

## Carotene-Rich Diet Reduces Risk of CVD



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A recent study conducted by researchers of the IDIBAPS Translational research in diabetes, lipids and obesity group and the University Oberta de Catalunya (UOC) shows that a higher level of carotenes in the bloodstream is associated with a reduced incidence of atherosclerosis in the arteries and a lower risk of cardiovascular diseases. The findings are published in *Clinical Nutrition*.

The research was led by Gemma Chiva Blanch, affiliated with the IDIBAPS Translational Research in Diabetes, Lipids, and Obesity group, headed by Josep Vidal. Chiva Blanch is also associated with the CIBEROBN research center and is an associate professor and researcher at the Faculty of Health Sciences of the UOC.

Atherosclerosis, characterised by the accumulation of LDL on the inner walls of blood vessels, poses a significant risk to heart health. This buildup of atherosclerotic plaques narrows the internal diameter of the blood vessels, thus impeding blood flow. Additionally, these plaques can rupture and form clots, obstructing blood flow and potentially leading to heart attacks or ischaemic strokes.

Dietary factors have long been recognised as a critical factor leading to the development of developing cardiovascular diseases. Carotenes are bioactive compounds found in yellow, orange, and green fruits and vegetables such as carrots, spinach, lettuce, tomatoes, sweet potatoes, broccoli, cantaloupes, bell peppers, mangoes, papayas, apricots, loquats, and pumpkins. They have been identified as potential protectors against atherosclerosis. However, previous studies have yielded inconclusive results, and there have been concerns regarding the detrimental effects of carotene supplements.

This particular study included 200 participants aged 50 to 70. Study participants underwent analysis based on the carotene concentration in the blood and the presence of atherosclerotic plaques in the carotid artery, assessed through ultrasound imaging.

The findings of the study show that higher concentrations of carotenes in the blood are associated with a lower atherosclerosis burden. This is particularly true for women. Hence, a diet rich in fruits and vegetables can help reduce the risk of cardiovascular disease.

Source: [Universitat Oberta de Catalunya](#)

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Published on : Tue, 27 Jun 2023