

Dietary Magnesium May Lower Risk of Heart Disease and Stroke



New findings published in BMC Medicine suggest that a diet rich in magnesium may help reduce the risk of diseases including coronary heart disease, stroke and type-2 diabetes. The results reinforce the notion that increased consumption of magnesium rich foods could be beneficial for overall health, according to researchers from Zhejiang University and Zhengzhou University in China.

See Also: Healthy Diet, Exercise Beneficial for Heart Failure Patients

The research team found that people in the highest category of dietary magnesium consumption had a 10 percent lower risk of coronary heart disease, 12 percent lower risk of stroke and a 26 percent lower risk of type-2 diabetes compared to those in the lowest category. They also found that an extra 100mg per day of dietary magnesium could also decrease risk of stroke by 7 percent and type-2 diabetes by 19 percent.

The team performed a meta-analysis of data from 40 epidemiological studies, covering a period from 1999 to 2016, to investigate associations between dietary magnesium and various diseases. This analysis of the evidence on dietary magnesium and health outcomes is the largest to date, involving data from more than one million people across nine countries.

Magnesium is vital for normal biological functions including glucose metabolism, protein production and synthesis of nucleic acids such as DNA. Diet is the main source of magnesium as the element can be found in foods such as whole grains, spices, beans, nuts, cocoa and green leafy vegetables.

"Low levels of magnesium in the body have been associated with a range of diseases but no conclusive evidence has been put forward on the link between dietary magnesium and health risks," says lead author, Dr. Fudi Wang, from the School of Public Health at Zhejiang University. "Our meta-analysis provides the most up-to-date evidence supporting a link between the role of magnesium in food and reducing the risk of disease."

While health guidelines recommend a magnesium intake of around 300mg per day for men and 270mg per day for women, magnesium deficiency still persists, affecting about 2.5–15 percent of the general population. "Our findings will be important for informing the public and policy makers on dietary guidelines to reduce magnesium deficiency related health risks," Dr. Wang points out.

Since this meta-analysis involves observational studies, the researchers note that it is not possible to rule out the effect of other biological or lifestyle factors influencing the results. It is also not possible to determine if magnesium is directly responsible for reducing disease risk. However, the large size of this analysis provides robust data that were stable when adjusting for gender and study location, the authors say.

Source: BioMed Central

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