EATING MANGOS DAILY MAY HELP SOME OVERWEIGHT/OBESE PEOPLE BETTER MANAGE CARDIOMETABOLIC HEALTH AND GUT MICROBIOME DIVERSITY

Research shows some overweight/obese adults who eat mangos every day may have improved blood pressure control, blood sugar control and gut microbiota.

WHY IS THIS TOPIC IMPORTANT?

It has been established that overweight and obesity can have significant and negative effects on maintaining normal blood pressure and blood sugar, as well as a healthy microbial gut environment.

The nutritive and bioactive compounds in mangos have been shown to exert beneficial impacts on health, especially with fat and blood sugar metabolism.

In general, most evidence on the health effects of bioactive components of mango has focused on extracts from leaves, seeds, peels and bark; more research is needed to explore eating mango flesh/pulp and health outcomes.

STUDY APPROACH

The study included 27 total overweight/obese adults: 8 males and 19 females. Participants were instructed by a registered dietitian to eat 2 cups/day of frozen mango for 8 weeks while maintaining their normal diet, calorie intake and lifestyle.

All participants reported eating mangos daily and consumed between 78-116% of the daily recommendation. Throughout the study, participants visited the study center five times, during which various body measurements and blood draws were taken and analyzed.

STUDY FINDINGS

AFTER EATING MANGOS EVERY DAY FOR 8 WEEKS:

Reduced systolic blood pressure
(-4 +/- 6 mmHg (p=0.011)

Reduced after-meal blood sugar
(Oral Glucose Tolerance Test)
(-0.58 +/- 1.03 mmol/L
p=-0.0008

Increased fasting insulin
(males only)
37.3 +/- 42.78 p=0.02

Increased microbial diversity

No significant changes in body weight, waist circumference or plasma lipid levels were noted after the 8-week intervention.

RESEARCH SPONSORED BY THE NATIONAL MANGO BOARD

Eating Mangos Daily May Help Some Overweight/Obese People Better Manage Cardiometabolic Health and Gut Microbiome Diversity

MORE ABOUT THE STUDY

Adults with overweight or obesity were recruited and given 2 cups of frozen mango per day for 8 weeks, following an initial 2-week washout period. Inclusion criteria included an age range of 18–55 years old; body mass index between 25 – 40 kg/m$^{2;}$ a waist circumference of >80 cm for females and >94 cm for men; and insulin >42pmol/L or triglycerides >1.35mmol/L. Exclusion criteria included the use of nicotine; taking antibiotics or dietary supplements that are similar to mango nutrition; diagnosis of a new medical condition within 3 months of the study; consumption of >2 alcoholic beverages per day; recent weight changes; currently consuming berries, cocoa or mango regularly; mango allergies; and following a special diet as vegetarian or gluten-free.

This study was relatively small and short-term; in the future, larger, longer-term, randomized, placebo-controlled studies would help to build on the body of evidence on the health benefits of mango consumption.

This study was not generalizable to other ethnicities or people with chronic diseases other than people with overweight or obesity.

FOR ABOUT 70 CALORIES, A ¾ CUP SERVING OF MANGO PROVIDES:

50% of daily vitamin C needs:
Body's natural antioxidant

7% of daily fiber needs:
Supports satiety and blood sugar control

4% of daily potassium needs:
Supports blood pressure control

CULINARY CORNER

BLEND IT

Incorporate mango into a daily smoothie paired with yogurt and ground flaxseeds

TOP IT

Add diced mango to a salad or salsa

SNACK IT

Mango alone makes for a refreshing snack. Pair it with a protein like nuts or cheese for a well-rounded snack.

SLICE IT

Mango makes a great first food for babies after 6 months of age. Slice it for an easy baby led weaning option.

Reference: Keathley, J, Kearney, M, Garneau, V, et al. Changes in systolic blood pressure, postprandial glucose, and gut microbial composition following mango consumption in individuals with overweight and obesity. Applied Physiol. Nutr. Metab. 47: 565–574 (2022) dx.doi.org/10.1139/apnm-2021-0637.