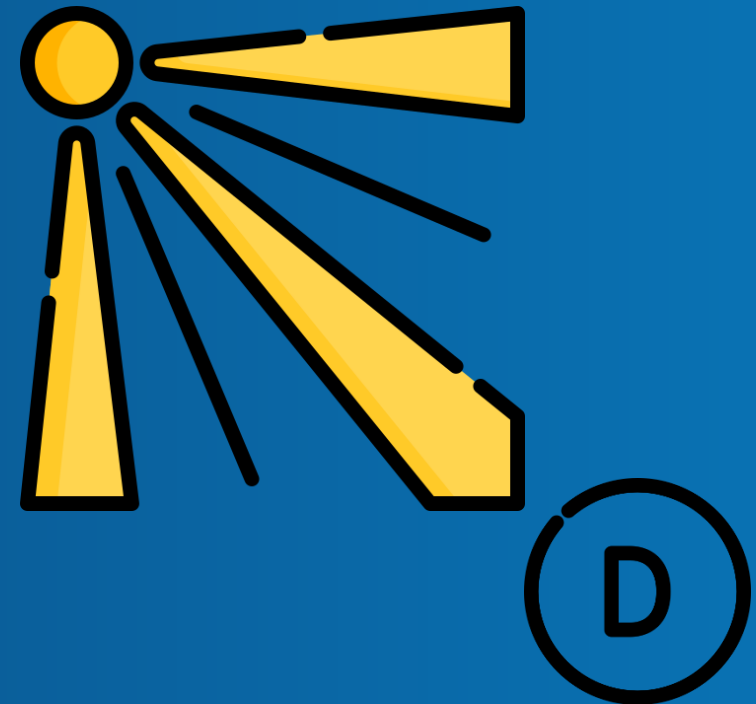
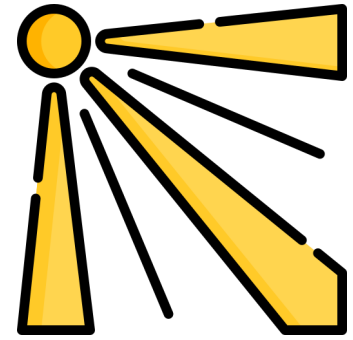


KEY MICRONUTRIENT VITAMIN D

Sunshine, not food, is where most of our Vitamin D comes from. So even a well-balanced and performance focused diet is unlikely to provide enough of this powerful and wide-impacting Vitamin.

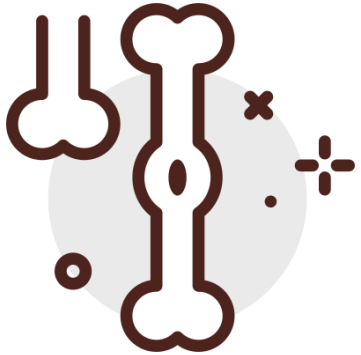


VITAMIN D – WHAT?

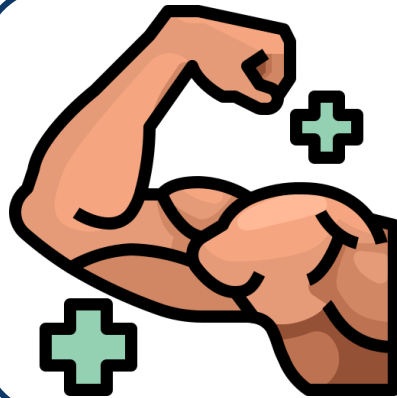


Vitamin D is technically a hormone and its impact is rather wide ranging – nearly every tissue and cell in our body utilises Vitamin D in some way!
It's commonly referred to as the 'sunshine vitamin' because we generate most of it under our skin following sunlight exposure but a small amount is also consumed in our diet.

Key Roles of Vitamin D for Swimmers

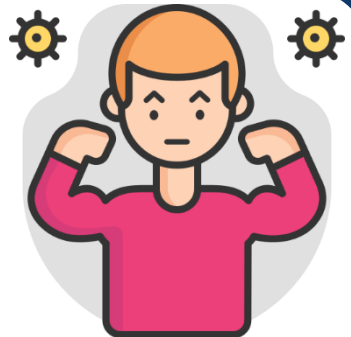


Vitamin D is involved in the control of calcium uptake by bone. A low Vitamin D status can compromise bone health and lead to greater risk of fractures.



Vitamin D has an emerging role in the regeneration and repair of muscle tissue. Maintaining Vitamin D status may therefore be important for enhancing the recovery process and subsequent muscle growth.

Vitamin D status is closely linked to infection risk and athletes with a sufficient Vitamin D level have decreased bouts of illness during winter months and periods of intense training.



WHY THE INTEREST...

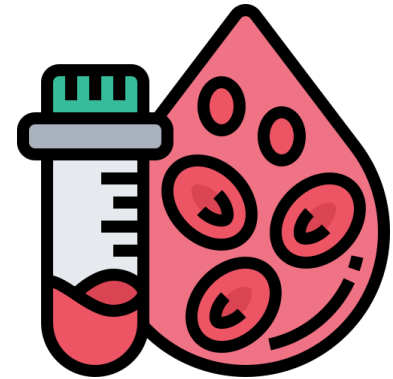


Most of our Vitamin D is synthesised in our skin from **sun exposure**. But countries **above 40°N** (*this includes most of Europe*) are **not exposed to the UVB rays** required to generate Vitamin D in the winter months. Therefore **British-based swimmers** are at risk of **lowered Vitamin D** status from October to March.



Studies of **UK-based** athletes suggest that **~65%** are Vitamin D **insufficient!**

Vitamin D status is assessed by a simple **blood test**.



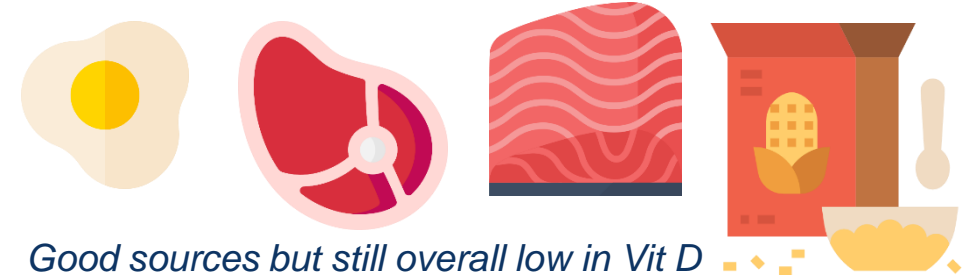
However, it should be assumed that athletes with **minimal sun exposure during the winter months** are at **risk of sub-optimal Vitamin D status**.

Furthermore, individuals with **darker skin** are at **greater risk** of insufficiency when sunlight exposure is low.

INCREASING LEVELS...



Vitamin D can be consumed through our **diet** but the amount is generally **too low** to maintain our Vitamin D status in the winter months.



Good sources but still overall low in Vit D

During the winter months the **UK Government recommends** all adults **supplement with Vitamin D3** at 400IU (10micrograms) per day.

British Swimming's **World Class Programme athletes** are individually advised on Vitamin D supplementation based on their **blood levels** and related markers. However, it is generally advised that **athletes at risk** of Vitamin D insufficiency supplement between **1000-2000IU per day during the winter** months.

Healthspan Elite is the official Vitamin and Supplement Partner to British Swimming.



It is recommended you consult a medical practitioner before engaging in any Vitamin D supplementation strategy greater than 400IU (10mcg) per day.

