

An ounce of prevention is worth a pound of cure.

Fighting the Flu with Vitamin D

Your family deserves this powerful, natural protection!

New Research

New research shows that vitamin D helps prevent flu.¹ Bureaucracies change slowly, however, so it will be years before California and federal public health agencies, such as the CDC, alert the public. *You don't have to wait!*

Emory University scientists recently examined D studies and concluded that D not only prevents but *treats* flu.² The *Harvard Heart Letter* (November 2009) reports, "Having enough D in circulation can help the body fight off the flu, tuberculosis, and infections of the upper respiratory tract."³ A newly discovered immune system, different from the immunity we get from vaccines, requires ample vitamin D to function, according to University of Oregon researchers.⁴

Latinos, African Americans Especially Low in D
Overall, only 3 out of 10 American children have enough vitamin D.⁵ Even worse, only 2 of 10 Latino children, and only 1 out of 10 African American children have adequate D-- because melanin in the skin blocks the ultraviolet B rays which make Vitamin D.⁶

It's shocking -- in just 10 years, the average blood serum level of D in Americans went from *low* to *lower*, that is, from 30 to 24 ng/mL (nanograms per milliliter).⁷ For comparison, Kaiser Permanente aims for blood levels ranging from 40 to 70 ng/mL.⁸ Farmers and lifeguards are the gold standard because they make D from sunlight (meaning they make what they actually need) and typically have 100 ng/mL.

Doctors Advise Supplementation

Dr. John Cannell advises parents to provide children at least 1,000 IU per 25 pounds of body weight each day (for example, a 75-pound child would need 3000 IU).⁹ Dr. C.L. Wagner recommends 6,400 IU for nursing mothers in order for enough D to spill over into breast milk.¹⁰ Dr. Douglass Bibuld at the Community Health Center in Boston prescribes as much as 7,000 IU a day for adults with low blood levels.¹¹ Experts say the largest safe amount is 10,000 IU a day.¹²

Compare these multi-thousand IU dosages to the miniscule FDA standard of 200 IU a day for both children and adults! Amazingly, in 1997 the FDA lowered the Daily Recommended Intake (DRI) from 400 to 200, based on a faulty 1984 study which found that 3,800 IU a day produced toxic symptoms like kidney stones and vomiting -- but the amount given participants was mistakenly about *100 times higher*,¹³ 380,000 IU! This one flawed study still rules, despite dozens of more recent studies showing the 200 IU DRI is completely inadequate.¹⁴ Think about it, how could 3,800 IU be toxic when a pale person sunbathing for 20 minutes midday in the summer makes about 20,000 IU of vitamin D? ¹⁵

Food can't provide enough D. For instance, to get 2000 IU per day from food you would need 6 servings of salmon, or 10 servings of tuna, or 20 glasses of fortified milk every day.¹⁶

School food only provides 100 to 200 IU a day. Therefore it's up to parents to insure their children get enough D. Note that vitamin D3 is more effective than vitamin D2. D3 is made from fish liver oil, or lanolin (which has no fishy taste; it's usually a powder inside a capsule so parents can pull apart the capsule and mix the powder into food).

Keep in mind that D supplementation needs dietary calcium and magnesium, which are easily provided by greens (chard, kale, spinach), nuts, and milk products. Anyone with liver or kidney disease, or sarcoidosis, needs medical supervision.¹⁷

Affordable Home Test

If you want to know your, or your child's, current blood level of D, the 25-OH-D test will tell you. This reliable \$40 home 'blood spot' D test hurts no more than pulling a splinter. Go to GrassrootsHealth.org, click on "D-Action," and scroll down to the "Join Now" button. This is a 5-year study, but you can buy just one test. Results are sent by email.

Why Are So Many People Deficient?

Americans eat less fish than ever, work and play inside more than ever, use sunscreen, weigh more (excess body fat sequesters D), and no longer take supplements like cod liver oil. Plus, we cannot make D during the winter because the sun's ultraviolet B rays travel through the atmosphere at an oblique an angle; in other words it's a longer path so the UVB rays are absorbed by the atmosphere before reaching us.

North of the 34th latitude (Los Angeles, Atlanta), we can't make D from sunlight from October to March. By February most people have used up their reserves, which is why "flu season"¹⁸ happens then. Even in spring, summer and fall, we only produce D when the sun is directly overhead (between 11 and 1), i.e. when your shadow is shorter than you are.

Not Just for Flu

Vitamin D is needed by every cell in the body and is actually not a vitamin but a hormone. Here is a list of health problems which research finds related to D deficiency: acne, asthma, arthritis, cancer, diabetes, fibromyalgia, heart disease, high blood pressure, MS, muscle weakness, obesity, osteoporosis, TB, tooth decay, ADD, autism, depression, schizophrenia, Alzheimer's, and Parkinson's.¹⁹ The brain uses a lot of vitamin D; maybe the Achievement Gap is simply the result of lower D levels in students of color -- that would explain why everything schools do to close the gap still hasn't worked!

Citations at: <http://GoodSchoolFood.org/pdf/CitationsDflu.pdf>
Questions or comments? Contact Lauren.Ayers@GoodSchoolFood.org

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1. http://www.huffingtonpost.com/dr-soram-khalsa/vitamin-d-for-swine-flu-p_b_310235.html
2. <http://www.ncbi.nlm.nih.gov/pubmed/19491064>
3. http://www.health.harvard.edu/press_releases/vitamin-d-deficiency-bad-for-the-heart-bones-and-rest-of-the-body
4. <http://www.samaylive.com/news/researchers-stress-importance-of-vitamin-d/648384.html>
5. <http://www.medpagetoday.com/Pediatrics/GeneralPediatrics/15359>
6. http://www.contracostatimes.com/nation-world/ci_13640740
7. http://www.sciencecodex.com/increasing_number_of_americans_have_insufficient_levels_of_vitamin_d
8. This is Kaiser's current 25-OH-D standard.
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10. <http://www.nutraingredients.com/Research/Doctors-advise-more-vitamin-D-for-infants>
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