

Montreal combo plate cuts weight and health risks in obese individuals

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Montreal – Lifestyle programs focused on high-intensity interval training combined with nutritional counselling on the Mediterranean diet have shown dramatic results for improving the heart health of people with abdominal obesity, finds a study released at the Canadian Cardiovascular Congress.

"Each of these lifestyle interventions alone is known to have an impact, but no one has studied them together in a longer term," says Dr. Mathieu Gayda, one of the study's authors and an exercise physiologist at the Montreal Heart Institute. "Our results show that the combination of the two interventions supersized the benefits to [heart](#) health."

The [heart health](#) benefits included significant improvements in body fat mass, cholesterol and [blood pressure](#) levels, exercise capacity, muscle endurance, weight loss, [waist circumference](#), resting heart rate and [blood sugar](#) control.

The study found an average reduction in waist circumference of eight centimeters, a reduction in systolic blood pressure of 6 mm Hg and an aerobic fitness improvement of 15 per cent over the first nine months of the study.

Improvements in waist circumference, blood pressure and fitness can lead to numerous other health benefits including a reduced risk of developing high blood pressure, as well as improving osteoarthritis symptoms, quality of life, physical functioning, and cognition.

On average, blood sugar levels also improved by 23 percent in participants with diabetes, while the improvement was approximately 10 per cent in individuals with pre-diabetes.

"In general, the sicker you are, the more you will benefit from the program. The greatest improvements in blood sugar levels were achieved in the individuals with diabetes, those who had the highest blood sugars," says author Dr. Anil Nigam, a preventive cardiologist at the Montreal Heart Institute.

Dr. Gayda notes that cardiovascular disease is currently the leading cause of death for Canadians with diabetes. "Improvements and control in [blood sugar levels](#) using lifestyle interventions (exercise and diet) can substantially reduce their overall risk of heart disease and [stroke](#) and microvascular complications such as retina and kidney disease."

All of the study participants had [abdominal obesity](#) – excess body fat carried around the stomach and abdomen. Abdominal obesity increases the risk of heart disease, stroke, [high blood pressure](#), diabetes and high blood cholesterol and interferes with the body's ability to use insulin effectively, a condition known as insulin resistance.

Study participants received high-intensity interval training two to three times per week combined with counselling on a Mediterranean diet, which favours lots of vegetables, grains and fish, small amounts of meat and plenty of olive oil. High-intensity interval training is a form of cardiovascular training that mixes very high-intensity bursts of activity with low-intensity breaks over 20 to 30 minutes.

"What is striking is not only the positive early results, which can be common when motivation is high – but the fact that participants kept improving into a second year," says Dr. Nigam.

"When it comes to a healthy weight and reducing the risk of heart disease and stroke, people look for the magic bullet," says Dr. Beth Abramson, Heart and Stroke Foundation spokesperson. "But there is no magic – it comes down to basics and how we live our lives. We have the power to prevent up to 80 per cent of premature [heart disease](#) and stroke."

She adds that the key to a long, heart-healthy life is to manage your diet, be physically active and smoke-free and to avoid excessive alcohol consumption and stress.

A report released by the Heart and Stroke Foundation earlier this year underscores the importance of healthy behaviours in protecting your heart health to gain more healthy years of life:

- A sedentary lifestyle results in nearly four lost quality years of life
- Eating a poor diet results in nearly three lost quality years of life
- Quitting smoking can add two and a half more quality years of life
- Excessive stress can cut nearly two years of quality life
- Excessive alcohol consumption costs Canadians two quality years of life

"It's about prioritizing your health today and sticking to your commitment," says Dr. Abramson, who urges all Canadians to go to makehealthlast.ca to do a personalized risk assessment and get tips and tools to lower their risk.

The Canadian Cardiovascular Congress is co-hosted by the Heart and Stroke Foundation and the Canadian Cardiovascular Society.

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Provided by Heart and Stroke Foundation of Canada

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