

Noni juice may lower total cholesterol and triglycerides in adult smokers

Noni, an indigenous plant of the South Pacific used in Polynesian folk medicine for over 2,000 years, may lower total cholesterol and triglycerides, according to a study reported today at the American Heart Association's 46th Annual Conference on Cardiovascular Disease Epidemiology and Prevention.

After one month's use, noni juice significantly reduced cholesterol and triglycerides in current smokers with elevated cholesterol levels.

"We chose smokers because they tend to have higher total cholesterol levels and are at higher risk for heart disease than nonsmokers," said Mian-Ying Wang, M.D., M.S., lead author of the study and assistant research professor at the University of Illinois College of Medicine in Rockford.

Previous studies found that noni juice — made from fruit of *Morinda Citrifolia*, (noni tree) — had strong antioxidant, anti-coagulation, anti-inflammatory and anti-cancer properties.

Researchers analyzed total serum cholesterol and triglyceride levels of 132 current smokers with cholesterol levels higher than 190 milligrams per deciliter (mg/dL). The current smokers were 20 to 60 years old and were not on cholesterol-lowering medication during the study.

Researchers randomly assigned 13 men and 13 women to drink a juice (placebo), similar to noni in look and taste, and 57 women and 49 men to drink real noni juice that was branded Tahitian Noni® juice. No one in the study knew which juice that they were drinking.

"The company formulates its noni juice with blueberry and grape juices to make it more palatable," Wang said. "Otherwise, due to noni's pungent odor and taste, it would be difficult to drink."

After drinking one to four ounces of the noni juice daily, noni drinkers' average total cholesterol dropped from 235.2 mg/dL to 190.2 mg/dL, and average triglyceride levels declined from 242.5 mg/dL to 193.5 mg/dL. The placebo group's average total cholesterol and triglyceride levels did not significantly change.

The total cholesterol levels in the placebo group rose slightly, though insignificantly, from an average 239.2 mg/dL at the start of the study to 246.6 mg/dL one month later when the study ended. Triglyceride levels in the placebo group also rose slightly, though insignificantly, from an average of 200.9 mg/dL to 210.0 mg/dL.

When breaking down participants' initial total cholesterol levels into "out of range" (191 to 220 mg/dL), "high level" (221 to 299 mg/dL), and "very high level" (at or higher than 300 mg/dL), the researchers reported that total cholesterol decreased:

- 7 percent (14 mg/dL) among "out-of-range" noni drinkers
- 18 percent (45 mg/dL) among "high level" noni drinkers
- 22 percent (74 mg/dL) among "very high level" noni drinkers

They found similar drops among triglyceride levels in the noni group.

The study, a double-blind, placebo controlled, randomized clinical trial with men and women, was approved by the University of Illinois College (UIC) Institutional Review Board.

According to Wang, the results are a strong indicator that noni juice may lower total cholesterol and triglyceride levels in current smokers. However, the study had limited participants, so the power of the study was small.

“In a future study, a large clinical trial in the general population should be conducted to confirm the long-term effect on total cholesterol,” Wang said.

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