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About 10-15 percent of the U.S. population (20 million people) has gallstones, and 1 million new cases are diagnosed yearly according to the U.S. National Institutes of Health. New research indicates that higher magnesium intake may decrease the risk of gallstone disease.

LONG-TERM MAGNESIUM INTAKE REDUCES THE RISK OF GALLSTONE DISEASE

Magnesium deficiency has been associated with alterations in blood lipids (cholesterol) and insulin hyper-secretion, which can lead to formation of gallstones. In addition, gallstone disease is an important risk factor for gallbladder cancer. A study published in the *American Journal of Gastroenterology* analyzed the effect of long-term consumption of magnesium on the risk of gallstone disease.

Researchers studied magnesium consumption and risk of gallstone disease in a group of 42,705 U.S. men from 1986 to 2002. Magnesium intake was assessed using a food frequency questionnaire, and newly diagnosed gallstone disease was determined twice a year.

During 13 years of follow-up, 2,195 cases of gallstones were documented. The average intake of magnesium was calculated to 352.8 milligrams per day for the study population. Men with the highest average levels of magnesium intake (454 mg/d) were 28 per cent less likely to develop gallstones, compared to men with the lowest average intake (262 mg/d).

It is not yet known whether higher magnesium intake protects against initial formation of gallbladder stones, or whether it simply decreases the likelihood of the already existing gallstones becoming symptomatic. However, since surveys show that most adults do not meet the RDA for magnesium (320 mg per day for women and 420 mg per day for men), improving the diet and supplementing magnesium may prove to be an effective means of reducing the progression of gallstone disease.

Tsai CJ et al. Long-term effect of magnesium consumption on the risk of symptomatic gallstone disease among men. Am J Gastroenterol 2008 Feb;103(2):375-82.