

Widespread Vitamin D Deficiency Poses Risk: study

By Andrew Stern, *news.yahoo.com*, *Reuters*, June 2, 2008

Many young children do not get enough vitamin D, an often invisible deficiency that can show up later as broken bones or a weakened immune system prone to disease, researchers said on Monday.

Two out of five U.S. children aged 8 months to 2 years who took part in a 380-patient study at Children's Hospital Boston had less-than-optimal blood levels of vitamin D.

The main risk factors were not drinking enough fortified milk, not taking vitamins and being overweight, said the report published in the *Archives of Pediatric and Adolescent Medicine*.

Lead researcher Catherine Gordon of Children's Hospital Boston said the 40 percent deficiency rate "is higher than expected in a country that has vitamin D fortified milk."

The study adds to a growing body of evidence that vitamin D, made when sunlight hits the skin and used to fortify many foods, is important for preventing chronic diseases. It is key to maintaining strong bones but has also been linked with a lower risk of cancer, artery disease and even kidney disease.

The lack of symptoms, at least initially, led Gordon to call it a "silent disease."

"What was striking to us was how many infants were vitamin D deficient but they were asymptomatic. The silence of what we saw worries me more," she said in a telephone interview.

The alternative to a blood test to discover a deficiency is to routinely give vitamins that can be consumed easily in the form of liquid drops, she said.

Only three children in the study showed signs of the soft and weakened bones characteristic of rickets, a dangerous condition. Another 13 had symptoms of demineralization, where lack of vitamin D causes minerals to leach out of the bones.

Canadian researchers recently reported that breast cancer patients with lower levels of vitamin D were far more likely to die or have their cancer spread than women with normal levels.

Children with vitamin D deficiency sometimes have bowed legs or easily fractured bones. They can also appear tired, or shaky, or suffer seizures in severe cases.

Overweight children were found to be prone to vitamin D deficiency, perhaps because the vitamin dissolves into fat, Gordon said. Diabetes is one disease linked to the deficiency.

Her findings complemented previous research she did on teenagers in 2004 that found a similar percentage with the deficiency. In that case, soda consumption and exposure to sunshine was a factor, and could be reversed during summer.

But sun exposure did not have an influence on younger children's risk, perhaps because they were often covered against exposure to the sun's rays.

Also at risk for a vitamin D deficiency were breast-fed infants, because "breast milk is the perfect food except that it lacks vitamin D," Gordon said.

However the study found 6 percent of the children fed fortified formula also were vitamin D deficient. The researchers said this raised questions about whether the fortification was sufficient.

(Reporting by Andrew Stern; Editing by Maggie Fox and Chris Wilson)

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