



WWW.QNUTRAPHARMA.COM

*Platinum
Excellence*

BRIGHTSTART

Combines DHA and vitamin D to support optimal brain, visual, bone and immune health.

Nutritional Information

One ML provides:

		%NRV
Vitamin D3 (400 i.u.)	10 µg	200
DHA (Docosahexaenoic Acid)	40 mg	42
Vitamin E	5 mg	42

*NRV = Nutrient Reference Values

Infants and children aged 1 month to 5 years old, take 0.5ml twice daily or 1ml once daily.



SUMMARY

- Unique combination of Vitamin D and DHA highly recommended for infants 1 month+.
- Vitamin D supports bone, teeth, joint and immune health.
- DHA supports the early stages of brain and visual development in infants.
- Prevents vitamin D deficiency in infants.

WHAT IS BRIGHTSTART?

Combines two essential nutrients in one convenient formula for infants and children aged between one month and five years old. Designed to support bone health and early development of the brain and eyes. DHA is a key nutrient in brain structure and function and contributes to normal brain function and maintenance of normal vision. Vitamin D is an essential vitamin for children, it contributes to the growth and development of bones. The UK Department of Health recommends that all infants and young children aged 6 months to 5 years should take a vitamin D supplement. Vitamin D also helps to maintain teeth and contributes to the normal function of the immune system and muscles.

HOW DOES BRIGHTSTART GIVE INFANTS THE BEST START?

Increased risk of deficiency: Infants and children are one of the population groups for which vitamin D3 supplementation is highly recommended. This age group is at a high risk of vitamin D deficiency and is unable to meet their daily intake of vitamin D through the diet and sunlight exposure alone.¹

Official recommendations: The recommendations on vitamin D3 supplementation for infants and children from the Department of Health and the National Institute for Health and Clinical Excellence (NICE), in the United Kingdom are as follows:^{2,3,4}

- All infants and young children aged six months to five years should take a daily supplement containing vitamin D in the form of vitamin drops to help meet their requirement.
- Infants fed formula milk will not need vitamin drops until they are receiving less than 500ml of infant formula a day, as these products are fortified with vitamin D.
- Breastfed infants may need to receive drops containing vitamin D from one month of age if their mother has not taken vitamin D supplements throughout pregnancy.

Vitamin D deficiency is implicated in a wide variety of health problems and diseases. Especially relevant to infants are problems in the development and growth of bones due to poor bone mineralisation, weakened immunity, susceptibility to infections, and joint/muscle conditions (rheumatic disease).⁵

Docosahexaenoic acid (DHA)

An essential nutrient: Docosahexaenoic acid (DHA) is an omega 3 essential fatty that cannot be made by the body and therefore must be obtained through the diet or supplementation in a preformed or precursor form. DHA is a key nutrient in brain structure and function, with the potential to influence neurocognitive development. For infants, DHA is specifically required in the early development of cognitive and visual function and to safeguard subsequent neurocognitive performance.^{6,7,8,9,10,11,12,13,14,15}

Brain development: The DHA-rich human brain requires an ample and sustained source of dietary DHA to reach its full potential. The brain accumulates and accretes DHA up to the age of 18, but the most extensive development occurs during the last trimester of the pregnancy and in the first years of life, reaching 80% of its adult volume by the age of 3.¹⁶ In particular, the brain undergoes a “growth spurt” and enters its most dynamic stage of development in the first year of life, growing from 250g to 925g.¹⁷ During this stage a sufficient supply of DHA is vital for the brain’s proper development and this development is particularly vulnerable to nutritional insufficiencies, such as in DHA.^{6,18}

DHA conversion: The sources of DHA in the first years of life include maternal breast milk, fortified milk formulas and nutritional supplementation, such as BrightStart. It is important to distinguish between sources that provide preformed DHA, such as BrightStart, and sources that provide DHA precursors. DHA precursors, such as Alpha-Linolenic acid (ALA), rely on a highly inefficient conversion process in the body to be converted into DHA.¹⁹ In fact studies have shown that less than 0.5% of dietary ALA intake is actually converted into DHA.²⁰

