



MANGO & CARDIOVASCULAR HEALTH:

Circulation, Vascular Function & Nutrient Delivery

Emerging evidence suggests fresh mango may support aspects of cardiovascular health, providing a foundation for research into healthy circulation and nutrient delivery.

Fresh mango contains fiber, vitamin C, folate and bioactive compounds, including polyphenols and carotenoids. The National Mango Board (NMB) Health & Nutrition Research program is exploring how mango may influence lipid metabolism, vascular function, blood pressure, inflammation and oxidative stress.

WHAT CURRENT RESEARCH SHOWS

The current evidence base examining mango and cardiovascular health includes interventions ranging from 2 to 12 weeks. Studies have primarily included adults with overweight/obesity, with emerging research extending to postmenopausal women and those with prediabetes.

*While further research is necessary for broader applicability, these findings contribute to the growing evidence linking mango consumption to cardiovascular health.

LIPIDS & CHOLESTEROL

Studies suggest fresh mango may influence aspects of lipid metabolism

Short-term studies have reported **reductions in total and LDL cholesterol** following mango consumption, including a 2-week study in postmenopausal women with overweight/obesity.¹

Lipid findings are not yet consistent across studies, with less consistent effects observed for triglycerides and HDL cholesterol.^{2,3}

VASCULAR FUNCTION & BLOOD PRESSURE

Emerging evidence suggests potential effects on vascular health

Mango consumption has been associated with **lower systolic blood pressure** in some study populations, with findings suggesting possible differences by gender and weight status. In postmenopausal women with overweight/obesity, one study found favorable changes in select post-meal blood pressure measures.^{1,2}

Research co-funded by the National Mango Board and the Hass Avocado Board demonstrated **improved flow-mediated dilation (FMD)**, suggesting that pairing mango with other nutrient-dense whole foods, such as avocado, may support vascular function through their complementary nutrients and bioactive compounds.⁵

INFLAMMATION & OXIDATIVE STRESS

Studies have reported favorable changes in select markers of inflammation, antioxidant capacity and oxidative stress

These pathways represent promising areas for further investigation:

LIPIDS

↓ Total + LDL cholesterol in select studies

Mixed TC + HDL findings

VASCULAR FUNCTION

↓ Systolic BP in select populations

Emerging FMD evidence

OXIDATIVE STRESS

Favorable changes in select inflammatory markers

↑ Antioxidant capacity in select studies

FROM VASCULAR FUNCTION TO CIRCULATION & DELIVERY



NMB's Research Roadmap builds on these findings to explore how cardiovascular function may relate to circulation, nutrient delivery and ultimately steady/sustained energy:

Vascular function

Blood flow + vessel function



Cardiometabolic regulation

Lipids + blood pressure + oxidative stress



Circulation & delivery

Oxygen + nutrients



Potential benefit of mango

Steady / sustained energy

AREAS OF INTEREST FOR FUTURE RESEARCH



CONFIRM: Confirm emerging effects of fresh mango on LDL cholesterol and other lipid outcomes using controlled, appropriately powered studies.



STRENGTHEN: Build the evidence for blood pressure and vascular function, including studies in adults with impaired vascular health.



INVESTIGATE: Explore oxidative stress, inflammation and related mechanisms that may help explain mango's potential cardiovascular effects.



EXPAND: Extend research to populations at greater cardiometabolic risk, including adults with elevated LDL, impaired vascular function or multiple risk factors.



CONNECT: Integrate glucose and insulin measures to understand how cardiovascular and metabolic pathways may work together to support circulation, nutrient delivery and sustained energy.

THE RESEARCH OPPORTUNITY

How may fresh mango influence cardiovascular function and could these effects contribute to efficient circulation, nutrient delivery and steady, sustained energy?

REFERENCES:

1. Holt RR, Ho E, Li X, et al. Short-Term Cardiometabolic Response to Mango Intake in Postmenopausal Women. *J Am Nutr Assoc.* 2025;44(7):627-635. doi:10.1080/27697061.2025.2478937
2. Keathley J, Kearney M, Carneau V, et al. Changes in systolic blood pressure, postprandial glucose, and gut microbial composition following mango consumption in individuals with overweight and obesity. *Appl Physiol Nutr Metab.* 2022;47(5):565-574. doi:10.1139/apnm-2021-0637
3. Rosas M Jr, Pinneo S, O'Mealy C, et al. Effects of fresh mango consumption on cardiometabolic risk factors in overweight and obese adults. *Nutr Metab Cardiovasc Dis.* 2022;32(2):494-503. doi:10.1016/j.numecd.2021.11.001
4. Castro RJ, Pedroza K, Hong MY. The effects of mango consumption on vascular health and immune function. *Metabol Open.* 2023;20:100260. Published 2023 Oct 13. doi:10.1016/j.metop.2023.100260
5. Preiss C, Tunio S, Hirimuthugoda LK, et al. Effects of Increasing Total Fruit Intake With Avocado and Mango on Endothelial Function and Cardiometabolic Risk Factors in Adults With Prediabetes. *J Am Heart Assoc.* 2026;15(4):e040933. doi:10.1161/JAHA.124.040933
6. Burton-Freeman BM, Sandhu AK, Edirisinghe I. Health benefits of the mango fruit—recent review of literature. *Food Funct.* 2025;16(22):8680-8694. Published 2025 Nov 10. doi:10.1039/d5fo00902b



@MangoBoard



@MangoBoard



@officialmangoboard



@MangoBoard



@NationalMangoBoard