

Study shows strawberries may lower cardiovascular disease risk

08 August 2024 | News

The study aimed to investigate the dose-related effects of strawberry fruit intake on endothelial function and glucose control



The study aimed to investigate the dose-related effects of strawberry fruit intake on endothelial function and glucose control

Strawberries, Canada's favourite fruit, are top for consumers in taste, and research shows that they may be a good choice in promoting heart health as well. A new study looking specifically at cardiovascular health and improved glucose control was presented in a poster session at Nutrition 2024, the American Society for Nutrition's annual meeting, on June 30 in Chicago. Primary investigator Lasantha Krishan Hirimuthugoda, M.D., postdoctoral research associate at Illinois Institute of Technology, presented the findings. The study aimed to investigate the dose-related effects of strawberry fruit intake on endothelial function and glucose control, specifically investigating the relationship of flow-mediated dilation (FMD) responses to intervention on cardiovascular disease (CVD) risk.

The study included 36 women and 32 men, aged 20 to 62 years with a body mass index (BMI) of 29.8 ± 4.8 kg/m². Researchers assessed the effects of strawberry intake on FMD as well as the relationship of the FMD responses to intervention on CVD risk. FMD per cent was significantly influenced by eating strawberries daily for 4 weeks compared to control suggesting a dose-response toward higher to lower median, respectively (Kruskal-Wallis test, $p < 0.001$). Preliminary analyses of CGM suggest no significant differences between interventions in changes from baseline (Kruskal-Wallis test $p > 0.05$). In a logistic regression model (with goodness of fit $p = 0.33$) using all interventions with FMD responses and a 2 per cent increase in FMD as an indicator of reduced CVD risk, suggested strawberry intake dose-dependently reduced CVD risk by 8-times compared to the control group ($p < 0.001$). The sensitivity analysis, in which missing primary outcome data were imputed, resulted in similar findings (odd ratio, 8.029; to 7.029; $p < 0.001$ to $p = 0.002$).

"A diet low in fruit is among the top three risk factors for cardiovascular disease and diabetes," said co-author Britt Burton-Freeman, PhD, professor at the Illinois Institute of Technology. "Adding as little as one cup of strawberries a day to your diet may show beneficial effects on your cardiovascular health."

As one of the most popular and accessible fruits in Canada, strawberries are a flavour-favourite with consumers. A serving of 8 strawberries (one cup) fulfils the daily recommended value of vitamin C and delivers a host of other nutrients and beneficial bioactive compounds. California strawberries are available year-round in Canada and offer consumers a versatile and convenient fruit option loved by kids and adults.