

Nutrition News You Can Use: Magnesium, type 2 diabetes and peanuts

Dr. Andrew Craig, APC Health Consultant, London

The role of magnesium (Mg) obtained from everyday food sources like peanut products in helping to reduce the risk of developing type 2 diabetes is becoming clearer thanks to research around the world. Metabolic disorders like insulin resistance and the metabolic syndrome leading to type 2 diabetes are growing health issues facing both “developed” and “developing” countries. Magnesium is one of the essential minerals many people eating a typical “Western” diet do not get enough of. The good news is that common foods like peanuts are good dietary sources of magnesium. Here’s what the science says.

In 2007, researchers at Stockholm’s Karolinska Institute reviewed the evidence from observational studies over the previous ten years and reported that for every 100mg increase in Mg intake, the risk of developing type 2 diabetes apparently decreased by 15%. (1) They concluded “increased consumption of magnesium-rich foods such as whole grains, beans, nuts and green leafy vegetables seems prudent” in order to help reduce disease risk.

Since then, more studies have emphasised the role of adequate intakes of magnesium rich foods in diabetes risk reduction and disease prevention. Most recently a study from the University of Giessen in Germany using Mg supplements found that sensitivity to insulin improved and thus reduced diabetes risks in overweight men and women who were insulin-resistant (metabolic syndrome) but had not yet developed diabetes.(2) This is another key part of the puzzle about diabetes prevention through diet in which Mg rich, nutrient-dense foods like peanuts can play a role.

Crucially, the German researchers did not recommend Mg supplements for people at risk, but emphasised instead “the need of sufficient magnesium intake by food” in order to get the cumulative benefits of a healthy diet. This has a very practical implication for improving our everyday eating habits. A serving of peanuts roasted without oil (about 30g) according to USDA nutrient tables provides 53mg of magnesium. However they are eaten, this is a tasty and convenient way for a middle age man to get 15% of his daily requirement of this essential mineral and reduce his risk of developing diabetes at the same time.

1. Larsson SC, Wolk A (2007). Magnesium intake and risk of type 2 diabetes: a meta-analysis *Journal of Internal Medicine* 262: 208-214
2. Mooren FC et al. (2011). Oral magnesium supplementation reduces insulin resistance in non-diabetic subjects -a double-blind, placebo controlled, randomized trial. *Diabetes, Obesity and Metabolism* 13(3): 281-284

