

Vitamin D and Vitamin D with Calcium Prescribing Guidance

Vitamin D Deficiency in Adults from Age 18 years Onwards with eGFR ≥ 30 ml/min/1.73m² – Diagnosis, Treatment and Prevention Primary Care Pathway

As per [NICE guidance PH56](#), the testing of vitamin D levels should not be routine practice, including testing asymptomatic patients who are at higher risk of vitamin D deficiency. Vitamin D should only be tested where there is true clinical suspicion or where this will affect clinical management, e.g. prior to bisphosphonate treatment.

Do not routinely test asymptomatic individuals, including those at higher risk of deficiency.

The Department of health and social care advises all adults to take a 10 micrograms (400IU) vitamin D supplement during the autumn and winter. Higher risk individuals - people over 65 years of age, those with darker skin and those with limited sun exposure are advised to continue vitamin D supplementation all year. See [Vitamin D lifestyle advice patient information leaflet](#).

When to test:

Test when there is a Condition specific rationale	Test when there are symptoms of deficiency	Testing when Patients are at very high risk of deficiency
Patients with bone diseases that may be improved with vitamin D treatment, e.g. Osteomalacia /osteoporosis / Paget's disease. or where correcting vitamin D deficiency prior to specific treatment would be appropriate. Such as prior to bariatric surgery or prior to relevant drug treatment, e.g. bisphosphonates.	Symptoms of Osteomalacia such as: Severe aching in bone and muscles and proximal muscle weakness making standing up and walking difficult and painful. Marked waddling gait. Symptoms of Hypocalcaemia (rare): Including muscle cramps, carpopedal spasm, numbness, paraesthesias, tetany, or seizures.	Do not routinely test asymptomatic individuals. Where patients are considered to be at particularly high risk (e.g. very low exposure to sun light) and not following preventative supplementation guidance from DOH consider testing.

Calcium supplementation with Vitamin D

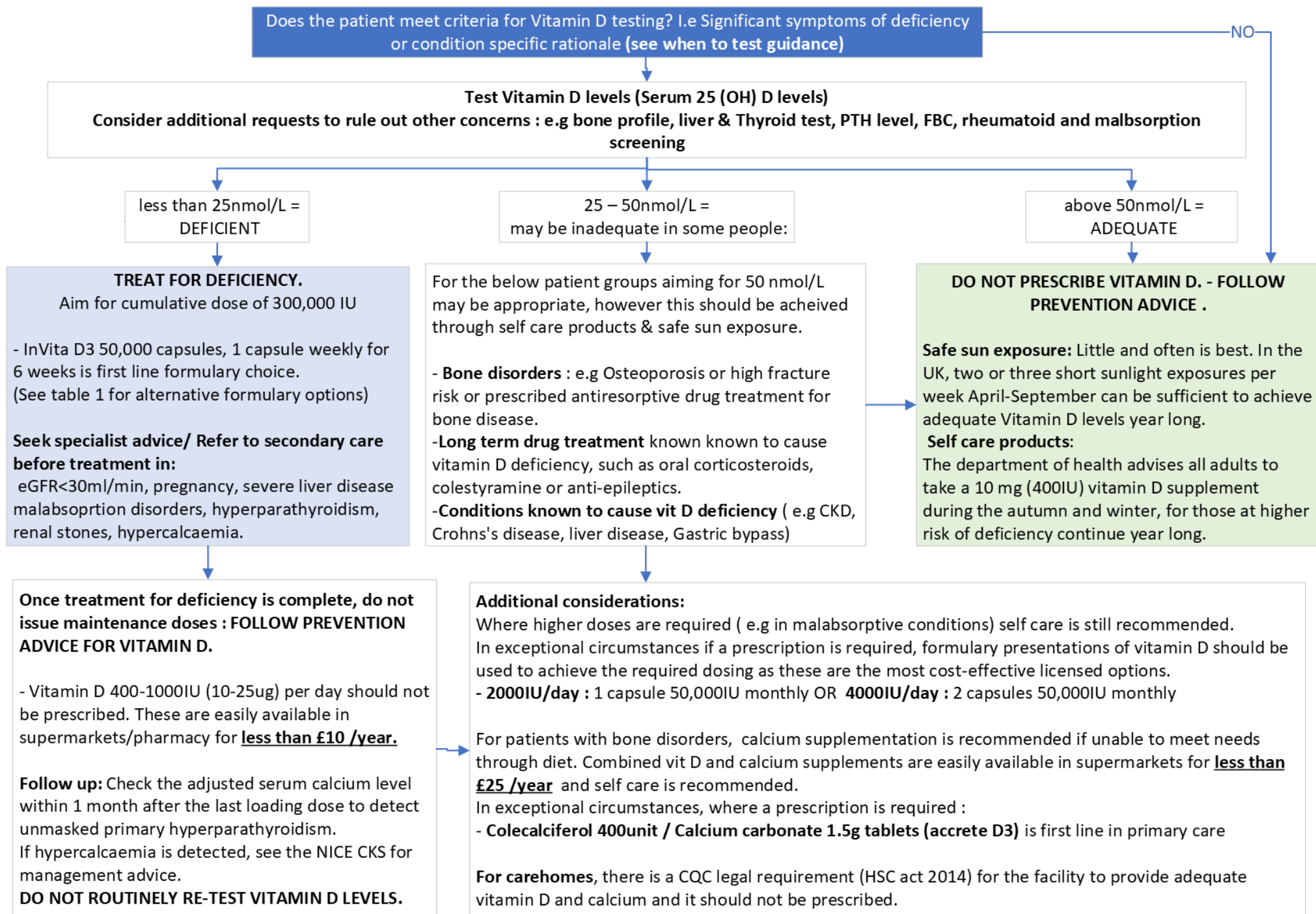
Adequate levels of both vitamin D and calcium are needed to ensure optimum serum calcium levels, and it is important to ensure that both are maintained to prevent long-term adverse effects on the bones. Patients can check their own calcium intake using the [Vitamin D lifestyle advice patient information leaflet](#). Calcium supplementation is contraindicated in primary hypercalcaemia and metastatic skeletal disease.

