Medical Xpress

Study indicates mangos may lower blood sugar in obese adults

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Research published in the journal *Nutrition and Metabolic Insights* found that regular consumption of mango by obese adults may lower blood sugar levels and does not negatively impact body weight. These are important findings considering that approximately 34 percent of U.S. adults have been classified as obese and given the health concerns related to obesity, such as type 2 diabetes (T2DM) and metabolic syndrome.

"We are excited about these promising findings for mangos, which contain many bioactive compounds, including mangiferin, an antioxidant that may contribute to the beneficial effects of mango on blood glucose. In addition, mangos contain fiber, which can help lower glucose absorption into the blood stream," said Edralin Lucas, Ph.D., associate professor of nutritional sciences at Oklahoma State University, College of Human Sciences and lead study author. "Our results indicate that daily consumption of 10 grams of freeze-dried mango, which is equivalent to about one-half of a fresh mango (about 100 grams), may help lower blood sugar in obese individuals."

This pilot study was designed to investigate the effects of mango consumption on anthropometric measurements, biochemical parameters, and body composition in obese adults. Participants completing the 12-week study included 20 adults (11 males and 9 females) ages 20 to 50 years old with a Body Mass Index (BMI) of 30 to 45 kg/m2. The study subjects were asked to maintain their usual diet, exercise habits, and regimen of regularly prescribed medications.

Each day during the study period, participants consumed 10 grams of freeze-dried mango, and dietary intake was monitored via 3-day food records assessed at baseline and after 6- and 12- weeks of mango supplementation. Anthropometric measurements (height, weight, and circumference of waist and hip) were measured at baseline and after 6- and 12- weeks of mango supplementation. Body composition and blood analyses of fasting blood triglyceride, HDL-cholesterol, glucose, hemoglobin A1c, and plasma insulin concentration were evaluated at baseline and at the end of 12 weeks of mango supplementation.

The researchers found that after 12 weeks, participants had reduced blood glucose (-4.41 mg/dL, P