptoms of depression and anxiety in children and the elderly. A placebo-controlled clinical study found that supplementing high school students with 500 mg of vitamin C per day for two weeks reduced their anxiety levels by 25%, while the placebo made no difference (Oliveira et al., 2015).

Vitamin C is essential to the body's proper formation of collagen, which is needed for healthy bones, cartilage, teeth, and gums, as well as healing wounds. Deficiency can lead to abnormal bone development and conditions such as scurvy, characterized by bleeding gums and bruising.

Correlations have also been confirmed between vitamin C intake and strong bone mineral density in children (Laudermilk et al., 2012). Through a cross-sectional analysis, researchers identified a significant relationship between vitamin C intake and the bone size and strength of school-aged girls. They calculated that for every mg of vitamin C consumed per day, the trabecular area of bones increased by 11% and cortical strength increased by 14%, while circumferences of the outer (periosteal) and inner (endosteal) layers of connective tissue in bones increased by 5% and 8.5%, respectively (Laudermilk et al., 2012).

Vitamin C's role in wound healing benefits those who suffer from oral and stomach ulcers. A preliminary clinical study found that when children between nine and 14 with aphthous stomatitis or canker sores (MRSA) took 2000 mg/m² vitamin C per day for three months, they experienced a 50% decline in their oral outbreaks and a significant reduction in related pain (Yasui et al., 2010).

Ingredients

Each chewable tablet contains:

Vitamin C (sodium ascorbate, ascorbic acid)250 mg

Dosage

Recommended dose: Children 2–3 years: Chew 1 tablet daily or as recommended by a health care practitioner. **Children 4–8 years:** Chew 1–2 tablets daily or as recommended by a health care practitioner. **Adolescents 9–13 years:** Chew 1–4 tablets daily or as recommended by a health care practitioner. **Adolescents 14–18 years:** Chew 1–6 tablets daily or as recommended by a health care practitioner.

Cautions

Keep out of the reach of children.

References

- Heydarian, F., Ahanchian, H., Khalesi, M., et al. (2016). The effect of serum levels of vitamin C on asthmatic children: A systematic review. *Rev Clin Med*, 3(3), 87-92.
- Khan, I., Shabbier, A., Naeemullah, S., et al. (2014). Efficacy of vitamin C in reducing duration of severe pneumonia in children. *JRMC*, 18(1), 55-57.
- Laudermilk, M., Manore, M., Thomson, C., et al. (2012). Vitamin C and zinc intakes are related to bone macro-architectural structure and strength in prepubescent girls. *Calcif Tissue Int*, 91(6), 430-439.
- Maggini, S., Wenzlaff, S. & Hornig, D. (2010). Essential role of vitamin C and zinc in child immunity and health. *The Journal of International Medical Research*, 38, 386-414.
- Oliveira, I., de Souza, V., Motta, V., et al. (2015). Effects of oral vitamin C supplementation on anxiety in students: a double-blind, randomized, placebo-controlled trial. *Pak J Biol Sci*, 18(1), 11-8.
- Yasui, K., Kurata, T., Yashiro, M., et al. (2010). The effect of ascorbate on minor recurrent aphthous stomatitis. *Acta Paediatr*, 99(3), 442-5.