BrightStart contains preformed DHA and safeguards the DHA intake of both breast-fed and formula-fed infants:

Breast-fed babies: DHA levels in breast-milk rely on a good DHA status of the mother, which will depend on whether the mother had/has a good DHA intake during her pregnancy and lactation.^{9,21} Numerous experts and government authorities agree that DHA requirements are increased during pregnancy and lactation requiring at least 200 mg DHA daily from supplements or from 1-2 portions of fish per week.²² Figures indicate that the majority of women in western countries do not achieve these levels of DHA intake.^{23,24}

Formula fed babies: Many infant formulas contain high levels of DHA precursors, such as ALA, which are inefficiently converted into DHA in the body. Studies show that modern infants consuming infant formulas that include only DHA precursors, such as ALA, have lower DHA levels and lower accretion of DHA in the brain, compared to infants with a source of preformed DHA.²⁵

HOW SHOULD BRIGHTSTART BE TAKEN?

Infants and children aged 1 month to 5 years old, should take 0.5ml twice daily or 1ml once daily. For infants, place drops onto mother's nipple or a dummy and allow baby to suck. Alternatively mix with formula, juice or food. This product can also be given directly.

ARE THERE ANY PRECAUTIONS THAT SHOULD BE TAKEN BEFORE GIVING BRIGHTSTART TO AN INFANT?

BrightStart is not suitable for infants consuming 500ml or more of formula milk a day and infants under 1 month of age unless under medical supervision. BrightStart should not be combined with any other products containing Vitamin D and Vitamin A.

FEATURES

• Provides DHA and vitamin D in one formula • Easy to take liquid • Natural orange flavour • Convenient measured dropper dose

HEALTH NEEDS



CHILDREN'S HEALTH



EVERYDAY HEALTH
AND WELLBEING



EYES

SCIENTIFIC REFERENCES

1. Scientific Advisory Committee on Nutrition: Update on Vitamin D position statement. 2007
2. Department of Health: Delivering a healthy start for pregnant women, new mums, babies and young children. London, COI: 2010
3. National Institute for Health and Clinical Excellence NICE clinical guideline 62: Antenatal care. Issued March 2008. Last modified June 2012 NICE, 2008
4. National Institute for Health and Clinical Excellence NICE public health guidance 11: Maternal and child nutrition NICE, 2008.
5. Pediatrics. 2008 Nov;122(5):1142-52
6. Front Hum Neurosci. 2013 Nov 20;7:774
7. Prostaglandins Leukot Essent Fatty Acids. 2006 Oct-Nov;75(4-5):329-49
8. J Nutr Biochem. 2013 May;24(5):725-43
9. Brain Res. 2008 Oct 27;1237:35-43
10. Pharmacol Res. 2013 Apr;70(1):13-9
11. Early Hum Dev. 2011 Mar;87(3):223-30

12. Pediatrics. 2003 Jan;111(1):e39-44
13. Dev Med Child Neurol. 2000 Mar;42(3):174-81
14. J Nutr. 2007 Apr;137(4):855-9
15. Am J Clin Nutr. 1994 Aug;60(2):189-94
16. J Neurosci. 2007 Feb 7;27(6):1255-60
17. Am J Clin Nutr. 2014 Mar;99(3):734S-41S
18. Front Hum Neurosci. 2013 Mar 26;7:97
19. Reprod Nutr Dev. 2005 Sep-Oct;45(5):581-97
20. Appl Physiol Nutr Metab. 2007 Aug;32(4):619-34
21. Biomed Pharmacother. 2007 Feb-Apr;61(2-3):105-12
22. J Perinat Med. 2008;36(1):5-14
23. Nutrients. 2010 Feb;2(2):198-213
24. Prostaglandins Leukot Essent Fatty Acids. 2011 Nov;85(5):275-80
25. Biochimie. 2011 Jan;93(1):7-12