

High fiber diet associated with reduced CV risk in hypertension, type 2 diabetes patients

3 October 2019



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Patients with hypertension and Type 2 diabetes who consume a high fiber diet had improvement in their blood pressure, cholesterol and fasting glucose, according to a study presented at the [American College of Cardiology \(ACC\) Middle East Conference 2019 together with the 10th Emirates Cardiac Society Congress](#). The conference is Oct. 3-5 in Dubai, United Arab Emirates.

Hypertension and diabetes are major risk factors for future cardiovascular disease. Diet also plays a role in the severity of cardiovascular disease. Researchers from Care Well Heart and Super Specialty Hospital in Amritsar, India, investigated the relation between a high fiber [diet](#) and its impact on cardiovascular disease risk factors.

According to guidelines from the National Institute of Nutrition and the Indian Council of Medical Research, the recommended dietary allowance (RDA) for [dietary fiber](#) is 40gm/2000kcal. Patients in this study had Type 2 diabetes and a calorie

intake of 1,200-1,500kcal, causing their RDA for fiber to be 24-30gm. The fiber intake of these patients was increased up to 20 to 25 percent from the recommended allowances for them to be consuming a high fiber diet.

The study tracked 200 participants' fiber intake for six months and included check-ups at the start of the study, three months and six months. Participants were provided diet prescriptions, which included detailed lists of different food groups with portion sizes in regional languages. Qualified dietitians provided the information through regular counseling sessions and used audio-visual aids to ensure understanding among study participants.

The researchers tracked participants' fiber intake several ways, including having patients send photos of their meals on WhatsApp—which not only helped in knowing their fiber intake but also helped approximate portion sizes—and telephone calls three times a week during which detailed dietary recall was taken.

"Comprehensive evaluation of etiological effects of dietary factors on cardiometabolic outcomes, their quantitative effects and corresponding optimal intakes are well-established," said Rohit Kapoor, MD, medical director of Care Well Heart and Super Specialty Hospital and lead author of the study. "This study helps us determine three important things for this patient population. Firstly, a high fiber diet is important in cases of diabetes and hypertension to prevent future cardiovascular disease. Secondly, medical nutrition therapy and regular counseling sessions also hold great importance in treating and prevention of diabetes and hypertension. Thirdly, this type of diet in combination with medical treatment can improve dyslipidemia, pulse wave velocity, waist-to-hip ratio and hypertension."

Participants on a high fiber diet experienced significant improvement in several cardiovascular risk factors, including a 9 percent reduction in serum cholesterol, 23 percent reduction in triglycerides, 15 percent reduction of systolic [blood pressure](#) and a 28 percent reduction of fasting glucose. The researchers found a [high fiber diet](#) is inversely related with cardiovascular risk factors and plays a protective role against cardiovascular disease.

Provided by American College of Cardiology

APA citation: High fiber diet associated with reduced CV risk in hypertension, type 2 diabetes patients (2019, October 3) retrieved 13 November 2019 from <https://medicalxpress.com/news/2019-10-high-fiber-diet-cv-hypertension.html>

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