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The below article is from David I. Minkoff, MD "Optimum Health Report", May 3, 2004. Many of these on-line reports, after a time, are no longer accessible, so we have copied this article in its entirety.

NEWS does Vitamin D testing routinely.

If you need this type of testing done, please call for an appointment @ 706.769.0720.

And for a whole website dedicated to the way NEWS thinks about VitD click the below link. THE VITAMIN D COUNCIL at: www.cholecalciferol-council.com/

For hundreds of millions of years the main nurturing catalyst for life on earth has been sunshine. It is the light energy from sunshine, through photosynthesis, that enables the plant to transform earth minerals into a living organism. We know that phytoplankton (sea algae) have been creating energy from sunlight for at least 500 million years. For as long as there has been human life on earth, our bodies have been nurtured by sunshine as well. It is only with sunlight that our bodies can manufacture Vitamin D. Contrary to this need for sunshine, most of us work indoors and get little direct sunlight. Added to that are current medical advices to avoid direct sunshine and to wear sun protective clothing and sunscreen so that you do not get any sun exposure. Of course the reason for this is to prevent melanoma skin cancer. Unfortunately, even with sun avoidance and the use of sunscreens, melanoma rates have been increasing. The downside of staying out of the sun, however, is that Vitamin D deficiency "diseases" are surfacing at an astronomical rate. With this in mind, I thought it would be good to summarize some of the important and relevant information.

1. Did you know that breast milk does not transfer Vitamin D from mom to baby? The baby must get it from sunshine or from an outside supplement. Mothers used to give babies egg yolk at an early age. Egg yolk is a good source of Vitamin D (and iron).
2. Vitamin D as a blood pressure regulator? Yes. There is actually quite a lot of solid research on this. We know that hypertension is at epidemic proportions around the world. Could it be in part due to Vitamin D deficiency? We know from epidemiologic studies that people living closer to the equator have less high blood pressure. A study in Lancet showed that ultra-violet light (which increases the Vitamin D production in the body) could lower blood pressure. Two other clinical trials have shown that Vitamin D supplementation could reduce both systolic and diastolic blood pressure. How? Vitamin D works by blocking an enzyme called angiotensin-converting-enzyme, or ACE for short. You have probably heard of a whole category of blood pressure medicines called the "ACE Inhibitors." Common ACE inhibitors are Vasotec, Lotensin, Zestril, Altace, Capoten and others. Well, Vitamin D is nature's ACE inhibitor! When there is not enough natural ACE inhibitor around (i.e., sunshine!), the body produces too much of a hormone called angiotensin (angio=blood vessel, tensin=make tense or tight). Therefore, high angiotensin leads to constricted blood vessels, thickened heart muscle, increased adrenaline levels, and increased salt retention by the body. This all leads to high blood pressure.

Prescription ACE inhibitors have side effects like: cough, headache, dizziness, skin rash, kidney problems, swelling of the face, lips and throat.

What is most interesting about this is that Vitamin D actually regulates our DNA to produce the appropriate amount of these hormones so that an excess of angiotensin does not occur. How wise is nature!

Now guess what the pharmaceutical companies are working on???

You guessed it "Vitamin D analogues". These are patentable versions of Vitamin D. Now I am not against anyone trying to make a buck, but for goodness sakes, how about a half an hour of sunshine a day and perhaps some supplemental Vitamin D, if needed!

3. Researchers have found women who eat a diet rich in vitamin D may reduce their chances of developing rheumatoid arthritis (RA) and multiple sclerosis (MS). Vitamin D. Deficiency or insufficiency has also been associated with:

Adrenal insufficiency

Alzheimer's

Allergy

Autoimmune disorders

Cancers of the colon, breast, skin and prostate

Depression

Diabetes, Type 1 and 2

Gluten intolerance

Heart disease

Heavy metal toxicity

Hypertension

Infertility

Learning disorders

Lectin intolerance

Misaligned teeth and cavities

Myopia

Obesity

Osteomalacia

Osteoporosis

Parkinson's

PMS

Psoriasis

Rickets

Seasonal affective disorder

Syndrome X

Use of corticosteroids and more...

With this in mind, and since the scope of problems is so big with Vitamin D deficiency, I would suggest that everyone get a blood test to measure their Vitamin D level . It is actually the only way to know if you have a low level or not. Many times, these conditions may not show up for months or years after being deficient. So as part of a good preventive plan, and for sure if you live north or south of the subtropics, or always use sunscreen, it is very important to do it.

All chronically ill people should have their Vitamin D level measured. While several tests of Vitamin D level are available, the best one to measure is 25(OH)D, also called 25-hydroxyvitamin D.

