

# Restricting calories leads to weight loss, not necessarily the window of time you eat them in

April 27 2022, by Clare Collins



Credit: AI-generated image (disclaimer)

Results of a <u>new weight loss study</u> were published this week, leading to headlines proclaiming intermittent fasting "<u>isn't a magic diet trick after all</u>".



The researchers aimed to test whether adding a restriction on what time of day you were allowed to eat (or not) to the usual low calorie (or kilojoule) diet led to greater weight loss compared to just following a low calorie diet. They recruited 139 adults whose average weight was 88 kilograms and age 32 years.

The participants were randomized to follow either the low calorie diet that had reduced their usual daily energy intake by 25%, or the same low calorie diet with the addition of a time period during which they were allowed to eat in an eight-hour window between 8am and 4pm each day.

This approach is called "time-restricted eating" or a "16-hour intermittent fast." Both groups received support from health coaches to follow their diets for 12 months.

Results showed that after one year, people in both groups lost 7–10% of their baseline body weight. While the low calorie group lost an average of 6.3 kilograms, the low calorie plus time restricted eating group lost 8 kilograms. Although there was a 1.8 kilogram difference between the groups, it was not a statistically significant difference.

Why intermittent fasting isn't a magic diet trick after all <a href="https://t.co/xG1w9mV7zh#seo">https://t.co/xG1w9mV7zh#seo</a>

— Crank Start Media (@CrankStartMedia) April 23, 2022

Participants in both groups also had better blood sugar and blood fat levels and improved <u>insulin sensitivity</u>, but again there was no significant differences between groups.

There are four reasons this weight loss trial is important.

### 1. It wasn't based in the U.S.



Most <u>intermittent fasting</u> studies have been conducted in the United States. This trial was done in China and recruited people in Guangzhou, so it provides important data using a culturally sensitive, prescribed <u>calorie restriction</u> over 12 months.

## 2. It showed small extra time restrictions on eating don't make much difference

In their normal lives, the participants in Guangzhou had a usual window for daily eating of about 10.5 hours. Studies in other populations, particularly the US, show about 90% of adults have an eating window of 12 hours, with only 10% of adults having an overnight fasting period greater than 12 hours.

For more than 50% of people in countries like the US, the overnight fast is less than nine hours, meaning they eat over a 15 hour time period each day. So in the current study, the time restriction on eating was only minor—at about two hours less per day than what's usual for people in China. This would not have been too big a difference from usual.

The researchers also reported that in China, the biggest meal is usually eaten in the middle of the day, so that was not influenced by the time restriction. In countries where the evening meal is the biggest or people snack all evening, then time restriction may still be a beneficial way to reduce intake.

A <u>2020 review of 19 studies</u> that used time-restricted intermittent fasting found it was an <u>effective treatment</u> for adults with obesity, leading to greater loss of body weight and body fat, with significantly lower systolic blood pressure and blood glucose.

## 3. It showed support is imperative



Both groups in this trial were given a lot of support to adhere to the kilojoule-restricted diet. They were provided with one meal replacement shake per day for the first six months, to make it easier to follow the kilojoule restriction and help improve adherence to the diet.

They also received dietary counseling from trained health coaches for the 12 months of the trial. They received dietary information booklets that included advice on portion size and sample menus. They were encouraged to weigh foods to improve their accuracy in reporting kilojoule intakes and were required to keep a daily log with photographs of foods eaten and the time, using the study app.

They also received follow-up calls or app messages twice a week and met with the health coach individually every two weeks for the first six months. In the second six months, they continued to fill out their dietary records for three days per week and received weekly follow-up telephone calls and app messages and met with a health coach monthly. They also attended monthly health-education sessions.

This was a lot of support and is very important. Receiving long-term support to achieve health behavior changes typically achieves a weight loss of 3–5% of body weight, which significantly lowers risk of weight-related health conditions, including a 50% lower risk of developing type 2 diabetes over eight years.

# 4. Even with good adherence, individual weight loss varies

Individual weight loss responses were very variable, even though adherence was high in this trial.

About 84% of participants adhered to the prescribed daily calorie targets



and time restricted eating period. Weight loss at 12 months varied from 7.8 to 4.7 kilograms in the low calorie only group, and 9.6 to 6.4 kilograms in the low calorie plus time-restricted eating group.

As we have seen many times previously, this study confirms there is no one best diet for weight loss. It also shows small decreases in the window of time you're eating probably won't make a difference to weight loss.

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