

New study shows vegan diet improves diabetes markers in overweight adults

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A plant-based diet improves beta-cell function and insulin sensitivity in overweight adults with no history of diabetes, according to a new study published in *Nutrients* by researchers from the Physicians Committee for Responsible Medicine.

Measuring the function of beta cells, which store and release insulin, can help assess future type 2 [diabetes](#) risk.

The study randomly assigned participants—who were overweight and had no history of diabetes—to an intervention or control group in a 1:1 ratio. For 16 weeks, participants in the [intervention group](#) followed a low-fat vegan diet based on fruits, vegetables, whole grains, and legumes with no calorie limit. The control group made no diet changes. Neither group changed exercise or medication routines.

Based on mathematical modeling, the researchers determined that those on a [plant-based diet](#) increased meal-stimulated insulin secretion and beta-cell glucose sensitivity, compared to those in the [control group](#). The plant-based diet group also experienced a decrease in [blood sugar levels](#) both while fasting and during meal tests.

"The study has important implications for diabetes prevention," says lead study author Hana Kahleova, M.D., Ph.D. "Type 2 diabetes affects approximately 30 million Americans, with 84 million more suffering from prediabetes."

Physicians Committee researchers posit that because the intervention group experienced weight loss, including loss of body fat, their fasting insulin resistance decreased (i.e. improved), and their beta-cell function improved as a result.

"If nothing changes, our next generation—the first expected to live shorter lives than their parents—is in trouble. A third of young Americans are projected to develop diabetes in their lifetimes," says Dr. Kahleova. "Fortunately, this study adds to the growing evidence that food really is medicine and that eating a healthful plant-based diet can go a long way in preventing diabetes."

Previous studies have shown that plant-based diets not only have the power to prevent and reverse type 2 diabetes, but that they also lead to weight loss, improved cholesterol levels, [lower blood pressure](#), and less heart disease.

More information: Hana Kahleova et al, A Plant-Based Dietary Intervention Improves Beta-Cell Function and Insulin Resistance in Overweight Adults: A 16-Week Randomized Clinical Trial, *Nutrients* (2018). [DOI: 10.3390/nu10020189](https://doi.org/10.3390/nu10020189)

Provided by Physicians Committee for Responsible Medicine

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