

Advice on Vitamin D Requesting in Adults (Sheffield)

When to measure vitamin D

1. If a person is **symptomatic** of vitamin D deficiency. Symptoms include:
 - Bone pain
 - Proximal muscle weakness
 - Low trauma fracture
2. If a person has a clinical condition that may predispose them to vitamin D deficiency such as malabsorption.
3. If a person has biochemistry results suggestive of vitamin D deficiency:
 - Hypocalcaemia (on 2 occasions and with normal Mg) - See [pathway](#)
 - Increased PTH
 - Increased alkaline phosphatase with normal GGT – See [pathway](#)
4. In the follow-up of patients on high dose vitamin D supplementation (baseline vitamin D <25 nmol/L); measure at 4 months following commencement of treatment and again at 12 months. For **high dose supplementation** see [here](#)

When NOT to measure vitamin D and when to signpost for OTC supplements

1. In the follow-up of patients on standard dose supplementation (baseline vitamin D 25-50 nmol/L)
2. In those **at risk** of having a low vitamin D status but who are **asymptomatic**. These individuals should be **advised to take vitamin D supplementation**. At-risk groups and their advised supplementation are as follows:
 - All pregnant and breastfeeding women, particularly teenagers and young women ([see guidelines](#))
 - 10micrograms (400 units)/day.
 - Infants and children under 5 years ([see guidelines](#))
 - Breastfed babies from birth to one year of age: 8.5 – 10micrograms (340 – 400 units)/day.
 - Babies fed infant formula should not be given a supplement until they are receiving less than 500mL of infant formula (once on less than 500mL advice is as for breastfed)
 - Children aged 1 to 4 years old: 10micrograms (400 units)/day.
 - People over 65: People who have low or no exposure to the sun (for example, those who cover their skin for cultural reasons, who are housebound or confined indoors for long periods): People who have darker skin, for example, people of African, African-Caribbean and South Asian origin.
 - 10micrograms (400 units)/day.
 - All other adults and children over 5 year old:
 - Between late March / April to end the of September, most people aged 5 years and above will probably obtain sufficient Vitamin D from sunlight.
 - However, Public Health England recommends that everyone should take a supplement containing 10micrograms (400 units)/day particularly during the autumn / winter months.

Note: For these standard doses, over the counter (OTC) supplementation is recommended.

However, pregnant women, women with a child under 12 months and children aged from six months to four years who are receiving Healthy Start vouchers are entitled to free Healthy Start vitamins via the National Healthy Start scheme. In Sheffield, there is also an extended [Healthy Start scheme](#)

For more clinical guidance on Vitamin D see:

<https://sites.google.com/site/sheffielddccgportal/clinical-guidance/vitamin-d>
<https://www.nhs.uk/conditions/vitamins-and-minerals/vitamin-d/>
<https://www.nice.org.uk/guidance/ph56>

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Date: 27/04/23 (version 5)

Review Date: April 2024