

PATIENT INFORMATION · GENERAL HEALTH

Vitamin D deficiency

common in the UK, easily corrected

Vitamin D is made in the skin from sunlight and is needed for bone health, muscle function and immunity. Between October and March the UK sun is too weak to produce any, which is why deficiency is widespread here — and considerably more common in some communities than others.

Seek prompt assessment if you have

- **severe bone pain**, particularly in the ribs, hips, pelvis or thighs
- **difficulty climbing stairs or rising from a chair** because of muscle weakness
- **a fracture after minor injury**
- **bone deformity, delayed walking or bowed legs** in a child
- **muscle spasms, twitching or tingling around the mouth** — these suggest low calcium

Severe deficiency causes osteomalacia in adults and rickets in children, both of which are still seen in the UK. Symptomatic low calcium needs urgent treatment. If a child has bowed legs, a delayed walking milestone or unexplained bone pain, that needs assessing rather than watching.

Who is at higher risk

- **Darker skin** — more melanin means far less vitamin D produced for the same sun exposure. This is the most important single factor in the UK.
- **Covering the skin** for cultural or religious reasons, or consistently using high-factor sunscreen.
- **Limited time outdoors** — shift work, indoor work, housebound or in residential care.
- **Pregnancy and breastfeeding**, and infants who are breastfed.
- **Obesity**, which sequesters vitamin D in fat tissue.
- **Coeliac disease, Crohn's, liver or kidney disease**, and after bariatric surgery.
- Certain medicines, including some for epilepsy and long-term steroids.

Symptoms

Mild deficiency often causes nothing at all. More marked deficiency produces tiredness, aching bones and muscles, muscle weakness particularly around the hips and thighs, low mood, and increased susceptibility to infection. These are non-specific, which is why testing rather than guessing is sensible.

What the numbers mean

Below 25

deficient — treatment needed
(nmol/L)

25-50

insufficient — supplementation
advised

Above 50

adequate for most people

Treatment and maintenance

- **Deficiency** is treated with a loading regimen of higher-dose vitamin D over several weeks, followed by a maintenance dose.
- **Everyone in the UK should consider 10 micrograms (400 IU) daily from October to March**, and all year round if you are in one of the at-risk groups above.
- **Children from birth to four** should have a daily supplement, unless taking more than 500ml of infant formula, which is already fortified.
- **Vitamin D3 is better absorbed than D2**, and it is fat-soluble — take it with a meal containing some fat.
- Calcium intake matters alongside; vitamin D helps you absorb it, but there must be some to absorb.
- Retesting is usually only needed where deficiency was severe, symptoms persist, or absorption is in question.

More is not better

Vitamin D is stored in fat and can accumulate. Very high doses over long periods raise blood calcium, causing nausea, thirst, constipation, confusion, kidney stones and kidney damage. High-dose products sold online frequently contain far more than anyone needs. **Do not take more than 100 micrograms (4,000 IU) a day without medical advice**, and be particularly careful if you have sarcoidosis, kidney disease or take a thiazide diuretic. Trials of very high doses have shown worse outcomes, including more falls in older people, not fewer.

Sunlight, safely

Short periods of sun exposure to forearms and face between late March and September — around 10 to 30 minutes around the middle of the day, less for fair skin and considerably more for darker skin — are sufficient for most people. Never burn. Sunbeds are not a safe source and raise skin cancer risk substantially.

Why come to us. We test vitamin D alongside calcium, ferritin, B12, folate and thyroid function in-house, with results explained by a clinician in the same visit — because low vitamin D rarely occurs alone, and fatigue attributed to it is frequently something else. We look for the underlying cause where deficiency is severe or recurrent, and prescribe the correct loading regimen rather than leaving you to guess from a pharmacy shelf. Open seven days a week, with published fees.

Tested properly, alongside the things it travels with

Bloods in-house, results explained the same visit.

Seven days a week.

Book an appointment

or call 020 7916 0029

Where to get help

Tower Bridge Hospital London

97–99 Whitechapel Road, London E1 1DT

020 7916 0029

WhatsApp **07903 284 189**

info@mhwcclinic.co.uk

Open 7 days, 9am–7pm

In an emergency

Call 999, or go to the Royal London Hospital Emergency Department, Whitechapel Road, London E1 1FR.

When we are closed and it is not an emergency

Call NHS 111 or visit 111.nhs.uk.

Related: **[Blood Tests](#)** · **[Health Screening & MOT](#)** · **[Private GP Services](#)** · **[All patient leaflets](#)**

Written and reviewed by Dr H Bolat, GP & Clinical Director Review date: 26 July 2026 Next review due: July 2028

Ref: TBH-PIL-144

This leaflet is based on current NHS, NICE and SACN guidance on vitamin D and bone health. It is general information and does not replace advice from a clinician who has assessed you. If your symptoms change or you are worried, contact us on 020 7916 0029, call NHS 111, or call 999 in an emergency.

© 2026 My Health & Wellbeing Clinics Ltd, trading as Tower Bridge Hospital London. Company No. 14811638 · CQC Provider ID 1-17189808454 · Registered office: 97–99 Whitechapel Road, London E1 1DT.