

NHS Rotherham Clinical Commissioning Group does not support prescribing of vitamin D products for the management of vitamin D **insufficiency** or as a **maintenance** therapy - all patients should receive lifestyle advice to supplement vitamin D and be advised to purchase these products over the counter as part of Self-Care.

Prescribing of treatment (loading) course of vitamin D in **deficiency with serum 25-OHD level below 25nmol/L** is supported by the CCG.

Routine testing for vitamin D level is NOT RECOMMENDED in any patients unless:



SYMPTOMS IN CHILDREN:

- rickets
- poor growth
- delayed walking
- aches and pains in legs
- bone pain or deformities
- cardiomyopathy
- hypocalcaemic seizures
- muscle weakness
- bow legs
- swollen wrists

CLINICAL REASON:

- chronic liver or renal disease
- long term treatment with anti-epileptics/ oral steroids/ rifampicin/ isoniazid/ highly active anti-retroviral treatment
- malabsorption syndromes (e.g. coeliac disease, Crohn's disease, cystic fibrosis)
- high risk fracture/ osteoporosis/ osteomalacia/ treatment with antiresorptive agent



INVESTIGATIONS: ▪ serum 25-OHD ▪ bone profile (Ca²⁺, PO₄) ▪ U&Es and eGFR ▪ LFTs

Serum 25-OHD level	Vit D status	Recommendation	Monitoring
<25 nmol/L	DEFICIENCY	Rx loading dose treatment suitable for age followed by self-care substitution with over-the-counter supplements providing vit D 400-1000units (10-25micrograms) daily. Provide lifestyle advice incl. vit D patient information leaflet (PIL).	<ul style="list-style-type: none"> ▪ adjusted serum calcium four weeks after completing the loading regimen. If Ca²⁺ > normal range, check PTH level, refer to paediatrician and advise patient to stop vit D supplementation. ▪ re-testing 25-OHD not required unless patient remains symptomatic

TREATMENT OF VITAMIN D DEFICIENCY IN CHILDREN

prescribed as the following brands only

AGE	TREATMENT DOSE	PRODUCT	dosage instruction to be prescribed
1 - 5 months	3,000units (75micrograms) once daily for eight weeks	Thorens 10,000units/ml oral drops [gelatine free, suitable for patients with soya/peanut allergy and vegetarians]	0.3ml or 15 drops once daily for eight weeks (supply total of 20ml)
6 months - 11 years	6,000units (150micrograms) once daily for eight weeks	Thorens 10,000units/ml oral drops	0.6ml or 30 drops once daily for eight weeks (supply total of 40ml)
12 - 18 years	10,000units (250micrograms) once daily for eight weeks	1 st line: SunVitD3 10,000units tablets [gelatine free, suitable for patients with soya/peanut allergy and vegetarians]	One tablet daily for eight weeks (supply total of 56 tablets)
		2 nd line: Thorens 10,000units/ml oral drops	1ml once daily for eight weeks (supply total of 60ml)

Serum 25-OHD level	Vit D status	Recommendation	Monitoring
25-50 nmol/L If symptomatic or presenting with clinical reason treat as for vit D deficiency	INSUFFICIENCY associated with risk of deficiency and linked disease risk but may be adequate in some patients	Self-care with over-the-counter supplements providing vit D 400-1000units (10-25micrograms) daily. Provide lifestyle advice incl. vit D PIL.	None, unless change in clinical presentation.
> 50 nmol/L	SUFFICIENCY	No treatment required. Provide lifestyle advice incl. vit D PIL. Self-care with over-the-counter supplements providing vit D 400units (10micrograms) daily all year round until child has completed growth or age of 18 years.	None, unless change in clinical presentation.

VITAMIN D SUPPLEMENTATION IN CHILDREN with insufficient or sufficient vitamin D levels		
AGE	SUPPLEMENTATION DOSE	Optional products available over the counter
Newborn up to 1 month	300-400units (7.5-10micrograms) once daily	<ul style="list-style-type: none"> • Abidec (multivitamin) drops – dosing as per manufacturer. Not suitable for children with peanut or soya allergy.
1 month – 18 years	400-1000units (10-25micrograms) once daily	<ul style="list-style-type: none"> • Dalivit (multivitamin) drops – dosing as per manufacturer (from age of 6 weeks). Not suitable for children with intolerance to some sugars. • Healthy Start Vitamins drops – available free of charge for children up to the age of four years old and eligible for Healthy Start vouchers (low income families) from health visitors, midwives and Children’s Centres across Rotherham.
<p>The Department of Health recommends a dose of 300unit (7-8.5 micrograms) daily to prevent rickets for all children from six months to five years of age (unless they are receiving over 500ml of formula milk per day).</p>		



REFER to secondary care patients with deficiency or insufficiency **and** any of following conditions:

- rickets • malabsorption syndromes • short bowel • cholestatic liver disease
- parathyroid disorders • CKD with eGFR<30ml/min • TB • sarcoidosis

For treatment options for strict vegan patients, please seek further advice from the Prescribing Advisor

REFERENCES:

1. The Royal College of Paediatrics and Child Health. October 2013. Guide for vitamin D in childhood.
2. British Paediatric and Adolescent Bone Group. December 2012. Position statement on vitamin D deficiency.
3. National Osteoporosis Society. December 2018. Vitamin D and bone health: A practical clinical guideline for patient management in children and young people.
4. British National Formulary for Children 2018-2019. 2018. Section 7. Vitamin deficiency.
5. Scientific Advisory Committee on Nutrition. July 2016. Vitamin D and health.