

Rickets

What is rickets?

Rickets is a bone disease that affects children when there is a lack of Vitamin D. To make strong bones the body needs a combination of Vitamin D and two other minerals called calcium and phosphorus. If there is not enough Vitamin D in the body, then the way that calcium and phosphorus work is not controlled and the bones do not harden and stay strong, and are unable to properly support the weight of the growing body. Rickets also occasionally develops in children with rare forms of kidney and liver disease or as a complication of a digestive disorder. Rickets is uncommon in newborns but may be seen in young children 6 to 24 months old.

Symptoms

Rickets causes bone pain or tenderness in the arms, legs, spine and pelvis. A child may also show bowed legs, a deformed chest, dental problems, muscle loss and increased risk of fractures (easily broken bones). Changes in the skull may also occur causing a “square headed” look.

About Vitamin D

Vitamin D is a fat-soluble vitamin that can be made available to our body in two ways;

1. Absorbed into the body from the food that we eat. Foods that contain good sources of Vitamin D are dairy foods, eggs and green vegetables.
2. Produced by the skin when the skin is exposed to the ultraviolet light of sunlight. People with darker skin need more exposure to ultraviolet light to produce the same level of Vitamin D.

Addressing the common causes

Although rickets is not common there has been a slight increase in the number of cases in Australia. This increase can be explained by:

- The skin cancer awareness campaigns. This has meant that some children are never or very rarely exposed to sunlight and therefore their body is not able to make Vitamin D.
- The cultural mix of the Australian population. People with darker skin need more exposure to ultraviolet light to produce Vitamin D. Some cultural and religious clothing practices also mean less exposure to sunlight.
- More parents are choosing to give their child only breast milk after the age of six months, rather than introducing solids. Breast milk has a low Vitamin D content.

A sufficient amount of sunlight each week and good supplies of Vitamin D in the diet can prevent rickets. Bones will respond very quickly when the body has enough Vitamin D and calcium. If rickets is treated when the child is young there is every chance that any deformities will disappear as the child grows and develops.

Supplied as part of:



Community Paediatric Review A national publication for community child health nurses and other professionals.

Supported by an educational grant from Wyeth Nutrition. Ph 1800 55 2229

For further information contact the Centre for Community Child Health, The Royal Children's Hospital, Melbourne.

Phone 03 9345 6150 or Fax 03 9347 2688 www.rch.org.au/ccch

© 2005. This publication can be photocopied for distribution to parents.

Produced by:



CENTRE FOR
Community
Child Health