

Garcinia mangostana L Extract as anti-hypertension in High Cardiovascular Framingham Score Patients with Hypertension

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Abstract

Background: Hypertension is one of the risk factors of cardiovascular diseases. Oxidative stress and inflammatory process are the major pathology not only in hypertension, but also atherosclerosis, which underlies most cardiovascular diseases. *Garcinia mangostana* Linn has been known for years for its health benefits.

Objective: This study was aimed to prove the effect of *G. mangostana* as a potent anti-hypertension in high-risk cardiovascular patients with hypertension.

Method: A randomized, Single-blind, placebo-controlled clinical trial was conducted in 90 adults with high-risk cardiovascular score which were determined based on Framingham criteria, age 50–70 y. The patients were divided into two group. One group was given 2520 mg/day *Garcinia mangostana* Linn extracts in 3 divided doses for 90 days and the other group given placebo. Parameters were systolic blood pressure, LDL, and total cholesterol measured at baseline and after 90 days of treatment. We also evaluated the levels of NO, IL-1, IL-6, hs-CRP, and MDA.

Results: After 90 days of administration of *Garcinia mangostana* extract, we found that there was a significant decrease in systolic blood pressure compared to placebo ($p < 0.05$). We observed a significant decrease of cholesterol total, LDL ($p < 0.05$) between treatment and control groups Similar to that, plasma IL-6, IL-1, MDA, and hs-CRP concentration was significantly decrease compared to placebo ($p < 0.05$). There was no difference in HDL, and TG.

Conclusion: *Garcinia mangostana* Linn extract is a potent adjuvant therapy for hypertension in patients with high-risk cardiovascular Framingham score.

Biography:

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Publication of speakers:

1. Mortality Prevention in Pregnancy With Pulmonary Arterial Hypertension, DOI:10.21776/ub.hsj.2020.001.04.07
2. LBPS 01–05 GANODERMA LUCIDUM POLYSACCHARIDE PEPTIDES AS ANTIOXIDANT, ANTI-INFLAMMATION, ANTI-HYPERTENSION AND ANTI-LIPID IN HIGH-RISK PATIENTS OF ATHEROSCLEROSIS, September 2016 - Volume 34 - Issue - p e175