

Information for Parents

Prevention of Vitamin D deficiency in children

Introduction

Vitamin D is important for various body functions and is especially required for the growth of bones in children. The main source of vitamin D is from exposure to sunlight and availability in dairy products. Insufficient exposure to sunlight and poor dietary habits has led to an increasing number of children diagnosed with vitamin D deficiency.

This leaflet explains some ways of preventing vitamin D deficiency in children.

What is vitamin D?

Vitamin D is a type of vitamin required by the body. The main function of vitamin D is to absorb calcium from food. The calcium is then used by the body for the growth of bones. Apart from this function, vitamin D is also important for immune function and may prevent some form of cancers.

Natural sources of vitamin D **Sunshine:** Most of our vitamin D comes from the sun. The amount of vitamin D obtained from sunlight is variable as it depends on skin colour, duration of exposure to sunlight and underlying illness. Dark skinned people need more sunlight exposure to produce vitamin D when compared to light skinned people.

Diet: Only 10% of our vitamin D comes from our diet. The following foods will help keep levels topped up:

- oily fish (salmon, mackerel, trout)
- dairy products
- cod liver oil.

Complications of vitamin D deficiency

Vitamin D deficiency leads to decreased absorption of calcium from our intestine. This leads to impaired bone growth as the child grows, resulting in a condition called rickets. This can lead to severe deformities in their bones and affect their ability to walk. Other

complications of vitamin D deficiency include seizures, impaired heart function and recurrent infections.

Why do children develop vitamin D deficiency?

Pregnant mothers may have inadequate vitamin D in their body, leading to their babies having poor vitamin D stores. These babies are more likely to develop vitamin D deficiency as breast milk is a poor source of vitamin D.

Insufficient exposure to sunlight occurs in some populations in the UK. Particularly affected are those who are dark skinned and who wear fully covered clothing. These result in decreased production of vitamin D in the body. If your skin is pale, you should be careful about over exposure in the sun, as this may lead to long term risk of skin cancer.

Prevention of vitamin D deficiency in children

To prevent vitamin D deficiency, babies require at least 200 IU of vitamin D daily from six months of age. Children's vitamin drops – Healthy start (available free of charge from six months of age for eligible families) – 5 drops to be given once daily until five years of age. A link to the website is given below:

<http://www.healthystart.nhs.uk/>

Please speak to your GP or health visitor for further details about how to obtain the vitamin drops.

There are various other over the counter preparations available to buy. Please check with your pharmacist about the correct dose of vitamins for your child.