

Vitamin D status during pregnancy and type 1 diabetes risk in offspring

Posted on [December 30, 2011](#) by [Dr John Cannell](#)

“Dad, what will happen if I don’t take my insulin?”

“You’ll die son.”

That was my personal introduction to type-1 diabetes in children, teaching my then 14-year-old son that his life depended on giving himself insulin injections for the rest of his life. Although I did not know it in 1998, the incidence of type-1 diabetes is steadily increasing in our children, similar to the incidence of autism and asthma, about 3% a year for the last 40 years. Keep in mind that sales figures for sunblock and sunscreen have jumped in this time as well, from \$18 million in 1972 to \$500 million in 1996 to \$800 million in 2009. That is the curves for sunblock sales and the incidence of autism, asthma, and autoimmune disorders are parallel.

Last month, a group from Oslo University Hospital led by Dr. Ingvild Sorensen and colleagues, published a well conducted study showing that pregnant women with the highest vitamin D levels were twice as likely to have children that remained free of type-1 diabetes all the way up to 15 years of age at the end of the study.

[Sørensen IM, Joner G, Jennum PA, Eskild A, Torjesen PA, Stene LC. Maternal Serum Levels of 25-Hydroxy-Vitamin D During Pregnancy and Risk of Type 1 Diabetes in the Offspring. Diabetes. 2011 Nov 28.](#)

I feel likely that this finding is understated because Norway is a cod liver oil country and some of the pregnant women undoubtedly gulped down, in my opinion, toxic cod liver oil. Studies show Americans take in much more vitamin A than needed and that vitamin A blocks the vitamin D receptor. If so, cod liver oil would have masked her results, and they would be more robust than they were.

Although no one knows for sure, scientists think that when vitamin A is present in excess, instead of vitamin A binding to activated vitamin D and stimulating the receptor, two vitamin A molecules bind to each other and block the receptor. Remember, this is much more a problem when you are

vitamin D deficient.

No one knows the proper ratio of vitamin D/vitamin A. All we know is that Americans get way too much A and way too little D. What role vitamin A excess had in Dr. Sorensen's study I don't know, but I do know I wish I had learned about vitamin D in 1997, in time to try and prevent my son's autoimmune diabetes. However, he is doing very well, unlike many young people in his vitamin D deficient generation.



About Dr John Cannell

Dr. John Cannell is founder of the Vitamin D Council. He has written many peer-reviewed papers on vitamin D and speaks frequently across the United States on the subject. Dr. Cannell holds an M.D. and has served the medical field as a general practitioner, itinerant emergency physician, and psychiatrist.

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2 Responses to Vitamin D status during pregnancy and type 1 diabetes risk in offspring

texarc@gmail.com said on January 5, 2012 at 1:34 pm



It would sure be great if someone had the resources and information to actually graph the curves for those diseases mentioned in this article.

Brant Cebulla said on January 5, 2012 at 4:04 pm



Texarc, are you referring specifically to the incidence of autoimmune diseases, autism and asthma stacked up with sunscreen sales? There's probably a couple members here that would love to stack sunscreen sales with various disease incidents.

*These statements have not been evaluated by the Food and Drug Administration. The products and i
diagnose, treat, cure, or prevent any disease

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