Vitamin D in specific dietary requirements

At the time of writing, the formulary has a suitable vitamin D for soya, peanut, and vegetarian requirements, however excipients should be checked on any prescribed item. [Vitamin D: Licensed options for allergies](#) [SPS: Vitamin D in Veganism and vegetarians](#).

There are no licensed forms of vegan vitamin D, including all Ergocalciferol items for information on appropriate management see [Vegan society: Veganism and medications](#).

For further support on a case by case basis, including the use of Ergocalciferol, contact the [Prescribing partnership](#).



Treatment	Dose	Regimen	Cost per course
Deficiency of vitamin D: <25nmol/L	Loading dose of approx. 300,000 units 6x 50,000 IU = Total 300,000 units in 6 weeks 1 capsule or 1ml per week	InVita D3 50,000 IU capsule Prescribe FULL COURSE: 6 capsules. Or InVita D3 50,000 IU Prescribe FULL COURSE: 6 x 1ml ampoule	£9.90 Or £12.50
Deficiency treatment in pregnancy: <25nmol/L	Loading dose of approx. 300,000 units 84x 3200 IU = Total 300,000 units in 12 weeks 1 capsule per day for 12 weeks	Cholecalciferol 3200 unit capsules Prescribe full course : 84 capsules	£37.30
Prevention of deficiency in patients with malabsorptive disorders. (e.g Bariatric surgery, short gut, cystic fibrosis)	Maintenance doses of 400-1000 IU daily should be purchased over the counter. For patients with higher requirements due to chronic conditions, self-care is advised but in exceptional circumstances consider most cost-effective prescribing option.	InVita D3 50,000 IU capsule 1 capsule per month (approx. 2000IU /day) Or 2 capsule per month (approx. 4000IU /day)	£19.50 (Annually) Or £39.60 (Annually)
Prevention of deficiency in patients with Bone disorders AND inadequate calcium intake	Combined Calcium (min 1g) and Vit D (min 400IU) self-care is advised but in exceptional circumstances consider most cost-effective prescribing option.	Colecalciferol 400unit / Calcium carbonate 1.5g tablets (accrete D3) Or Colecalciferol 400unit / Calcium carbonate 1.5g chewable tablets	£33.00 (Annually) Or £43.80 (Annually)

Additional considerations

- In secondary care, different brands of Vitamin D and Vit D with calcium will be used however these should be changed to the formulary options in primary care. Where there are issues with supply or shortages, please refer to [netFormulary](#) for appropriate primary care alternative brands.
- Where a deficiency is diagnosed in secondary care, the full treatment course should be issued when the patient is discharged to complete treatment.

Document ratification details

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