

Extra vitamin D in early childhood cuts adult diabetes risk

Vitamin D supplements in early childhood may ward off the development of type 1 diabetes in later life, reveals a research review published ahead of print in the *Archives of Disease in Childhood*.

Type 1 diabetes is an autoimmune disorder, in which insulin producing beta cells in the pancreas are destroyed by the body's own immune system, starting in early infancy. The disease is most common among people of European descent, with around 2 million Europeans and North Americans affected.

Its incidence is rising at roughly 3% a year, and it is estimated that new cases will have risen 40% between 2000 and 2010.

A trawl of published evidence on vitamin D supplementation in children produced five suitable studies, the pooled data from which were re-analysed.

The results showed that children given additional vitamin D were around 30% less likely to develop type 1 diabetes compared with those not given the supplement.

And the higher and the more regular the dose, the lower was the likelihood of developing the disease, the evidence suggested.

Levels of vitamin D, and sunlight, from which the body manufactures the vitamin, have been implicated in the risks of developing various autoimmune disorders, including multiple sclerosis and rheumatoid arthritis.

And there is a striking difference in the incidence of type 1 diabetes according to latitude and levels of sunlight exposure, with a child in Finland 400 times more likely to develop the disease than a child in Venezuela, say the authors.

Further evidence of vitamin D's role comes from the fact that pancreatic beta cells and immune cells carry receptors or docking bays for the active forms of the vitamin.

Source: British Medical Journal

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