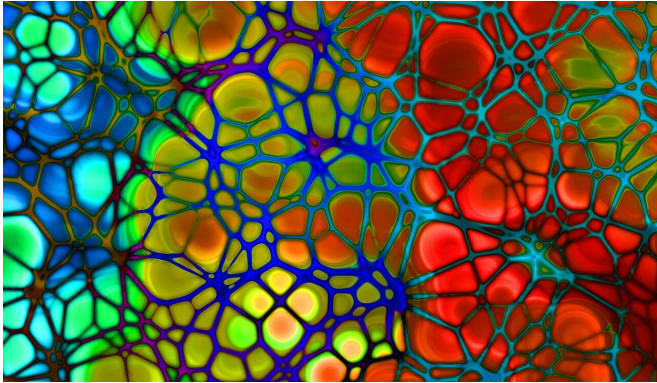


# Prediabetes does not increase the cardiac risk of patients with CAD

20 May 2019



Credit: CC0 Public Domain

Prediabetes, the precursor stage before type 2 diabetes, does not increase the cardiac risk of patients with coronary artery disease (CAD). An extensive study led by the University of Oulu, Finland, examined the effects of prediabetes on the cardiac risk of patients with CAD by monitoring the health of approximately 2,000 patients with CAD for six years. It is the first extensive follow-up study on this topic.

"We were able to demonstrate for the first time that prediabetes does not increase the risk of cardiac death and adverse cardiac events among patients with coronary artery disease," says Antti Kiviniemi, Postdoctoral Researcher, Research Unit of Internal Medicine, University of Oulu.

Earlier studies that focused on the normal population have found that myocardial infarctions and cardiac deaths are more common among people with prediabetes. Studies on the significance of prediabetes for the prognosis of CAD are limited, however.

"The results are promising and encourage both good care of coronary artery disease and

prevention of diabetes," says Kiviniemi.

## Treatment of CAD and prevention of prediabetes important

Good care of CAD and prevention of type 2 diabetes are especially important among patients with CAD who already exhibit signs of prediabetes, meaning that they have an increased risk of type 2 diabetes. Development of diabetes nearly triples the risk of sudden cardiac death in coronary artery disease.

Many Finns are not aware that they have diabetes. For example, approximately one third of patients with CAD have prediabetes and one third have developed type 2 diabetes. It is estimated that one in five Finns have prediabetes.

Prediabetes develops in the body over years and decades. Sufficient exercise, [healthy food](#), weigh management and no smoking are the cornerstones of prevention of prediabetes and type 2 diabetes.

A total of 1,946 patients with CAD participated in the study called ARTEMIS. 834 had type 2 [diabetes](#), 417 prediabetes and 695 had normal glucose homeostasis, defined by a glucose tolerance test. Before the study, the participants underwent [coronary angiography](#) to determine [coronary artery disease](#) and its treatment. Coronary artery disease was treated with [balloon angioplasty](#) or cardiac bypass surgery and medication.

The study was published in the *Diabetes Care* journal.

**More information:** Antti M. Kiviniemi et al. Prediabetes and Risk for Cardiac Death Among Patients With Coronary Artery Disease: The ARTEMIS Study, *Diabetes Care* (2019). [DOI: 10.2337/dc18-2549](#)

Provided by University of Oulu

APA citation: Prediabetes does not increase the cardiac risk of patients with CAD (2019, May 20) retrieved 15 September 2019 from <https://medicalxpress.com/news/2019-05-prediabetes-cardiac-patients-cad.html>

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*