

# Supplementing Vitamin B12 may reduce the risk of diabetes

Although only 2 micrograms are needed each day, Vitamin B12 now shows its great effect on type 2 diabetes.

Although only 2 micrograms are needed each day, Vitamin B12 now shows its great effect on type 2 diabetes.

Researchers from CSIR (CCMB), Molecular Biology and Cell Biology Center, together with scientists from Pune, Singapore and the UK have studied molecular pathways to understand how to supplement B12. to type 2 diabetes and its related genes.



"Previous studies from our lab have shown that B12 supplementation in a year can reduce homocysteine levels (a sign for cardiovascular diseases). Indians in general have low B12 levels. We may want to explore more because we know that B12 plays an important role in many body reactions and affects the risk for many diseases, including transfer disorders. heart and metabolism ". Giriraj R. Chandak, scientist at CSIR-CCMB said.

This study was conducted on 108 children from Pune Nutrition Research (PMNS). They were randomly divided into four groups. One group was not given any supplements while the second group received B12 (10 micrograms / day), the third group added B12 with folic acid (affecting homocysteine levels) and the fourth group of supplements. Folic acid supplement.

After one year, their blood samples were collected and the DNA gene was isolated and studied the differences before and after supplementation.

"We found that B12 is a crucial factor in the body's carbon metabolism, helping to determine the level of different proteins by regulating their gene methylation. Expression of different genes "Related to diabetes is found less by methylation. We found the top four genes that are linked to diabetes are less expressed," he added.

Biological studies have helped us determine the location of other cell cultures and cell cultures that have been done to confirm this result. Other studies are underway in the laboratory to understand more about the effects of B12 on molecular networks and signaling pathways of genes related to type 2 diabetes ", Dr. Smeeta Shrestha, co. Industry and co-author of CCMB said.

This study clearly provides evidence that micronutrients such as Vitamin B12 can profoundly affect the risk of common diseases like diabetes. Dr. Chandak said: B12 can be taken from foods like meat, fish, eggs, dairy products.

You finished reading the article "**Supplementing Vitamin B12 may reduce the risk of diabetes**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.