

PROTECT OUR CHILDREN NOW!

Put a stake in the ground – eliminate vitamin D deficiency at its beginning

- Protect the health of the next generation
- Help eliminate ethnic disparities in pregnancy
- 24 month program demonstrates effectiveness to whole population
- Ready to implement upon funding
- Quick, safe & effective

Health improvement and cost savings

- Results from three separate cohorts show very similar results - a decrease of approximately 50% in the risk of preterm birth with vitamin D serum levels of at least 40 ng/ml compared to 20 ng/ml (Medical University of South Carolina, University of Pittsburgh Medical Center).
- The March of Dimes estimates the cost of each premature infant is \$55,000.

Annual number of preterm births in your area =

50% potential reduction = X \$55,000 =

POTENTIAL ANNUAL COST SAVINGS

How does it work?

- Create an action group including a medical center, pregnant women; educate physicians, staff; implement regular vitamin D screening (12-14 weeks; 22-26 weeks; 32-36 weeks; infant); supplement to achieve serum levels of at least 40 ng/ml.
- Measure hard pregnancy outcomes (i.e. preterm birth, low birth weight, C-section, pre-eclampsia, infection).
- Promote the results to the rest of the populace, including public health officials who can translate the benefit to all of society. Publish in journal.
- To implement a Protect Our Children NOW! project in your community, please contact Jen Aliano, Project Manager, jen@grassrootshealth.org.

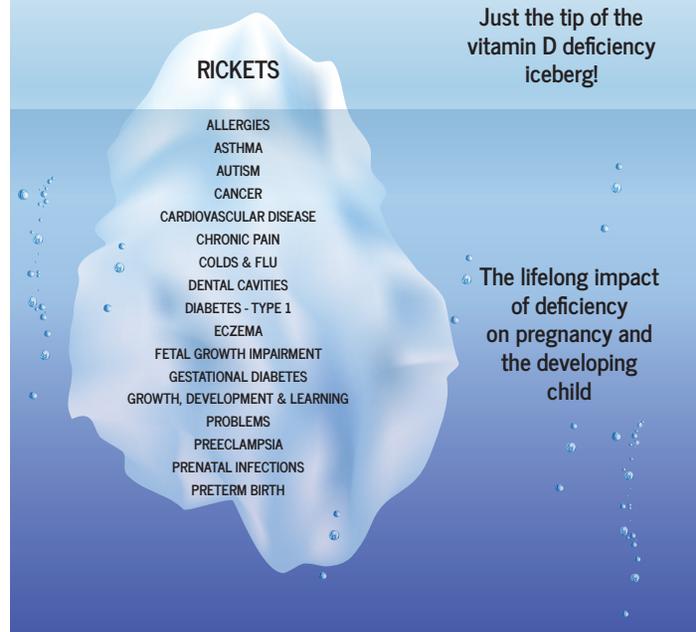
D*action is a public health project of GrassrootsHealth, a 501c3 non-profit organization. www.grassrootshealth.net

PROTECT OUR CHILDREN NOW!

Mission Statement of the *Protect our Children NOW!* project
To take demonstrated science and translate it to a larger population to both substantiate the results as well as to help pregnant women have safer pregnancies.

50% OF PRETERM BIRTHS COULD LIKELY BE PREVENTED WITH VITAMIN D

A prenatal program to enable women to take charge of directing their own health as well as their infants' to create healthy outcomes during this critical time. Women can track their vitamin D serum levels and make necessary adjustments; they can individually track and manage other chosen outcomes from weight to diet, pain and activity levels. The program allows the woman to see how her information fits with 1000's of others to provide additional support for healthy decision making.



IMMUNE & HEALTH PRIMING OCCUR DURING PREGNANCY, INFANCY & EARLY CHILDHOOD

Learn more at myhylion.com

D*action is a public health project of GrassrootsHealth, a 501c3 non-profit organization. www.grassrootshealth.net 760-579-8141 customerservice@grassrootshealth.org

A **D*action** Project of  **GrassrootsHealth**
Moving Research into Practice

Vitamin **D*action**

A Consortium of Scientists, Institutions and Individuals
Committed to Solving the Worldwide Vitamin D Deficiency Epidemic

80%+ OF PREGNANT WOMEN ARE VITAMIN D DEFICIENT

Vitamin D Pregnancy, Breastfeeding & Babies

Frequently Asked Questions

GrassrootsHealth
Moving Research into Practice

Vitamin D: Pregnancy, Breastfeeding & Babies Frequently Asked Questions

What is Vitamin D?

