EClub Weekly Health Tip – All Under Fives Should Take Vitamin D Pills to Avoid Rickets, says UK Government Health Chief

Phillip Day – 29 January 2010

"All children under five are at risk of developing rickets because of their couch potato lifestyles, the government's Chief Medical Officer said today.

Professor Dame Sally Davies says children aged six months to five should be given vitamin D supplements - particularly during the winter.

Her advice comes after figures revealed a dramatic increase in the crippling disease in children who aren't exposed to sunlight for long enough, because they stay indoors playing computer games or watching TV.

Dame Sally, the Director General of Research and Development and Chief Scientific Adviser for the Department of Health and NHS, said children should take seven micrograms of the sunshine vitamin every day."

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PHILLIP DAY'S COMMENT:

Good advice, coupled by a risible recommendation. 7 IU/day? According to the latest science, D3 supplementation should always be varied according to bodyweight. Therapeutic supplementation is far higher.

Research shows the unequivocal benefits of vitamin D both in the prevention and treatment of cancer as well as rickets and other diseases. Lack of, and fear of sunshine, combined with processed, cooked diets has become the, to-date, undeclared catastrophe of modern times. The Vitamin D Council writes:

"Technically not a 'vitamin', vitamin D is in a class by itself. Its metabolic product, calcitriol, is actually a secosteroid hormone that targets over 1000 genes in the human body. Current research has implicated vitamin D deficiency as a major factor in the pathology of at least 17 varieties of cancer as well as heart disease, stroke, hypertension, autoimmune diseases, diabetes, depression, chronic pain, osteoarthritis, osteoporosis, muscle weakness, muscle wasting, birth defects, periodontal disease, and more. Vitamin D's influence on key biological functions vital to one's health and well-being mandates that vitamin D no longer be ignored by the healthcare industry nor by individuals striving to achieve and maintain a greater state of health."[1]

www.orthomolecular.org writes:

"If you search the US National Institutes of Health's Medline online database for 'cancer vitamin D', you will find over five thousand papers... some dating back nearly 60 years.

It's true: physician reports on vitamin D stopping cancer have been ignored for decades. In 1951, T. Desmonts reported that vitamin D treatment was effective against Hodgkin's disease (a cancer of the lymphatic system).[2] That same year, 57 years ago, massive doses of vitamin D were also observed to improve epithelioma.[3] In 1955, skin cancer was again reported as cured with vitamin D treatment.[4] In 1963, there was a promising investigation done on vitamin D and breast cancer.[5] Then, in 1964, vitamin D was found to be effective against lymph nodal reticulosarcoma, a non-Hodgkin's lymphatic cancer.[6]

The American Cancer Society has been obsessed with finding a drug cure for cancer. Pharmaceutical researchers are not looking for a vitamin cure. And when one is presented, as independent investigators and physicians have continuously been doing since 1951, it is ignored."[7]

Vitamin D RDA and Sun-Dosing

The recommended daily allowance for vitamin D in adults is set at 200-400 international units a day (IU). This is thought to be the level above which overt cases of the classic vitamin D deficiency disease rickets will not be observed. Alas, it's not that simple. You actually need around 4,000 IU/day just to maintain the vitamin D level

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[1] www.vitamindcouncil.org

[2] **Desmonts T, Duclos M "**Favourable effect of vitamin D on the evolution of a case of Hodgkin's disease", *Sang*. 1951;22(1):74-5. And: **DESMONTS T "**Favourable action of vitamin D in leukemic erythroderma and Hodgkin's disease", *Pathol Gen*. 1951 Mar;51(326):161-4. Also: **VACCARI R** "Vitamin D2 and experimental carcinogenesis", *Boll Soc Ital Biol Sper*. 1952 Aug-Oct;28(8-10):1567-9

[3] **Sainz de Aja Ea** *Actas Dermosifiliogr*. 1951 Nov;43(2):169-70

[4] **Linser P** "Spontaneous cure of skin carcinoma by vitamin D treatment", *Dermatol Wochenschr*. 1955;132(40):1072-3. German

[5] **Gordan G S, Schachter D** 'Vitamin D activity of normal and neoplastic human breast tissue', *Proc Soc Exp Biol Med*. 1963 Jul;113:760-1

[6] **Desmonts T, Blin J** "Action of Vitamin D3 on the course of a lymph nodal reticulosarcoma", *Rev Pathol Gen Physiol Clin*. 1964 Mar;64:137. French.

[7] www.orthomolecular.org

you already have as an adult. Do you think government scientists know this already? Of course they do. To understand vitamin D's playing field a little better, consider the following.

Let's say you went out to the local park in June between 11am and 2pm, stripped completely naked and laid out on the grass. In the half an hour it took for the local police to arrest you, scientists say you can generate around 20,000 IU of vitamin D. Of course, the mitigating factors are skin pigmentation, where you are on the planet, cloud cover, pollution, speed of police, etc. Then you get bailed out at the station, return home with your clothes on, strip off again for a shower… and wash all that vitamin D down the plughole!

That's right. It takes around 48 hours for vitamin D to penetrate the skin. Being oil-soluble, vitamin D is broken down by soap and washed away in your power shower. To avoid this happening after adequate sun exposure (enough for you fair-skinned types to turn pinkish), wash off the skin with water and tend to the underarms and groin area separately. Smelly old farmers live longer – pungent but true. Dark-skinned folk need much more sun than light-skinned folk.

