

Vitamin D in Children with Epilepsy and Neurodisability

This leaflet offers more information about Vitamin D. If you have any further questions or concerns, please discuss this with your child's consultant or specialist nurse.

Vitamin D

It is important to promote good bone health in children of all ages especially those diagnosed with epilepsy. Therefore, regular exercise and a good source of Vitamin C and D are essential in ensuring this.

Vitamin D helps regulate the amount of calcium and phosphate in the body. It is an essential nutrient required for bones and teeth, for maintaining normal muscle tone and enhancing the immune system function. There is also recent evidence to demonstrate that it may also prevent many other diseases.

Those at risk of Vitamin D deficiency include:

- Pregnant and breast-feeding women
 - Teenagers and young women
 - Infants and young children under the age of five, especially those with prolonged breast feeding
 - Individuals who have low or no sun exposure
 - Those who are unable to walk (e.g., cerebral palsy and other neurodisabilities)
 - Those who stay indoors or cover their skin
 - Individuals who have darker skin
 - Individuals who have epilepsy and take antiepileptic drugs (Phenytoin, Phenobarbitone, Carbamazepine, Valproate) or enzyme inducers (Topiramate)
 - Those who have malabsorption, poor nutritional status, obesity,
 - Liver or renal disease
 - Individuals on exclusion diets (e.g., milk allergies - as milk is required for vitamin D absorption)
 - People aged 65 and over
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- Aches and pains, muscle weakness, bone changes or rickets or osteomalacia in adolescents
 - Myopathy causing delayed walking, rickets with bowed knees, knock knees and poor growth
 - Seizures, tetany (spams of the hands and feet, cramps, spasm of the larynx)
 - Cardiomyopathy in infants



How do you obtain Vitamin D?

Only a few food sources will contain Vitamin D, including Oily fish, eggs, and fortified foods such as cereals, margarine, formula milk and yoghurts. This makes it difficult for children to receive sufficient amounts of Vitamin D in their diets. Vitamin D is also obtained through the sun. However, the time required to make Vitamin D in the sun is short and much less than the amount needed for skin to redden and burn. Wearing sunscreen is important to prevent skin cancer, but it can block the UVB which is needed to make Vitamin D. It is therefore advised that a few minutes of sun exposure on a sunny day is recommended before applying sunscreen.

(National Health Forum, Diabetes UK, Cancer Research UK, National Osteoporosis Society)

Vitamin D Deficiency Prevention

Our epilepsy service recommends that all young people on treatment with either sodium valproate, carbamazepine, topiramate or phenytoin should take over the counter vitamin supplements. If you have difficulty obtaining these then please do contact the epilepsy service for further advice.

If your child is found to have Vitamin D deficiency from a blood test, then a higher dose Vitamin D supplement will be issued on prescription by your child's GP or consultant.

Parents who qualify for "Healthy Start" are entitled to free supplementation. Oral sprays and vitamin drops have been formulated for babies and young children, whilst chewable vitamins or tablets are available to older children and adults. Vitamin D supplements can be bought in supermarkets and chemists.

Useful Links

- <https://www.healthystart.nhs.uk>
- <https://www.nhs.uk>
- <https://www.epilepsysociety.org.uk>
- <https://nih.gov>

If you have any questions, please do get in contact with the Paediatric epilepsy team at Ashford and St Peter's hospital (Monday to Friday) on 01932 722329 or your child's Epilepsy Nurse Specialist on 07970 768967



Further Information

We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email asp-tr.patient.advice@nhs.net. If you remain concerned, the team can also advise upon how to make a formal complaint.

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We can provide interpreters for a variety of languages, information in larger print or other formats (e.g. audio) - please call us on 01932 723553.



اگر نیاز به ترجمہ دارید، لطفاً با شماره 01932 723553 تماس بگیرید.

আপনার অনুবাদের দরকার হলে এখানে যোগাযোগ করুন : 01932 723553

ਜੇ ਤੁਹਾਨੂੰ ਭਰਜਮੇ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਇਸ ਨੰਬਰ ਤੇ ਫੋਨ ਕਰੋ: 01932 723553

यदि आपको अनुवाद की ज़रूरत है तो कृपया इस नंबर पर फोन करें: 01932 723553

اگر آپ اس کا اردو زبان میں ترجمہ چاہتے ہیں، تو براؤزر اس فون نمبر 01932 723553 پر رابطہ کریں

Jeżeli chcemy, aby te informacje w innym języku, proszę zadzwonić 01932 723553

Se precisa de uma tradução por favor contacte: 01932 723553

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