

Consuming a diet based on glycemic index may not improve cardiovascular risk factors

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The glycemic index (GI) is a number supposedly

corresponding to a carbohydrate-containing food's effect on blood glucose levels. A food with a low GI value (dried apricots, steel cut oats) has less impact on blood sugar than a food with a high GI value (bananas and instant oatmeal). There has been some research into beneficial health effects of consuming a diet with a larger amount of foods with a low GI value, but results have been mixed, especially in the context of an otherwise healthy diet. A [new study](#) ^[1] published in *JAMA* found that in overweight and obese participants, consuming a diet of low GI foods did not result in improvements in insulin sensitivity, lipid levels or systolic blood pressure.

Researchers from Brigham and Women's Hospital and Harvard Medical School led by Dr. Frank M. Sacks studied 163 overweight adults with prehypertension or stage 1 hypertension. Study participants received at least two of four complete diets and consumed each diet for five weeks. The four diets were a high GI, high-carbohydrate diet, a low-GI, high-carbohydrate diet, a high-GI, low-carbohydrate diet and a low-GI, low-carbohydrate diet. Each diet was rich in fruits, vegetables and low-fat dairy and low in saturated and total fat, based on the Dietary Approaches to Stop Hypertension (DASH) diet aimed at lowering blood pressure. Comparing the high-carbohydrate diets, the low-GI diet decreased insulin sensitivity, increased LDL (bad) cholesterol and did not affect HDL (good) cholesterol, triglycerides or blood pressure compared to the high-GI diet. Comparing the low-carbohydrate diets, there were no differences in effects of the low-GI versus high-GI diets except that the low-GI diet decreased triglycerides. And overall, there were no differences in effects seen when comparing the low-GI, low-carbohydrate diet with the high-GI, high-carbohydrate diet except in the case of triglycerides.

The authors suggest that future research should focus on effects of GI in a typical US diet as well as in those with type 2 diabetes or for weight loss.

These results were unexpected among those nutritionists and similarly-oriented researchers who had been convinced that GI was an important criterion regarding the healthfulness, or lack thereof, of foods especially for diabetics and patients with other insulin-related issues. To which Dr. Robert H. Eckel of the University of Colorado says, The unexpected findings of the study by Sacks et al

suggest that the concept of glycemic index is less important than previously thought, especially in the context of an overall healthy diet, as tested in this study. These findings should therefore direct attention back to the importance of maintaining an overall heart-healthy lifestyle, including diet pattern.

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[1] <http://jama.jamanetwork.com/article.aspx?articleid=2040224>