Watch to see when your shadow is shorter than you are. Dr John Cannell says this is a useful thumbnail to determine when you can make vitamin D. Unfortunately in the UK, your shadow is longer than you are for a good six months of the year. Trying to get sun exposure behind glass won't work either since the vitamin-D-making UVB wavelength is disrupted. UVA gets through, however, and that's not good news.

Every member of the population should take *reasonable* sun exposure not only more seriously, but view it as one of the cardinal prerequisites for a longer life. If you have dark skin and have moved to a northern country, you are especially at risk from vitamin-D-deficiency problems. Numerous studies indicate that 'all-cause mortality' is significantly higher if you are vitamin-D-deficient.[8]

Vitamin D Testing

If you have cancer or other serious condition, the first thing to do is find out your blood serum level of D. You can do this even if you are healthy and just want to know. The test you should request from your GP is known as a 25(OH)D or 25-hydroxy D test for calcidiol, and is done using a blood sample. Do not get fobbed off with "Oh, you're a bit low, Marjorie." You need the figure and the calibration, i.e. 25 ng/ml or 75 nmol/L. If you end up with other calibrations, convert as follows:

10 ng/ml = 10µg/L (no change)
10 ng/ml = 24.96 nmol/L (1:2.5)

The ng/ml and µg/L scales run as follows (UK, USA, etc.):
<20 ng/ml – grossly deficient
20-40 ng/ml – deficient
50-60 ng/ml – normal
70-90 ng/ml – therapeutic
>100-110 ng/ml – toxic threshold

The nmol/l scale runs as follows (Australia, etc.):
< 50 nmol/L – grossly deficient
50 – 100 nmol/L – deficient
130 – 150 nmol/L – normal
170 – 190 nmol/L – therapeutic
>230 nmol/L – toxic threshold[9]

Dr Bruce Hollis remarks that no circulating D3 can be found until levels are 40-50 ng/ml (100-125 nmol/l). By this measure, at least 85% of the US population are vitamin-D-deficient. Consider that America is below the 52nd parallel, so the UK and northern Europe will be far worse.

If your test comes back deficient, your vitamin D level should be raised using sunlight and/or supplementation, and then re-tested four weeks later to see if progress is being made. I encourage people to take 10,000 IU/day of D3 while they are getting tested and then adjust the supplementation accordingly (usually upward) and re-test in four to six weeks.

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[8] www.vitamindcouncil.org/science/research/vitamin-d-and-mortality.shtml

[9] Studies show that vitamin D toxicity usually manifests as hypercalcaemia. Prolonged supplementation in excess of 30,000 – 50,000 IU/day for months is required to cause a problem. If in doubt, get tested. The amount of D3 you take is irrelevant, it's the serum levels that matter.

There are specially designed, electronic-ballast 'safe' tanning beds, too, which emit predominant UVB wavelength. Dr Joseph Mercola recommends these but they are expensive and not to everyone's tastes.[10] The best choice is sunlight and/or vitamin D3 (cholecalciferol) supplementation. If you are pushing the limits with very high supplementation, the experts advise that you to get tested often and watch for calcium levels rising – an indication of the toxic threshold. There is a good margin for safety, however. Risks from toxicity with D3 are commonly overblown and true problems only come from overdosing for months on end.

For most people, D3 oral supplementation will be the only option during winter months. The level of supplementation is irrelevant, it's the serum level that matters. Dr Mercola states that normal healthy individuals can supplement 3,000 IU/day per 100lbs bodyweight and for those undergoing treatment for cancer or other serious illnesses, 5,000 IU/day per 100lbs bodyweight. Once again, if you are pushing the limits with oral supplementation to get your serum level up in a hurry, it is vital to monitor levels not only to avoid the aforementioned overdosing, but to ensure the therapeutic margin is gained.

Some people require huge initial doses of D3 to get them into the game (50,000-100,000 IU). However, I find that for most adults who have never supplemented, 10,000 IU/day for a month followed by 5,000 IU/day thereafter gets them optimised without delay. If in doubt, you simply won't know where you stand without testing and monitoring your level. Remember also that you weren't designed to take vitamin D orally, so you won't get all of the benefits associated with normal sun exposure, which is by far the most safe and efficient method of vitamin D production when done *reasonably*:

"There is no way to know if the recommendations given below are correct. The ONLY way to know is to test your blood. You might need 4-5 times the amount recommended below. Ideally your blood level of 25(OH)D should be 60ng/ml." [11]

AGE	**ORAL DOSAGE**
Below 5	35 IUper lb per day
5-10	2,500 IU/day
18-30	5,000 IU/day
Pregnant women	5,000 IU/day

TIP: If you miss a day's supplementation, simply tack it onto the following day.

TIP 2: If you have a two year-old like I do whose allocation is 1,000 IU/day, and you have 5,000 IU capsules, give them one every five days.

TIP 3: Now book a holiday!
Phillip

To purchase any of the items mentioned above please go to
http://interneka.com/affiliate/AIDLink.php?BID=11205&AID=34037

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The Campaign for Truth in Medicine
http://www.campaignfortruth.com

[10] www.mercola.com
[11] Ibid.