Vitamin D is a natural chemical compound that all the tissues in our bodies use to access the instructions in their genetic blueprints. Following those instructions is how our bodies respond to the stresses and strains of everyday life. Vitamin D is normally made in the skin on exposure to sunlight, but with modern indoor lifestyles and the widespread use of sunscreen, few of us make enough vitamin D to meet our body's needs, and we are therefore dependent upon supplements.

Why is Vitamin D important during pregnancy?

Vitamin D is important at every stage of life from womb to tomb. It's particularly important in pregnancy for two reasons. 1) It helps the mother-to-be do the best job she can of providing a healthy environment for the child in her womb. Having adequate vitamin D during pregnancy reduces the risk of premature birth, low birth weight babies, Cesarean sections, and various others of the many complications of pregnancy. And 2) equally important is the fact that vitamin D helps the unborn infant program its own body so as to reduce the risk of a host of disorders that may not appear until many years after birth.

How do I know if I'm making or getting enough vitamin D for me and my baby?

You can't tell without testing. There is a good blood test for vitamin D, measured as a compound called 25-hydroxy-vitamin D. Most scientists conclude that the woman's 25-hydroxy-vitamin D level during pregnancy should be at least 40–50 ng/mL.

I'm taking a prenatal vitamin; do I need to take more?

You probably do. The amount of vitamin D in a prenatal vitamin is not enough to produce a blood level of 40 ng/mL. The only way to tell for sure is to test.

How can I get more vitamin D so my levels improve?

The principal source of vitamin D is your own skin. We manufacture vitamin D only if we expose our skin to UVB radiation, which is less available in the early morning or late afternoon, during winter and at higher latitudes. Sunscreen blocks UVB radiation and prevents the manufacture of vitamin D. You can also get more vitamin D from food (limited), supplements and other UVB sources. There are many good quality vitamin D supplements available over the counter in drug, health food, and grocery stores. If you know what your blood level is, you can make a rough estimate of how much you might need to get to 40 ng/mL. 4000 IU/day was demonstrated to be safe in a randomized trial to help pregnant women achieve a serum level of approximately 40 ng/mL. (*Reference: Hollis, Wagner, Am J Obstet Gynecol. 2012 Nov 3.*)

What if my levels are not going up as expected?

It takes a while for the blood level to respond fully to a change in dose, so you really can't tell whether a blood level is going up as expected until about three months after increasing a dose. If, at that time, the blood level is not where it should be, you will need to increase the dose.

Is vitamin D safe?

In the doses we are recommending, yes, vitamin D is quite safe. It's helpful to keep in mind that, with summer sun exposure at mid-day and wearing a bathing suit, your body makes about 15,000 IU in just 15–20 minutes. Yet no one has ever gotten vitamin D poisoning from sun exposure. Moreover, there are no reported cases of vitamin D poisoning at daily oral doses below 30,000 IU.

Does it matter what form of vitamin D I take?

Vitamin D comes in two chemically distinct forms, vitamin D2 (ergocalciferol) and vitamin D3 (cholecalciferol). Vitamin D3 is the form that our bodies make naturally on exposure to the sun. Vitamin D2 is synthesized from plant product precursors. The available evidence indicates that vitamin D3 is substantially more potent than vitamin D2. This is the form we recommend.

Do I need to give my newborn vitamin D?

Yes. The American Academy of Pediatrics strongly recommends that all babies, whether breastfed or bottle fed, need supplemental vitamin D. Average doses will range from 400 to 800 IU/d during the first year of life.

Doesn't my breast milk have enough vitamin D for my baby?

That depends upon whether you yourself have enough vitamin D. In the Hollis/Wagner trial, it took 6500 IU/day for breast milk to have the minimum requirement of 400 IU/day of vitamin D for the baby. But it's important, if depending upon breast milk, that you yourself take vitamin D every day. Just a day or two off vitamin D, and your breast milk content of vitamin D drops to very low levels.

Should I keep taking vitamin D after pregnancy even if I'm not breastfeeding?

Everybody needs more vitamin D than current lifestyles allow us to generate in our own skins. So yes, essentially everybody needs more vitamin D to stay at a healthy 40-60 ng/mL serum level.

How much vitamin D should I give my children?

The average requirement is about 35 IU/pound of body weight (75 IU/kg) per day, from all sources. Vitamin D testing should be done at least annually with children as well as with adults to determine the need for supplements.