

# Low Vitamin D in Children behind Current Explosion of new Diabetes Cases

By John Phillip, Natural News

Researchers publishing in *The Journal of Clinical Endocrinology and Metabolism* have found that children with low vitamin D levels, especially when overweight and obese, are at much higher risk for developing insulin resistance that progresses to full-blown diabetes by early adulthood. Based on cellular saturation of the vitamin/prohormone, children and adults require higher amounts of vitamin D as body weight increases. The vast majority of children are vitamin D deficient, a problem exacerbated further by additional fat stores. In addition to a healthy lifestyle including plenty of physical activity and proper diet, parents will want to ensure their children reach proper blood levels of this critical vitamin through exposure to the sun or adequate supplementation.

Past research studies have concluded that high rates of vitamin D insufficiency are found most prominently in overweight and obese populations and are linked to dramatically increased risk of heart disease and diabetes. These studies have not explained the mechanism by which excess fat stores and low vitamin D saturation result in chronic disease development and progression.

## *Low Vitamin D Levels Lead to Insulin Resistance and Diabetes in Overweight Children*

Dr. Micah Olson and his team from The University of Texas Southwestern Medical Center examined the association between vitamin D levels and dietary habits in 498 obese and non-obese children. The researchers checked for levels of abnormal glucose metabolism and blood pressure in the participants. Additionally, the scientists measured vitamin D levels, blood sugar levels, serum insulin and BMI. Study participants were also asked to provide dietary information including daily intake of soda, juice and milk, average daily fruit and vegetable intake, and whether or not they routinely skipped breakfast.

The study authors determined that 92% of the obese children tested had a vitamin D saturation (using the standard 25(OH)D test) below the 'adequate' level of 30 ng/mL. 50% of the participants were classified as 'deficient' with a level below 20 ng/mL. Dr. Olson commented: "Poor dietary habits such as skipping breakfast and increased soda and juice intake were associated with the lower vitamin D levels seen in obese children." The study concluded that obese children with low serum blood levels of vitamin D had higher degrees of insulin resistance that played a significant role in the development of Type II diabetes.

New cases of diabetes and prediabetes are now found in young adults and even children at an alarming and increasing rate. This research highlights the connection between low vitamin D levels, excess body weight and diabetes risk, and it underscores the importance of vitamin D blood testing for all children and adults. Alternative health practitioners recommend maintaining a vitamin D level between 50 and 70 ng/mL using the 25(OH)D blood test.

Sources for this article include:

<http://jcem.endojournals.org/conten...>