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ONCE A DAY SUNSHINE D DROPS

(BABY AND KIDS)

A healthy start for bone, teeth and immune health

Nutritional Information

1ml provides:

		***NRV
Vitamin D3	400 i.u. (10 µg)	200

*NRV=Nutrient Reference Values

For infants and children 1 month plus: 1 ml once daily or 0.5 ml twice daily.



- 400 i.u. of vitamin D per serving
- Bioavailable D3 form
- Tasteless and easy to administer
- Suitable from 1 month plus

DESCRIPTION

Baby and Kid's Sunshine D drops provide 400 i.u. of vitamin D3 per serving. Vitamin D is an essential vitamin and is officially recommended for babies and children. Vitamin D is needed for the regulation of the immune system and inflammatory responses, as well as for bone and teeth health. Due to modern lifestyles, diets and cultural practices, vitamin D deficiency and inadequacy is widespread and leads to many health complications. Baby and Kid's Sunshine D drops are suitable from one month plus and can be given directly in the mouth or mixed with food or liquid.

HOW DOES VITAMIN D SUPPORT A CHILD'S IMMUNE SYSTEM?

Autoimmunity: Vitamin D is required for the regulation of T and B lymphocytes. These immune cells reside in the gut associated lymphoid tissue (GALT), alongside T regulatory cells, cells which help to ensure that T lymphocytes are displaying self-tolerance. A lack of self-tolerance leads to autoimmune antibodies and chronic autoimmune diseases. Vitamin D is found in large quantities in the GALT.

Increasing resistance to infections: Vitamin D exerts a beneficial effect on T and B lymphocytes, monocytes and dendritic cells, ultimately decreasing excess inflammation and supporting the effective defence against pathogens. Lower levels of vitamin D <30nmol per litre of blood is associated with increased rates of infections¹.

Allergies: Allergic conditions such as asthma and eczema may be worsened in states of low vitamin D status. Research in asthmatic children show an increased rate of corticosteroid use and worsening airflow limitation in children who had lower serum vitamin D levels². Research also indicates that Vitamin D insufficiency at age 12 months is associated with an increased odds of food allergy among infants³ and is associated with eczema in both children and adults³.

HOW DOES VITAMIN D SUPPORT THE DEVELOPING BONES AND TEETH IN CHILDREN?

Calcium absorption: Vitamin D is required for the absorption of calcium in the intestines and across the cell membranes.

Osteoblast stimulation: Vitamin D promotes osteoblast (bone secreting cell) differentiation and bone matrix calcification¹. Vitamin D binds to VDR receptors on the osteoblasts to stimulate calcification. At the time of birth, a large proportion of bone is cartilage. This slowly calcifies until fully calcified by the end of puberty.

WHAT ARE THE BENEFITS OF VITAMIN D3 OVER D2

Vitamin D biochemistry: Vitamin D is a fat-soluble vitamin and exists in several forms, two of which are biologically important. These two forms include ergocalciferol (D2) and cholecalciferol (D3). Both forms are metabolised in the body by the liver and the kidneys to the active form calcitriol and 1,25-dihydroxyvitamin D retrospectively. The liver yields more calcifediol from vitamin D3, than it does vitamin D2, meaning that vitamin D3 supplementation is more effective at raising serum vitamin D serum levels. Studies confirm that vitamin D3 is the preferable choice for supplementation.⁵

WHY ARE BABIES AND CHILDREN AT RISK OF VITAMIN D INSUFFICIENCY?

A baby's vitamin D status at birth is largely determined by the vitamin D status of the mother. Breast milk does not have controlled levels of vitamin D and a supplement is recommended. The lack of sun exposure to the skin is a major factor in vitamin D inadequacy. The use of sun cream largely prevents the synthesis of vitamin D. Childhood is a critical time for bone calcification so correct vitamin D levels are essential.

ARE THERE ANY PRECAUTIONS BEFORE GIVING BABY AND KID'S SUNSHINE D DROPS TO A CHILD?

Baby and Kid's Sunshine D drops are intended for infants and children age 1 month to 5 years of age. Not suitable for infants who are consuming more than 500 ml of formula milk per day unless otherwise instructed by a health professional.

HOW SHOULD BABY AND KID'S SUNSHINE D BE ADMINISTERED TO A CHILD?

For infants and children 1 month plus: 1 ml once daily or 0.5 ml twice daily. May be administered directly in the mouth or mixed with food or liquid provided it does not exceed 37°C. This product may also be placed on the mother's nipple before a breastfeed.

FEATURES

- 400 i.u. of vitamin D per 1 ml serving
- Bioavailable D3 form
- Tasteless and easy to administer
- Suitable from one month plus

HEALTH NEEDS



CHILDREN'S HEALTH

SCIENTIFIC REFERENCES

1. J Investig Med. 2011; 59(6): 881–886.
2. J Allergy and Clinical Immunology. 2010;125; 5; 995-1000
3. J Allergy and Clinical Immunology. 2013; 131; 4; 1109-1116
4. Allergy. 2013; 68; 7; 906-910
5. Scand J Prim Health Care. 2010; 28(3): 166–171.



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