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NHS Rotherham Clinical Commissioning Group

VITAMIN D PRESCRIBING GUIDANCE for adults (>18yrs)

NHS The Rotherham NHS Foundation Trust

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

NHS Rotherham CCG 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. The prescribing of treatment (loading) course of vitamin D in **deficiency** is supported by the CCG.

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

SYMPTOMATIC:
- chronic bone pain
- muscle weakness
- chronic widespread pain
- hypocalcaemia

CLINICAL REASON:
- prior to initiation of antiresorptive agent (i.e. i.v. zolendronic acid, denosumab, oral bisphosphonates)
- osteomalacia
- high risk of fracture/ osteoporosis
- recurrent falls
- chronic liver or renal disease
- long term treatment with anti-epileptics/ oral steroids/ rifampicin/ isoniazid/ highly active anti-retroviral treatment
- malabsorption syndromes

INVESTIGATIONS: ▪ serum 25-OHD ▪ bone profile (Ca^{2+}, PO_4) ▪ U&Es and eGFR ▪ LFTs

Serum 25-OHD level	Vit D status	Recommendation	Monitoring
<25 nmol/L	**DEFICIENCY**	Rx loading dose treatment as **InVita D3 oral solution 50,000units/ml or InVita D3 50,000units capsule once weekly for six weeks** followed by self-care substitution with over-the-counter supplements providing vit D 1000units (25micrograms) daily. Provide lifestyle advice incl. vit D PIL.	▪ adjusted serum calcium four weeks after completing the loading regimen. If Ca2+ > normal range, check PTH level, refer to endocrinology and advise patient to stop vit D supplementation. ▪ re-testing 25-OHD not required unless patient remains symptomatic
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 individuals	Self-care with over-the-counter supplements providing vit D 1000units (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 over autumn and winter months for most adults and all year round for at high risk groups. Consider vit D+calcium for patients with osteoporosis/ on bisphosphonate therapy.	None, unless change in clinical presentation.

⚠ **REFER** to secondary care patients with deficiency or insufficiency and any of following conditions:
● malabsorption syndromes ● short bowel ● cholestatic liver disease ● parathyroid disorders ● CKD with eGFR<30ml/min ● TB ● sarcoidosis

VITAMIN D SUPPLEMENTATION IN PATIENTS RECEIVING INSTITUTIONAL CARE OR HOUSEBOUND

Patient remaining long term in hospital, care or nursing home, specialised care unit or housebound

No baseline vit D level testing required unless symptomatic or presenting with clinical reason (as per the guideline above)

Where self-care with over the counter supplementation is not feasible initiate vit D prophylaxis with **InVita D3 oral solution 25,000units/ml or InVita D3 25,000units capsule once a month**

No monitoring is required, unless change in clinical presentation.

VITAMIN D SUPPLEMENTATION IN PREGNANCY

Vitamin D supplementation advice should be provided at booking. Routine testing for vitamin D is not recommended unless symptoms or clinical reasons (as listed in this guidelines above).

Serum 25-OHD level	Vit D status	Recommendation	Monitoring
<25 nmol/L	**DEFICIENCY**	Rx loading dose treatment: 1st line: **Fultium D3 3200units capsules – one <u>once daily</u> for five weeks (supply total of 35 capsules)** halal and kosher certified, suitable for patients with peanut allergy but not suitable for vegetarians/ vegans 2nd line: **Desunin 800units tablets - four tablets <u>once daily</u> for five weeks (supply total of 140 tablets)** gelatine free**,** suitable for patients with peanut allergy and vegetarians Followed by self-care substitution with over-the-counter supplements providing vit D 1000units (25micrograms) daily throughout pregnancy and thereafter. Provide lifestyle advice and vit D PIL.	▪ re-test 25-OHD on completion of loading dose ▪ adjusted serum calcium four weeks after completion of loading regimen. If Ca2+ > normal range, check PTH level, refer to endocrinology and advise patient to stop vit D supplementation.
25-50 nmol/L If symptomatic or presenting with clinical reason treat as for vit D deficiency	**INSUFFICIENCY**	Self-care with over-the-counter supplements providing vit D 1000units (25micrograms) daily throughout pregnancy and thereafter. Provide lifestyle advice and vit D PIL.	None, unless change in clinical presentation.
> 50 nmol/L	**SUFFICIENCY**	Self-care with over-the-counter supplements providing vit D 400units (10micrograms) daily throughout pregnancy and breastfeeding. Provide lifestyle advice and vit D PIL. Can be obtained through Healthy Start vitamins scheme for eligible families. Antenatal team to provide 2 months' supply of multivitamins for the mother.	None, unless change in clinical presentation.

Women at **high risk of vitamin D deficiency** and **risk of pre-eclampsia** should be advised to self-care with over-the counter supplements providing vit D 1000units (25micrograms) daily throughout pregnancy. Prescribing of treatment doses is not recommended for risk prophylaxis.
Risk factors: ● increased skin pigmentation ● obesity with BMI ≥30kg/m^2 ● reduced exposure to sunlight

⚠ **REFER** to obstetric consultant pregnant women with deficiency or insufficiency <u>and</u> any of following conditions: ● malabsorption syndromes ● short bowel ● cholestatic liver disease ● parathyroid disorders ● CKD with eGFR<30ml/min ● TB ● sarcoidosis