

Intermittent Fasting Protocol

Evidence-based guide to time-restricted eating

WHAT IS INTERMITTENT FASTING?

Intermittent fasting (IF) cycles between structured eating and fasting periods. It specifies when, not what, you eat. The most studied protocols are:

- 16:8 - 16-hour fast, 8-hour eating window. The most widely practiced and researched protocol.
- 5:2 - Normal eating 5 days; 500-600 kcal on 2 non-consecutive fasting days.
- Time-Restricted Eating (TRE) - Eating aligned with early daylight hours. Strongest circadian evidence.

WHAT THE EVIDENCE SHOWS

A 2020 meta-analysis (Annual Review of Nutrition) covering 27 trials found IF produces comparable weight loss to continuous caloric restriction with similar adherence. Distinct metabolic mechanisms include:

- Autophagy upregulation: begins at 14-16 hours of fasting (Levine & Kroemer, Cell 2019).
- Insulin sensitivity: fasting lowers fasting insulin and improves HOMA-IR across most trials.
- Metabolic switching: after ~12 hours glycogen depletes; body shifts to fat oxidation and ketone production.
- Circadian alignment: early TRE improves glucose tolerance and blood pressure independent of weight loss (NEJM 2019).

RECOMMENDED STARTING PROTOCOL: 16:8

Eating window: 10 am - 6 pm or 11 am - 7 pm. During weeks 1-2, use a 14:10 window to adapt before extending. Shift window earlier for stronger circadian benefit.

DAILY FASTING CHECKLIST

- Establish a consistent wake time - anchors your circadian rhythm and eating window.
- Delay first meal by 1 hour after waking. Start with 30 minutes if new to fasting.
- During fasting window: water, plain black coffee, and unsweetened tea are permitted.
- End eating window at least 2-3 hours before sleep to preserve sleep architecture.
- Do not restrict calories within the eating window during the first 4 weeks of adaptation.
- Consume at least 1.6 g/kg body weight in protein across meals to preserve lean mass.
- Track eating window start and end time daily for the first 2 weeks.

CONTRAINDICATIONS - DO NOT FAST IF:

- Pregnant or breastfeeding - increased caloric and micronutrient demands.
- History of eating disorders - fasting may reinforce restrictive patterns.
- Type 1 diabetes or insulin-dependent Type 2 diabetes - hypoglycemia risk requires medical supervision.
- Underweight (BMI below 18.5) - caloric insufficiency risk is significant.
- Children and adolescents - fasting is not appropriate during growth phases.

COMMON MISTAKES

- Compensatory overeating within the eating window - negates caloric benefit entirely.
- Starting with extended 24-hour fasts before adaptation - leads to early dropout.
- Insufficient protein intake - lean mass loss risk is elevated without resistance training.
- Late eating window (e.g. noon to 8 pm) - misses circadian benefit; shift window earlier.

SOURCES

Harris L et al. (2018). Intermittent fasting interventions for treatment of overweight and obesity in adults. JBI Database. |
Lowe DA et al. (2020). Effects of Time-Restricted Eating on Weight Loss. JAMA Intern Med. | Mattson MP et al. (2019).
Intermittent metabolic switching, neuroplasticity, and brain health. Nat Rev Neurosci.