## - Low-carbohydrate diet

## Study finds no benefit to time-restricted diet

A one-year study of people with obesity on a low-calorie, timerestricted diet shows little difference with other regimens

The Straits Times · 4 May 2022 · C3

A rigorous one-year study where people followed a low-calorie diet between 8am and 4pm or consumed the same number of calories any time during the day has failed to find an effect on achieving weight loss. The bottom line, a diet researcher said, is: "There is no benefit to eating in a narrow window."



NEW YORK • The weight-loss idea is quite appealing: Limit your eating to a period of six to eight hours each day, during which you can have whatever you want.

Studies in mice seemed to support so-called time-restricted eating, a form of the popular intermittent-fasting diet. Small studies of people with obesity suggested it might help shed kilograms.

But now, a one-year study in which people followed a lowcalorie diet between the hours of 8am and 4pm or consumed the same number of calories any time during the day has failed to find an effect.

The bottom line, said Dr Ethan Weiss, a diet researcher at the University of California, San Francisco, is: "There is no benefit to eating in a narrow window."

The study, published last month in the New England Journal Of Medicine, was led by researchers at Southern Medical University in Guangzhou, China, and included 139 people with obesity. Women ate 1,200 to 1,500 calories a day and men consumed 1,500 to 1,800 calories daily. To ensure compliance, participants were required to photograph every bit of food they ate and to keep food diaries. Both groups lost weight – an average of 6.35kg to 8.16kg – but there was no significant difference in the amount of weight lost with either diet strategy. There were also no significant differences between the groups in measures of waist circumference, body fat and l ean body mass.

The scientists found no differences in risk factors such as blood glucose levels, sensitivity to insulin, blood lipids and blood pressure. "These results indicate that caloric-intake restriction explained most of the beneficial effects seen with the time-restricted eating regimen," Dr Weiss and his colleagues concluded.

The new study is not the first to test time-restricted eating, but previous studies often were smaller, of a shorter duration and without control groups. That research tended to conclude that people lost weight by eating only during a limited period of time during the day. Dr Weiss used to be a believer in time-restricted eating and said that, for seven years, he had eaten only between noon and 8pm. In previous research, he and his colleagues asked some of the 116 adult participants to eat three meals a day, with snacks if they got hungry, and others were instructed to eat whatever they wanted between noon and 8pm.

Participants lost a small amount of weight – an average of 900g in the time-restricted eating group, and 600g in the control group, a difference that was not statistically significant.

Dr Weiss said he could hardly believe the results. "I was a devotee. This was a hard thing to accept."

That experiment lasted just 12 weeks. Now, it looks like even a one-year study has failed to find a benefit in time-restricted eating. Professor Christopher Gardner, director of nutrition studies at the Stanford Prevention Research Centre, said he would not be surprised if time-restricted eating nonetheless worked on occasion.

"Almost every type of diet works for some people," he said. "But the take-home supported by this new research is that when subjected to a properly conducted study – scientific investigation – it is not any more helpful than simply reducing daily calorie intake for weight

loss and health factors."

Weight-loss experts said timerestricted diets are unlikely to go away.

Dr Courtney Peterson, a researcher at the University of Alabama at Birmingham who studies time-restricted eating, suspects the diet might benefit people by limiting the number of calories they have an opportunity to consume each day. "We just need to do larger studies," she said.

Dr Louis Aronne, director of the Comprehensive Weight Control Centre at Weill Cornell Medicine in New York, said some people who have trouble with caloriecounting diets do better if they are told simply to eat only during limited periods of time each day.

"While that approach hasn't been shown to be better, it doesn't appear to be worse" than calorie counting, he said. "It gives patients more options for success."

The hypothesis behind timerestricted eating is that circadian genes that are thought to increase metabolism are turned on during daylight hours, said Dr Caroline Apovian, co-director of the Centre for Weight Management and Wellness at Brigham and Women's Hospital in Boston.

She said the question for researchers is: "If you overeat a bit during daylight hours, are you more able to burn those calories rather than store them?"

Dr Weiss said the new data reinforced his conviction that timerestricted eating offers no benefit. "I started eating breakfast," he said. "My family says I am a lot nicer."