

#### What's the best way of increasing vitamin D intake?

Since vitamin D isn't naturally present in many foods, it isn't easy to achieve optimal vitamin D intake from food sources alone. The risk of skin cancer from excessive sunlight or sunbed exposure opens an important debate over spending more time in the sun to increase vitamin D levels. Therefore, most experts now agree that supplementation is currently the safest and most effective method of achieving optimal vitamin D status. Supplements should contain vitamin D in the form of vitamin D3 (cholecalciferol), since this is the form naturally produced by the skin upon exposure to sunlight and research has shown this is the most efficient form to increase vitamin D levels.<sup>3</sup>

#### Bio-available liquid vitamin D supplementation

Liquid vitamin D supplements are often recommended because they are more easily digested, absorbed and utilised by the body and can be particularly useful for patients who have compromised digestive function. Liquid vitamin D supplementation is versatile and suitable for the whole family to take, and is especially suitable for children who may find it difficult to swallow capsules or tablets.

## **Convenient, high-strength tablet vitamin D supplementation**

With current expert opinion setting possible recommended daily intakes of vitamin D as high as 5000 IU per day, achieving this level of dosage can be difficult if it requires taking multiple tablets. A vitamin D supplement that contains 5000 IU vitamin D in a single, convenient daily tablet is an excellent way to support optimal levels of vitamin D without the hassle of having to remember to take multiple numbers of tablets daily.

#### References:

- 1. Pizzorno J. Integrative Medicine Vol. 9 No. 1 Feb/Mar 2010 'What have we learned about vitamin D dosing?'
- 2. Hall, Kimlin, Aronov et al. Journal of Nutrition. Published online ahead of print, doi: 10.3945/jn.109.115253 'Vitamin Dintake needed to maintain target serum 25-hydroxyvitamin D concentrations in participants with low sun exposure and dark skin pigmentation is substantially higher than current recommendations'.
- 3. Trang HM, Cole DEC, Rubin et al. (1998) American Journal of Clinical Nutrition 68, 854-858 'Evidence that vitamin D3 increases serum 25-hydroxyvitamin D more efficiently than vitamin D2'.





Patient Information Guide
Vitamin D

# Are you getting enough vitamin D?

For at least 50% of you, the answer is, probably not...





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## 'Super-Nutrient' Vitamin D - Deficiency linked to a wide range of health problems

Vitamin D is fast becoming known as a 'super-nutrient'. No longer just an important nutrient for healthy bones, research is now finding that deficiency of this fat-soluble vitamin can be linked to a wide range of health problems, from cancer and cardiovascular disease to cognitive impairment and problems with auto-immunity such as multiple sclerosis (MS) and Type 1 diabetes.

#### Vitamin D comes from sunshine, not food

What many people don't realise is that very few foods naturally contain vitamin D. Fortified milk, egg yolks and oily fish are the best sources, but you certainly cannot rely on food to provide you with optimal amounts of vitamin D on a daily basis. In fact, the major source (80 - 100%) of vitamin D is actually sunshine! Vitamin D is primarily manufactured in the skin on contact with sunshine.



## "Vitamin D deficiency is now recognised as a pandemic, with more than half of the world's population currently at risk"<sup>1</sup>

We now know that vitamin D deficiency is a major risk factor for at least 17 varieties of cancer as well as heart disease, stroke, hypertension, auto-immune disease, diabetes, depression, chronic pain, osteoarthritis, osteoporosis, muscle weakness, muscle wasting, birth defects and periodontal disease to name but a few.

## So why in this modern age are we experiencing such epidemic proportions of vitamin D deficiency?

The simple answer is that we simply aren't getting as much sun as we used to. Millions of years ago, our ancestors lived naked in the sun, spending most of the day working and travelling outside. Over the years, we have put on clothes and started working inside, travelling in cars and living in cities where buildings block the sun. In addition to this, in more recent years, skin cancer scares have further minimised sun exposure for all ages, especially for children. The recommended liberal use of high factor sunscreen has had additional negative impacts on the skin's natural vitamin D production process. Before the sun scare, 90% of human vitamin D stores came from skin production not dietary sources. When you look at how our lifestyles have evolved to cut out the sun's contact with our skin, it is easy to see why we now have such epidemic proportions of vitamin D deficiency.

### Some conditions associated with vitamin D deficiency:

- Cancer
- Stroke
- Auto-immune disease
- Depression
- Osteoarthritis
- Muscle weakness
- Birth Defects
- Autism

- Heart Disease
- Hypertension
- Diabetes
- Chronic Pain
- Osteoporosis
- Muscle wasting
- Periodontal Defects
- Alzheimer's Disease



#### So how much vitamin D do you need?

- Recent medical research indicates that human daily requirements of vitamin D may be up to 10 x more than what is currently recommended.
- The current daily recommendation for vitamin D is 200 IU.
- If you consider that the skin will naturally produce approximately 10,000 IU vitamin D in response to 20 30 minutes summer sun exposure, you can easily see how current daily recommendations of a worryingly low 200 IU are seriously brought into question by health experts.
- Based on information from the most current medical literature, highly respected scientist Dr Joseph Pizzorno recommends that an average daily maintenance dose of 5000 IU vitamin D is more realistic to promote optimal vitamin D levels.<sup>1,2</sup>
- Yet scientists also agree that there is a great deal of individual variation and with vitamin D it is impossible to recommend a 'one size fits all' daily dosage level.
- The correct level of vitamin D is the one which results in bringing blood levels of vitamin D into an optimal range; it is essential therefore that you seek advice from your qualified health care practitioner who will be able to advise you on the best dose for your individual requirements.