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Intermittent Fasting

Intermittent fasting involves intervals of limiting food intake for extended periods of time.

This dietary approach may be used for attempts at weight loss, for other health objectives, or as part of some religious practices. Popular intermittent fasting diets involve daily time-restricted feeding (such as 16-24 hours of fasting) or intermittent full-day fasting on 2 to 4 days (or more) per week. Some regimens allow very low calorie intake (500-700 calories per day) on a fasting day.

What Happens to the Human Body During Periods of Intermittent Fasting?

After an 8- to 12-hour period of fasting, the liver starts to break down fatty acids to produce ketone bodies. The human body uses ketone bodies as an alternate source of fuel to sustain vital organs and tissues when the typical source (glucose) is not available. Studies have shown that intermittent fasting decreases blood inflammatory markers and improves glucose regulation.

Does Intermittent Fasting Help People Lose Weight?

Studies lasting between 12 weeks and 12 months have shown no difference in weight loss when intermittent fasting is compared with a daily calorie-restricted diet. However, between 27% and 40% of these study participants dropped out of intermittent fasting, demonstrating the challenge of adherence to intermittent fasting diets.

Does Intermittent Fasting Improve Health?

Intermittent fasting has been shown to result in decreases in blood pressure, resting heart rate, cholesterol and triglycerides, glucose, and insulin. While these improvements in cardiovascular risk factors typically begin within 2 to 4 weeks of starting an intermittent fasting diet, they dissipate within several weeks of resuming a normal diet.

Potential Risks and Side Effects of Intermittent Fasting

Intermittent fasting may produce side effects including weakness, hunger, dehydration, headaches, difficulty concentrating, low blood pressure, or fainting. Discussion with a nutritionist or dietitian is recommended before starting an intermittent fasting diet to

Intermittent fasting diets may limit the amount of time during the day when a person can eat or may involve fasting for an entire day on a certain number of days per week.

Types of intermittent fasting

☐ Fasting ☐ Feeding

16:8 hour daily time-restricted fasting



Medical uses of intermittent fasting

Intermittent fasting may improve blood pressure, heart rate, cholesterol levels, and glycemic control. However, these improvements dissipate within weeks after resumption of a normal diet.

ensure that nutritional needs are met. Intermittent fasting is not recommended for pregnant or lactating women, frail older adults, individuals with immunodeficiency, or those with or at risk of eating disorders. Intermittent fasting may be dangerous for patients with diabetes due to the increased likelihood of hypoglycemia (low blood sugar). Patients with diabetes or other health conditions who are considering trying an intermittent fasting diet should discuss the potential benefits and risks with their doctor before starting.

FOR MORE INFORMATION

National Library of Medicine

<https://magazine.medlineplus.gov/article/5-questions-about-intermittent-fasting>

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Sources: Horne BD, Grajower MM, Anderson JL. Limited evidence for the health effects and safety of intermittent fasting among patients with type 2 diabetes. *JAMA*. 2020;324(4):341-342. doi:10.1001/jama.2020.3908

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