**Vitamin D**

**BIBLE:**

**Ecclesiastes 7:11 – “...there is profit to them that see the sun...”**

**SOP:**

**“I must become acquainted with myself,** I just **be a learner**always as to how to **take care of this building,** the body God has given me, that I may **preserve it in the very best condition** of health... **I must get all the**

**Sunlight that it is possible for me to obtain.** I must have wisdom to be a faithful guardian of my body.” (CD 302.3)

**GOOD SCIENTIFIC RESEARCH:**

<http://www.lifescript.com/Health/Conditions/Osteoporosis/Are_You_Deficient_in_Vitamin_D.aspx?utm_campaign=2011-020372497&utm_source=healthyadvantage&utm_medium=email&utm_content=healthy-well-wise_Are%20You%20Deficient%20in%20V&FromNL=1&sc_date=20110203T000000>

**ARE YOU DEFICIENT IN VITAMIN D?**

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**Vitamin D is one of the most important nutrients for women.** But are you getting enough for bone density and overall health? Here’s what you need to know if you’re deficient in Vitamin D.

For years, you’ve heard how important the **“SUNSHINE VITAMIN”** is to bone health, especially when taken with calcium. But D also **keeps your immune system humming, heart ticking and muscles strong.** It may even **prevent cancer.**

**THE BAD NEWS:**

**Most American women are deficient in vitamin D.** A government advisory panel tripled its recommended daily allowance (RDA) from 200 to 600 international units (IU) late in 2010. But some of the nation’s leading scientists say this higher RDA is still too low.

**It doesn’t consider the vitamin’s effects on other health conditions,** says Walter Willett, M.D., chairman of the department of nutrition at Harvard School of Public Health.

**About 70% of whites, 90% of Hispanics and 97% of blacks in the U.S. have insufficient levels** of D in their blood, according to a 2009 University of Colorado report published in the Archives of Internal Medicine.

“I never would have predicted that my patients would be deficient in Vitamin D [and] how **extreme the deficiencies** would be,” says obstetrician/gynecologist Lauren Streicher, assistant clinical professor at Northwestern University’s Feinberg School of Medicine.

**Vitamin D deficiency harms more than your bone strength.** It may lead to bigger health problems, such as Crohn’s disease, lupus, diabetes and heart disease. Eradicating Vitamin D deficiency could change the face of chronic disease, says Robert Heaney, M.D., a professor at Creighton University’s Osteoporosis

Research Center in Omaha, Neb.

“This is probably more important than any other health recommendation we’ve made, including whether to reduce salt or saturated-fat intake,” he says.

**ONE REASON:**

**Vitamin D influences more than 200 genes** **–** many of which are **associated with a variety of diseases,** according to a 2010 Oxford University study published in the journal Genome Research.

“In the past 30 years, there has been increasing evidence that **Vitamin D** **[plays a role] in many areas of the body and almost all the organs,”** says Edward Giovannucci, M.D., Sc.D., professor of nutrition and epidemiology at Harvard’s School of Public Health.

In fact, some **people with low levels report joint pain, muscle pain, fatigue, frequent stress fractures or low bone density.** Because it’s stored in fat, higher body fat levels could be another symptom of vitamin D deficiency.

**HERE’S HOW VITAMIN D AFFECTS YOUR HEALTH:**

**Cancer:** Adequate vitamin D levels are linked with a reduced risk of breast cancer, regardless of other risk factors, such as number of pregnancies, being overweight and alcohol intake, according to a 2010 National Cancer Institute research review published in the Journal of the American Dietetic Association. **Low levels are associated with a 30%-50% higher risk,** as well as an increased risk of dying from the disease, according to a 2007 research review published in the New England Journal of Medicine. Same goes for colon and prostate cancer.

**Heart Disease:** A variety of studies have found a **strong link between Vitamin D deficiency and cardiovascular risk factors,** according to a 2010 research review published in Current Opinions in Cardiology.

**Diabetes:** Low vitamin D levels are linked to **poor disease control** in people with diabetes, according to a 2010 study by Johns Hopkins School of Medicine in Baltimore, Md. The researchers suggested that the vitamin plays an active role in regulating insulin-producing cells.

**Insufficient levels were also related to larger amounts of deep abdominal fat** surrounding the internal organs, or visceral fat, which may promote development of insulin resistance and hypertension, according to a 2009 Medical College of Georgia study published in Diabetes.

**Autoimmune Disorders:** The 2010 Oxford study found that many of the genes vitamin D appears to influence are **associated with autoimmune conditions, such as multiple sclerosis, Crohn’s disease, rheumatoid arthritis and lupus.** And in a 2011 University of Cincinnati study, patients with autoimmune interstitial lung disease were more likely to have reduced lung function if their blood levels of the vitamin were low.

**Infection:** The vitamin also **supports a strong immune system,** says Bruce Hollis, Ph.D., professor of biochemistry at the Medical University of South Carolina in Charleston. **People with low vitamin D levels are 40% more likely to catch a cold or the flu,** according to a 2009 University of Colorado study

**“If your Vitamin D status is insufficient,** your early [immune] **attack against pathogens** could be greatly compromised,” Hollis says.

