



# Intermittent Fasting

**Intermittent fasting (IF)** is a generalized term used to describe cycles that alternate between periods of restricting calories and periods of not restricting calories. During the restriction period, individuals may either limit, or completely avoid calorie containing foods and beverages. There are a number of variations of fasting, but some of the more common approaches are defined here.

**Time Restricted Feeding (TRF)** describes a shortened window of time when a person consumes calories from food and beverages. This is also called “prolonged nightly fasting” and usually extends a person’s typical overnight fast. For example, a person may only consume calories between the hours of 8am – 4pm. Typically, a stretch of 12-16 hours without eating fulfills the criteria for time-restricted feeding.

**Alternate Day Fasting (ADF)** also called fasting intervals, describes a cycle of fasting on one day and eating on the next day. On fasting days, people typically restrict calories to no more than 600 per day. Some individuals may only consume water and electrolytes on these fasting days. Alternate day fasting can also refer to fasting every third day, or fasting on a more personalized schedule.

**Modified Fasting** describes a type of fast in which a person restricts calories by 20-30%, or reduces calories to 600 per day for a specified number of days per week. This type of fast is also called intermittent energy restriction.

**Fasting Mimicking Diet (FMD)** describes a ketogenic diet that is typically followed for five days once a month. This 5-day, very low-calorie, low carbohydrate, structured food plan has been shown in a limited number of studies to improve body composition and lower blood pressure after three consecutive cycles (3 months).<sup>2</sup>

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

## Who Benefits from Fasting?

Individuals should work with their healthcare practitioner to determine if and what type of fasting routine is appropriate. Shorter-duration human and animal studies show that fasting may be beneficial for insulin resistance, blood sugar, blood pressure, inflammation, short-term weight loss, and brain health.<sup>3,4</sup> Longer-term studies on the effectiveness of fasting on sustained weight loss and other health outcomes is still needed.<sup>1,3</sup>

## Who Should not Fast or Fast with Caution?

Fasting is not recommended for everyone. Some individuals with diabetes, metabolic syndrome, or recurring hypoglycemia may be “metabolically inflexible.” It is recommended that these individuals work with experienced healthcare practitioners to firstly improve their metabolic flexibility so they may be able to fast eventually, if needed. Some studies indicate that Time Restricted Feeding (TRF) may be easier to maintain long-term compared to other forms of fasting, like Alternate Day Fasting (ADF).<sup>5</sup>

Fasting is not recommended for frail individuals, those who are pregnant or breastfeeding, individuals with eating disorders or disordered eating behaviors, those with an underweight BMI, insulin-dependent diabetics, those with heart arrhythmias, or low blood pressure, or HPA axis disorders. Again, it is very important to discuss the risks versus potential benefits with 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.

## Prescription for Intermittent Fasting:

FASTING TYPE:	FREQUENCY/DURATION:	NOTES:
<input type="checkbox"/> Time Restricted Eating <input type="checkbox"/> Alternate Day Fasting <input type="checkbox"/> 1 day (24 hours) weekly <input type="checkbox"/> Modified fasting, 600 calories per day (see below for a sample food plan) <input type="checkbox"/> Fasting Mimicking Diet	_____ times per week for _____ weeks	
SUPPLEMENTATION RECOMMENDATIONS:	NOTES:	
<input type="checkbox"/> Multivitamin <input type="checkbox"/> Multimineral <input type="checkbox"/> Electrolytes (calcium, magnesium, sodium, potassium, chloride)		

## Sample 600-Calorie Food Plan:

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

For more information, see IFM's [Mito Food Plan - Comprehensive Guide](#).

### References:

1. 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
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3. 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
4. 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
5. 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