We do not want simply "normal levels." We want optimal levels - those at the top end of normal.

Here are some Vitamin D levels taken from healthy people from the tropical or subtropical parts of the world where they are receiving healthy sun exposures.

Practitioners experienced with this suggest that the optimal levels are the preferred ones. (Holick MF. Calcium and Vitamin D. Diagnostics and Therapeutics. Clin Lab Med. 2000 Sep;20(3):569-90)

Optimal 25-hydroxyvitamin D values are: 45-50 ng/ml or 115-128 nmol/l	Normal 25-hydroxyvitamin D lab values are: 20-56 ng/ml 50-140 nmol/l
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Your vitamin D level should NEVER be below 32 ng/ml. Any levels below 20 ng/ml are considered serious deficiency states and will increase your risk of breast and prostate cancer and autoimmune diseases like MS and rheumatoid arthritis.

If you have the above test performed, please recognize that many commercial labs are using the older dated reference ranges. The above values are the newest ones from the clinical research.

Vitamin D is available from either sunshine or dietary sources. Below is a table with some common dietary sources. Vitamin D can be toxic, even when it comes from food. So one must be careful one does not do a good thing to excess either.

Table of Selected Food Sources of Vitamin D:

Food	International Units	%DV *
Cod Liver Oil, 1 Tbs.	1,360 IU	340
Salmon, cooked, 3 1/2 oz	360 IU	90
Mackerel, cooked, 3 1/2 oz	345 IU	90
Sardines, canned in oil, drained, 3 1/2 oz	270 IU	70
Eel, cooked, 3 1/2 oz	200 IU	50
Milk, nonfat, reduced fat, and whole, Vitamin D fortified, 1 c	98 IU	25
Margarine, fortified, 1 Tbs.	60 IU	15
Cereal grain bars, fortified w/ 10% of the DV, 1 each	50 IU	10
Pudding, 1/2 c prepared from mix and made with	50 IU	10

Vitamin D fortified milk		
Dry cereal, Vit D fortified w/10%* of DV, 3/4 c * Other cereals may be fortified with more or less Vitamin D	40-50 IU	10
Liver, beef, cooked, 3 1/2 oz	30 IU	8
Egg, 1 whole (Vitamin D is present in the yolk)	25 IU	6
<p>* DV = Daily Value. DVs are reference numbers based on the Recommended Dietary Allowance (RDA). They were developed to help consumers determine if a food contains very much of a specific nutrient. The DV for Vitamin D is 400 IU. The percent DV (%DV) listed on the nutrition facts panel of food labels tells adults what percentage of the DV is provided by one serving. Percent DVs are based on a 2,000-calorie diet. Your Daily Values may be higher or lower depending on your calorie needs. Foods that provide lower percentages of the DV will contribute to a healthful diet.</p>		

This Fact Sheet was developed by the Clinical Nutrition Service, Warren Grant Magnuson Clinical Center, National Institutes of Health (NIH), Bethesda, MD, in conjunction with the Office of Dietary Supplements (ODS) in the Office of the Director of NIH.

If the levels are low, one should always work with a physician skilled and knowledgeable in nutritional and natural therapies to begin Vitamin D therapy. [NEWS has physicians on staff skilled in these therapies.]

Again: Vitamin D is a fat soluble vitamin and can be quite toxic if taken to excess. And while on Vitamin D therapy, one must recheck the levels every three months or so to make sure that an overdose is not occurring. The physician will also follow the blood calcium level.

Regarding Sunshine:

There are three bands of UV light known as UV-A, UV-B and UV-C. UV-B is the only wavelength that produces Vitamin D in the skin, and coincidentally is the "burning ray." This is the one that causes sunburn when one has been overexposed.

Caution: Avoid Sunburn

You should never get burned and should only gradually increase your sun exposure. Fair skinned people can produce more vitamin D in a shorter time than darker skinned people so they don't need to be in the sun as long to get the amount of Vitamin D that they need. This can be a problem though in African American people who live in the north. They can't get enough sunshine to achieve normal Vitamin D levels. Therefore every person should have their level measured and add supplementation to support their sun exposure. Sunburn is related to skin cancer, and yet if you don't get sunburned, and have regular sun exposure you actually decrease your risk of melanoma. Remember to supplement under the care of a physician trained in Vitamin D therapy.

Nature is awfully smart. Basic wisdom is a simple formula:

- Organic food.

- Pure water.
- Adequate restful sleep.
- Daily sunshine.
- People around us who love and care for us.
- Life purpose that includes helping others..... results in health.