



INTERMITTENT *Fasting* DIET: A FEW BASICS



Intermittent fasting is an umbrella term for a variety of eating **patterns that alternate between fasting and feasting**. As a tool for both managing weight and improving health markers, intermittent fasting has become a very popular diet plan among adults in the U.S.

Intermittent Fasting

The intermittent fasting diet is also known as intermittent energy restriction. This approach to eating refers to food consumption schedules that cycle between periods of restricted energy intake (fasting) and periods of unrestricted energy intake (feasting). In this context, “fasting” generally means the consumption of approximately 500 calories or fewer per day, or approximately 20% to 25% of your usual energy intake. However, it might range from 0% to 40% of your usual energy intake.¹ “Feasting” refers to eating as you normally would. This approach is gaining status as a weight-loss strategy alternative to traditional diets based on daily energy restriction.²

500

CALORIES
PER DAY

**20%-
25%**

OF USUAL
ENERGY
INTAKE

**0%-
40%**

VARIATION
OF USUAL
ENERGY
INTAKE

All statistics refer to fasting.

By the Day or By the Hour

Intermittent fasting is about when you eat, not what you eat. It does not involve calorie monitoring — just clock or calendar watching. It can easily fit into daily routines, with minimal disruption to family or social life. Intermittent fasting is easy for many people to adhere to while intrinsically cutting calories. Examples of intermittent fasting patterns include:

- **Alternate day fasting** — This refers to an ongoing pattern of eating normally (feasting) one day and restricting intake (fasting) the next.
- **The 5:2 pattern** — This refers to a pattern during which a person eats normally (feasts) for five days each week and restricts intake (fasts) for two days each week, not usually consecutively.

● = Feast

● = Fast

5:2 ●●●●●●●●

- **Time-restricted eating** — This usually refers to 24-hour cycles during which a person consumes all of his or her energy during a four- to 12-hour window. Among time-restricted eating patterns, the six-hour and the eight-hour windows are both popular and effective. A person following this pattern would, for example, eat and drink from 10 a.m. to 6 p.m. (eight hours) or 12 p.m. to 6 p.m. (six hours) each day and would not consume energy (eat or drink) outside this time frame. The 10- to 12-hour window can be effective, but at a slower rate. The four-hour window is difficult to maintain and does not promote weight loss any more effectively than the six-hour window.³

Intermittent Fasting and Health

Human studies on the health benefits of intermittent fasting/time-restricted diets are limited. Yet, this pattern of eating appears to promote weight loss, ease weight management and improve metabolic health.



Weight Management

Intermittent fasting is as effective for weight loss as standard weight loss diets.⁴ Recent studies have demonstrated that among healthy adults, alternate day fasting for a 22-day period resulted in significant weight loss, reduced fat mass and a decrease in fasting insulin levels.⁵ Similar results were found among obese adults who followed an eight-hour window intermittent fasting pattern for 12 weeks⁵ and among women following the 5:2 (fasting two days per week) intermittent fasting pattern for 26 weeks.⁴ On average, the time-restricted eating pattern reduced energy consumption by 300 to 600 calories per day. Weight loss occurs because individuals do not fully compensate for this calorie deficit during their “feast” periods.¹



Metabolic Health

Intermittent fasting improves glucose control, blood pressure and lipid profiles. Recent studies have demonstrated that adults with prediabetes or Type 2 diabetes who followed a 4:3 (fasting three days per week) intermittent fasting pattern were able to reverse their insulin resistance.⁴ Similarly, overweight, prediabetic men who followed a six-hour window intermittent fasting pattern for five weeks experienced improvements in measures of insulin, oxidative stress and appetite.⁶ Adults who followed a 12-hour window intermittent fasting period for six weeks demonstrated a significant improvement in their lipid profiles⁷, while obese adults who followed an eight-hour window intermittent fasting pattern for 12 weeks experienced reduced systolic blood pressure and body weight.⁶ And when compared to women who followed a traditional calorie-controlled diet over a six-month period, women who followed a 5:2 intermittent fasting pattern experienced similar weight loss but had greater improvements in insulin sensitivity and waist circumference.³

- These improvements in metabolic health appear within two to four weeks of intermittent fasting and tend to regress over the same time period after the intermittent fasting pattern is discontinued.
- The physiological mechanism through which health seems to improve with intermittent fasting is not fully understood. Yet, these (and other) studies suggest that intermittent fasting eating patterns are effective for weight loss and metabolic health in most adults, and that these health benefits are greater than can be attributed to caloric reduction alone.⁴

Points to Consider

Prior to adapting any of the intermittent fasting eating patterns, there are a few points to consider.

- As with any energy restriction, following an intermittent fasting eating pattern can result in:

• Hunger
• Dizziness
• Nausea
• Insomnia
• Migraine headaches
• Irritability
• Reduced concentration
• Weakness

- However, this normalizes within two to three weeks.
- Vitamin and mineral deficits are a possibility, depending on the degree of fasting and food selection/consumption during periods of feasting.⁸
- Intermittent fasting is not (currently) recommended for:
 - Children.
 - Pregnant or lactating women.
 - Individuals with Type 1 diabetes.
 - Individuals taking medicines that work in conjunction with food.
 - Shift workers.
 - Those who feel they need to snack frequently.
 - Those with a history of eating disorders.
 - Individuals who are underweight or malnourished.
- There has been minimal research on the long-term effects of intermittent fasting on humans. At this point, it is unclear if there are any long-term health benefits or risks related to this diet technique.⁹



Is It Right for You?

Intermittent fasting is one of many diet approaches. If you choose to give it a try, you can ease into an intermittent fasting pattern by starting with one of these small changes:

- Begin with a 12-hour fast.
- Cut out a snack or two each day.
- Eat dinner a little earlier and eat nothing after dinner.

Intermittent fasting appears to be a good approach to weight management and personal health promotion — but **only if it's right for you!**

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