

Intermittent fasting (IF) is a comprehensive term referring to patterns involving alternating periods of calorie restriction and non-restriction. During fasting, individuals may choose to limit or entirely abstain from calorie-containing foods and beverages. Various approaches to intermittent fasting exist, with some common ones outlined below.

**Time-Restricted Feeding (TRF):** involves condensing the window in which a person consumes calories from food and beverages. Also known as "prolonged nightly fasting," this approach typically extends a person's regular overnight fast. For instance, calorie consumption may be confined to the hours of 8 am to 4 pm, requiring a 12- to 16-hour stretch without eating to fulfill the criteria for time-restricted feeding.<sup>1</sup>

**Alternate Day Fasting (ADF):** also known as fasting intervals, entails a cycle of fasting on one day and eating on the next. On fasting days, individuals usually limit calorie intake to no more than 600 per day. Some may opt for consuming only water and electrolytes on these fasting days. Alternate day fasting can also encompass fasting every third day or adhering to a more personalized schedule.

**Modified Fasting:** involves a type of fast where individuals reduce calories by 10-20% or restrict calories to 600 per day for a specified number of days per week. This form of fast is also referred to as intermittent energy restriction.

**Fasting Mimicking Diet (FMD):** characterizes a ketogenic diet typically followed for five consecutive days once a month. This structured 5-day plan involves very low-calorie and low-carbohydrate intake, with limited studies suggesting improvements in body composition and lower blood pressure after three consecutive cycles (3 months).

## Who Benefits from Fasting?

Collaboration with a healthcare practitioner is essential for individuals seeking to ascertain the suitability and specific type of fasting regimen.

| Improves   | Decreases   |
|--|---|
| <ul style="list-style-type: none"> <li>Blood pressure</li> </ul>         | <ul style="list-style-type: none"> <li>Cholesterol</li> </ul>   |
| <ul style="list-style-type: none"> <li>Antioxidant activity</li> </ul>   | <ul style="list-style-type: none"> <li>Free radicals</li> </ul> |
| <ul style="list-style-type: none"> <li>Blood sugar metabolism</li> </ul> | <ul style="list-style-type: none"> <li>Inflammation</li> </ul>  |
| <ul style="list-style-type: none"> <li>Brain function</li> </ul>         | <ul style="list-style-type: none"> <li>Triglycerides</li> </ul> |

Limited-duration studies involving humans and animals suggest potential benefits of fasting for insulin resistance, blood sugar regulation, blood pressure, inflammation, short-term weight loss, and cognitive health. However, further research is required to establish the effectiveness of fasting in achieving sustained weight loss and other long-term health outcomes. Certain studies suggest that Time Restricted Feeding (TRF) might be more sustainable over the long term compared to other fasting approaches, such as Alternate Day Fasting (ADF).

## Who Should Avoid Fasting or Approach Fasting with Caution?

Fasting is not recommended for individuals who are frail, pregnant, or breastfeeding, those with eating disorders or disordered eating behaviors, individuals with an underweight BMI, insulin-dependent diabetics, those with heart arrhythmias or low blood pressure, and those with HPA axis disorders. For individuals with type 2 diabetes, metabolic syndrome, or symptoms related to unbalanced blood sugar, it is strongly advised to collaborate with an experienced healthcare practitioner who can provide guidance for improved blood sugar health and appropriate fasting strategies. It is crucial to engage in a discussion with your functional medicine practitioner to assess the potential risks and benefits associated with fasting. Refer to the next page for specific instructions from your functional medicine practitioner.

## General Recommendations for Fasting

- ➔ Drink plenty of filtered water on fasting days. Your functional medicine practitioner may also recommend electrolytes or other supplements personalized for you.
- ➔ High-intensity exercise is not recommended while fasting. Walking, yoga, or other light-intensity activity is preferred.
- ➔ Be aware of your movement as you may feel dizzy or lightheaded, especially when first starting a fast.
- ➔ Prioritize whole, unprocessed, nutrient-dense foods, especially as you are limiting your intake on fasting days.
- ➔ Stop fasting if you feel unwell and call your functional medicine provider.



## Personalized Recommendations for Intermittent Fasting

| PRESCRIPTION:  |  | NOTES: |
|--|--|--------|
| <input type="checkbox"/> Time Restricted Eating<br><input type="checkbox"/> Alternate Day Fasting<br><input type="checkbox"/> 1 day (24 hours) weekly<br><input type="checkbox"/> Modified fasting, 600 calories per day (see below for a sample food plan)<br><input type="checkbox"/> Fasting Mimicking Diet | <input type="checkbox"/> ____times per week for ____ weeks |        |

| SUPPLEMENTATION RECOMMENDATIONS:  | NOTES: |
|---|--------|
| <input type="checkbox"/> Multivitamin<br><input type="checkbox"/> Multimineral<br><input type="checkbox"/> Electrolytes (calcium, magnesium, sodium, potassium, chloride) |        |

These recommendations should be followed under the supervision and guidance of a qualified healthcare professional.

## Sample 600-Calorie Food Plan

| Breakfast:   | Lunch:   | Dinner:  |
|--|--|--|
| One scrambled egg with a cup of spinach sautéed in a small amount of chicken broth, topped with ¼ of whole avocado, pinch of sea salt, and pepper. | 2-3 ounces of cooked turkey or chicken over 2 cups of mixed baby greens, juice of ½ lemon, and 1 tsp. olive oil drizzled over greens and chicken, with pinch of sea salt and cracked pepper. | 2-3 ounces poached or broiled salmon and a cup of steamed broccoli drizzled with ½ tsp. olive oil, juice of ½ lemon or lime, pinch of sea salt, and fresh herbs of choice. |

## References:

- Patterson R, et al. Intermittent Fasting and Human Metabolic Health. *J Acad Nutr Diet.* 2015;115(8):1203-1212. doi:10.1016/j.jand.2015.02.018
- Wei M, et al. Fasting-mimicking diet and markers/risk factors for aging, diabetes, cancer, and cardiovascular disease. *Sci Transl Med.* 2017;9(377):eaai8700. doi:10.1126/scitranslmed.aai8700
- Mattson M, Longo V, Harvie M. Impact of intermittent fasting on health and disease processes. *Ageing Res Rev.* 2017;39:46-58. doi:10.1016/j.arr.2016.10.005
- de Cabo R, Mattson MP. Effects of intermittent fasting on health, aging, and disease. *N Engl J Med.* 2019;381(26):2541-2551. doi:10.1056/NEJMr1905136
- Trepanowski J, Kroeger C, Barnosky A, et al. Effect of alternate-day fasting on weight loss, weight maintenance, and cardioprotection among metabolically healthy obese adults: a randomized clinical trial. *JAMA Intern Med.* 2017;177(7):930-938. doi:10.1001/jamainternmed.2017.0936

