**Optimisation of Vitamin D Status for Enhanced Immuno-protection against Covid-19**

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**Lay Summary**

Vitamin D can be made in our skin or taken in the diet or from supplements.

It is usually not possible to get sufficient vitamin D from diet alone without taking supplements.

Many people in Ireland, particularly in late Winter and early Spring, are known to have low blood levels of vitamin D.

Older adults are much more likely to have low blood levels of vitamin D than younger adults.

You are also more likely to have low blood levels of vitamin D if you:

* have darker skin
* avoid sun exposure in Summer
* are a hospital inpatient or nursing home resident
* are vegetarian or vegan
* are overweight or obese
* smoke

People with low vitamin D levels are thought to have a higher risk of respiratory (chest) infections; these infections may include Covid-19.

Taking vitamin D supplements may prevent respiratory infections and decrease their severity, and again, these infections may include Covid-19.

The Food Safety Authority of Ireland (FSAI), the European Food Safety Authority (EFSA) and many other international agencies already recommend that both adults and children should supplement with vitamin D.

It has been shown that supplementing with vitamin D at a dose of 20-50 micrograms per day (800-2000 iu per day) is safe for adults.

Supplementing at this dosage will raise your blood concentration of vitamin D to the levels associated with reduced risk of respiratory infection.

While not yet proven, such vitamin D supplementation may enhance your resistance to Covid-19 infection, or limit its severity if you do become infected.