# Overcoming MS

The Overcoming MS Program underscores the crucial role of Vitamin D in managing multiple sclerosis (MS). There is strong evidence that vitamin D levels influence both the risk of developing MS and how the condition progresses.

### **Importance of Vitamin D**



### 1. Immune system regulation

Vitamin D plays a significant role in regulating the immune system. It helps maintain the balance between pro-inflammatory and antiinflammatory responses, which is crucial for individuals with autoimmune conditions like MS.



#### 2. Deficiency and MS

Research indicates that people with MS often have lower levels of Vitamin D. Extremely low vitamin D levels (below 50 nmol/L) may double the risk of developing MS.

### How much vitamin D?

Maintaining healthy vitamin D levels is essential for people with MS, and experts widely agree on its importance.

#### **Blood levels**

Overcoming MS recommends testing your vitamin D levels as soon as possible after diagnosis. This can be done through a general practitioner or an online testing kit.

A healthy vitamin D level is thought to be between 100–150 nmol/L.



#### 3. Relapse risk and disease activity

Low vitamin D levels are associated with a higher risk of relapses, greater disability, and more disease activity. Maintaining good vitamin D levels is associated with a lower risk of new brain lesions.

#### **Supplementation**

In many parts of the world, sunlight is too scarce, or UVB levels are too low to produce enough vitamin D naturally, making supplementation necessary.

The recommended daily intake ranges from 4,000 to 10,000 IU, depending on individual blood levels and exposure to sunlight. This dose range is perfectly safe for most people with MS to take, but please check with your healthcare provider if you have a history of kidney disease, sarcoidosis or hyperparathyroidism.

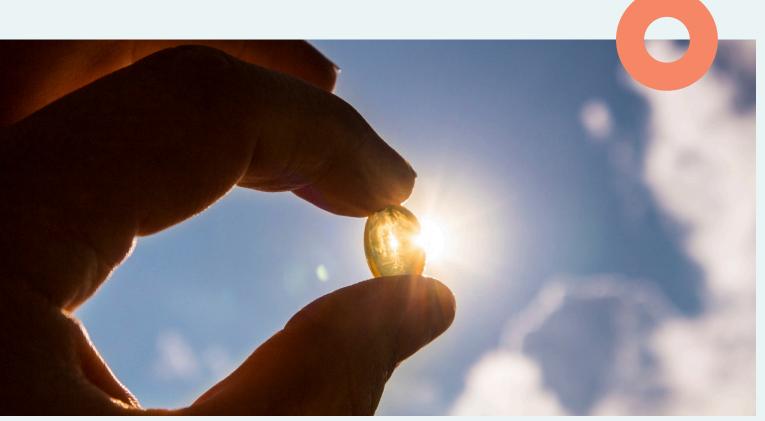
## Sunlight exposure

#### Natural sunlight

Sunlight is the most natural source of Vitamin D. The Overcoming MS Program advocates for regular, safe sun exposure, which typically means spending about 10-15 minutes in the sun with widespread skin exposure, three to five times a week, without sunscreen.

#### **Geographical considerations**

In regions with low UVB radiation or during seasons with limited sunlight, achieving adequate Vitamin D levels through sun exposure alone can be challenging, making supplementation essential.



### High dose protocols

#### **The Coimbra Protocol**

The Coimbra Protocol is a high-dose Vitamin D treatment used by some individuals with MS. It involves doses significantly higher than standard recommendations and requires medical supervision due to the risk of hypercalcemia and other side effects. The Overcoming MS Program advises caution with high-dose protocols, emphasising the importance of professional guidance and regular monitoring to avoid potential complications.

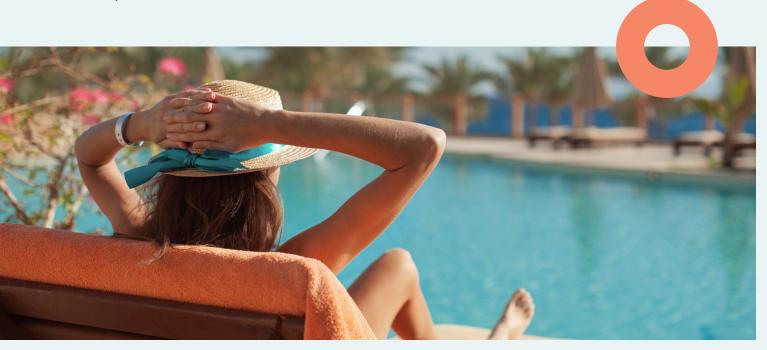
## **Benefits**

#### **Bone health**

Vitamin D is vital for calcium absorption and bone health. Adequate levels help prevent osteoporosis and fractures, which are concerns for people with MS due to mobility issues and potential steroid use.

#### Cardiovascular health

Emerging research suggests that Vitamin D also plays a role in maintaining cardiovascular health, which can be compromised in individuals with MS.



### **Practical tips**

#### **Supplements**

Choose high-quality Vitamin D3 supplements and take them with meals to enhance absorption.

#### Lifestyle strategies

Incorporate strategies to maximise safe sun exposure, such as outdoor activities and vacations in sunnier climates when feasible.

#### **Dietary sources**

While few foods naturally contain significant amounts of Vitamin D, including fortified foods like dairy alternatives, cereals, and fatty fish can contribute to overall intake.

### Learn more

By integrating these principles, the Overcoming MS Program empowers individuals with MS to take control of their health and live fuller, healthier lives.

For more detailed information and resources, visit our website on <u>www.overcomingms.org</u>

