Vitamin D

Vitamin D is essential for healthy growth and development in childhood. It is needed for healthy bones and to control the amount of calcium in our blood. In children, deficiency can cause poor growth, muscle weakness and bowed legs due to rickets. Adolescents with deficiency will often complain of bone pain. Severe deficiency can cause fits and heart problems in the younger age group.

In the UK a balanced diet and sunlight will not necessarily provide enough vitamin D to prevent deficiency, so all children under 5 years (including babies), children over 5 years with risk factors (see table), pregnant and breastfeeding mothers should take a daily vitamin D supplement. A daily dose of 400 units Vitamin D is safe for all age groups, and is consistent with the recommendations of the UK Scientific Advisory Committee on Nutrition (SACN), the National Osteoporosis Society, the British Paediatric and Adolescent Bone Group (BPABG) and a Global consensus statement.

Most children do not need a medical assessment or a blood test. If a child has risk factors for deficiency or symptoms then a medical assessment is required. Treatment is with high dose vitamin D that is available in a variety of different preparations for those with deficiency.

For more details:

Vitamin D and Bone Health: A Practical Clinical Guideline for Management in Children and Young People (December 2018)
National Osteoporosis Society

Guide for Vitamin D in Childhood (October 2013)
Royal College of Paediatrics and Child Health