**Muscle Strength:** Vitamin D also could **help your workouts.** Low levels are linked to decreased muscle strength and an accumulation of fat in muscle tissue, even among otherwise healthy young women, according to a joint 2010 study at McGill University in Canada and the University of Southern California.

**Bone Health:** Because it **helps the body absorb calcium,** vitamin D is hugely important in **PREVENTING OSTEOPOROSIS** (bone loss) and fractures.

**WHY WE ARE DEFICIENT IN VITAMIN D**

**One reason for widespread vitamin D deficiency is our modern lifestyle.** Researchers believe that humans evolved to absorb Vitamin D from the sun. When we’re exposed to bright ultraviolet-B light, an early form is produced in the skin. The liver, kidneys and other tissues then metabolize it into more active forms.

But use of more effective **SUNSCREENS,** spending more **TIME INDOORS** and **LIVING IN AREAS WITH LIMITED SUN** in winter have **reduced our UV exposure**, working against the body’s natural vitamin D metabolism.

Even living in a sunny climate is no guarantee that you’re getting enough. In a 2010 study of healthy young women on the West Coast, researchers at Canada’s McGill University were surprised to discover that **59% of the participants were deficient in vitamin D –** even though they lived in sunny California.

**HOW MUCH DO YOU NEED?**

Confused about **how much vitamin D** you should be getting? You’re not alone.

**Even physicians, scientists and government health experts disagree on how much women actually need.**

Late in 2010, an independent panel from the Institute of Medicine (IOM), part of the National Academy of Sciences, released a long-awaited report calling for a big boost in the RDA for women. **Many health-care practitioners follow the institute’s recommendations, although they’re not required to do so.**

The IOM’s new RDA, which calls for **600 IU daily for people age 1-70** and **800 IU over 70,** is a big boost from the previous RDA of 200 IU. (An IU, or “International Unit,” equals .025 micrograms.)

Their **recommendations were largely based on bone health,** says IOM committee member and Harvard Medical School professor JoAnn Manson, M.D.

“The data was consistent in supporting that **600 IU would cover the needs of 95% of the population** up to age 50,” she says.

But to Michael Holick, M.D., Ph.D., a professor of medicine and Vitamin D researcher at Boston University, the panel’s **guidelines are still 2-3 times too low.**

**He recommends as much as 3,000 IU per day for most of his patients,** he says. The IOM recommendations are intended to prevent vitamin D deficiency, which they define as less than 20 Nano grams per milliliter (ng/mL) of blood. (You can get a blood test at your doctor’s office to find out your current levels.)

It’s **more important to prevent “insufficiency”** – a higher standard often defined as less than 32 ng/mL, Holick says.

The **IOM might raise its recommendations** again when more research is done, Manson says.

**“When many ongoing trials [with daily doses as high as 2,000 IU] are completed, there will be much better information,”** she predicts.

**HOW TO GET YOUR VITAMIN D**

Despite the ongoing controversy, **everyone agrees women need at least 600 IU per day,** either through food, supplements or sun exposure.

**Sunlight is the most efficient way to absorb the vitamin.** But it’s not the safest because it increases the risk of skin cancer.

In summer, **less than 30 minutes of sun** exposure delivers **10,000-20,000 IU to light-skinned people.** Those with **darker skin may need 2-5 times as much.** After you reach a natural limit of around 10,000 IU, it begins to degrade in the skin.

**“You can [safely] get 5-15 minutes of unfiltered sun 2-3 times weekly,** depending on your skin type, and time of day and year,” Holick advises. “You can still protect your face, but your arms and legs should be exposed.”

But **many dermatologists disagree,** saying no amount of sun is safe.

“Even 10-15 minutes of unprotected sun exposure several times weekly can damage skin cells,” says Pittsburgh dermatologist Debra Tanner Abell, M.D., a spokeswoman for the Skin Cancer Foundation. “That causes premature aging and could eventually lead to skin cancer.”

**A safer bet:** Take a supplement, Giovannucci advises. Before you do, check with your doctor. If it’s low, you may be prescribed a high dose until you reach optimum levels.

Also, consider other sources of vitamin D. Your daily multivitamin may contain anything from 100-1,000 IU. High vitamin D foods such as fish or fortified milk can add 50-600 IU per serving. (See Top Foods for Vitamin D.) For every 1,000 IU taken daily, you can increase blood vitamin-D levels another 10 ng/mL in 3-4 months.

D3 (cholecalciferol) supplements are considered the most effective at raising vitamin D levels. But because **D3 comes from animal sources** (often lanolin from sheep’s wool), **vegetarians favor D2, which is produced from plants.** (See The Forms of Vitamin D.) (It is now said that they now have plant forms of D3).

Most researchers agree that you shouldn’t go over a safe upper limit, which the IOM sets at 4,000 IU daily, without a doctor’s supervision. **The institute warns that extremely high levels can cause adverse health effects, and that a daily intake above 10,000 IU per day could lead to kidney and tissue damage...**

(Keep in mind that most of the medical profession hasn't really seen cases of high doses of Vitamin D).

**Note:** **Some of the information in the article is incorrect.** **For correct values and time of day to be in the sun, please read the Vitamin D/Sunshine Health Nugget.**

**Blog Link:**

<http://ravishingrecipesandhealthfacts.blogspot.com/2017/06/vitamin-d.html>

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