Intermittent Fasting (IF) describes a pattern of eating which requires intervals of fasting or calorie restriction. For most, the intent behind IF is the reduction of calories to assist in weight loss. By reducing the number of calories consumed on certain days, the total weekly calorie amount may be reduced. Due to the relatively new nature of IF, limited evidence exists regarding the long-term impacts.

### Types of intermittent Fasting

- **5:2**
  - 5 days of normal eating, 2 days restricted
- **16:8**
  - Fasting for 16 hours, eating for 8 hours
- **4:3**
  - 4 days of normal eating, 3 days restricted
- **Alternate day**
  - Eating and fasting every other day

### What Does the Research Say?

- **Biometric measures and weight.** Compared to a normal diet, evidence suggests IF may improve triglyceride levels and systolic blood pressure, and result in reductions in weight.¹
- **Heart health.** Compared to a reduced-calorie diet, evidence found no significant difference in weight loss and measures of heart health such as cholesterol and triglycerides levels, blood pressure, as well as fasting blood glucose levels and HbA1c.¹
- **Weight loss.** One study found that participants in an IF group lost the same amount of weight as those in a reduced-calorie group, and that in both groups the weight was regained 1 year later.²

### Other Considerations

IF was found to be beneficial in the short-term for cardiovascular health and weight loss, but little is known about the long-term implications. Other considerations include:

| Weight loss is often temporary. | Participants in the IF groups were more likely to drop out of studies due to difficulty in adhering to the diet. The current research on IF and weight loss does not account for participants’ weight after 12 months, the time period when 95% of dieters regain the weight lost. Based on available research, the greatest reductions in weight occurs in interventions which focus on improving overall diet quality and incorporating physical activity.¹ |
| Weight cycling may occur. | Though IF may result in weight loss for some, the evidence on weight loss in general shows that in most individuals, dieting often leads to a cycle of weight loss and regain. Weight cycling negatively impacts the body’s metabolism and inflammation levels. |
| Fasting is not safe for everyone. | Individuals who are pregnant or have diabetes should not fast due to the potential negative side effects, including low blood sugar. |
| Fasting may result in fatigue and decreased physical activity. | Because our body’s energy stores become depleted rapidly, we often rely on consuming energy roughly every 2-4 hours. Fasting can lead to low blood sugar levels and feeling tired. Decreased energy levels may result in feeling less motivated to participate in physical activity. |
| Certain diets, including IF, may trigger the development of eating disorders. | In individuals already prone to developing eating disorders, restricting calories during fasting days may increase the likelihood. |
| IF may impact social activities. | Abstaining from eating at certain times may limit one’s ability to participate in spontaneous events and normal activities centered around eating. |
| Individual calorie and nutrient needs vary. | No diet plan or style of eating is a one-size fits all. Due to the risk of potential negative consequences of dieting, including IF, it is important to work with a registered dietitian nutritionist before beginning a new diet plan. |

### References