Time-restricted eating may raise cardiovascular death risk in the long term

March 19 2024, by Laura Williamson

Credit: Unsplash/CC0 Public Domain

A popular weight loss strategy that limits the hours during which calories can be consumed may nearly double a person's long-term risk of dying from cardiovascular disease, new research finds, especially among

people with underlying cardiovascular disease or cancer.

But questions remain about just how time-restricted eating, which limits calorie consumption to part of the day, affects heart disease and stroke risks. Prior studies have suggested the eating pattern may lower cardiovascular risk factors in the short term.

While the new research is compelling, the reasons why participants chose this style of eating were unknown, said Dr. Kenneth Mukamal, a primary care doctor at Beth Israel Deaconess Medical Center and a professor of medicine at Harvard Medical School in Boston. Mukamal was not involved in the study, which was presented Monday, March 18, at the American Heart Association's Epidemiology, Prevention, Lifestyle and Cardiometabolic Health conference in Chicago.

"This was a reasonable effort to look at long-term effects of time-restricted eating," he said. "At first glance, it does not suggest this is likely to be of cardiovascular benefit and indeed it was harmful. But there could be health reasons to eat in a time-restricted manner that would make this appear harmful, when it's not."

Mukamal said it is too soon to conclude that people should avoid time-restricted eating if it helps them meet their weight loss goals. "At this point, if people want to eat over a shorter duration and it's easier for them to maintain their weight that way, I would not use this as a reason not to do it," he said.

Time-restricted eating, a type of intermittent fasting, typically restricts calorie intake to a window of four to 12 hours. Prior research has shown it may be an effective weight loss strategy, especially when combined with calorie restrictions. Studies also have suggested it may lower blood pressure and other key indicators of cardiovascular disease over a short time in people with obesity.

In the new study, researchers analyzed dietary data from a national survey of 20,078 U.S. adults who were 49 years old, on average. On two occasions, they recalled all the food and drinks they consumed within a 24-hour period.

People who restricted their eating to a period of less than eight hours each day were nearly twice as likely to die of cardiovascular disease, which included heart disease and stroke, within a median follow-up of eight years, compared to those who ate their meals over a 12- to 16-hour period. The eight-hour eating window was associated with higher cardiovascular mortality in the general population as well as those who had pre-existing cardiovascular disease or cancer.

Time-restricted eating did not appear to affect the risk of dying from all causes combined or specifically from cancer. But in people with cancer, eating more than 16 hours in a day was associated with a lower risk of dying from cancer.

The findings are considered preliminary until full results are published in a peer-reviewed journal.

Lead researcher Dr. Victor Wenze Zhong, a professor and chair of the department of epidemiology and biostatistics at Shanghai Jiao Tong University School of Public Health in China, said the findings surprised his team.

"Restricting daily eating time to a short period, such as eight hours, has gained popularity recently because it seems to help people lose weight and improve cardiometabolic health," Zhong said. "Thus, we had expected that long-term adoption of eight-hour time-restricted eating would be associated with lower risk of cardiovascular death and even all-cause death. We were surprised to find that (wasn't the case)."

But Mukamal said many factors remain unaccounted for.

"It's important to note these are people choosing this eating pattern," he said, noting it was an observational study and not a randomized trial, in which people would be assigned to eat during different time periods for comparison. People with cancer, for example, might struggle with appetite loss and therefore eat during a more restricted time period but may have a shorter life expectancy.

"Some of what appears to be harmful may be due to the reasons why people are choosing to eat this way," Mukamal said.

But even among people in the general population who chose to eat during restricted time periods, "there wasn't any clear cardiovascular benefit," he said. "This leaves quite open the question about whether time-restricted eating is likely to improve cardiovascular health in the long run."

While research continues, people looking for healthier eating patterns should follow those that have been proven to improve heart health, Mukamal said. The DASH (Dietary Approaches to Stop Hypertension), pescetarian and Mediterranean diets score the highest for heart health, according to an AHA scientific statement.

"At least as of now, focusing on what people eat is more important than focusing on the time in which they eat," Mukamal said.

More information: Association Between Time-Restricted Eating and All-Cause and Cause-Specific Mortality. www.abstractsonline.com/pp8/#! … 343/presentation/379

Provided by American Heart Association

Citation: Time-restricted eating may raise cardiovascular death risk in the long term (2024, March 19) retrieved 9 May 2024 from https://medicalxpress.com/news/2024-03-restricted-cardiovascular-death-term.html