Intermittent Fasting & Time-Restricted Feeding

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Intermittent Fasting and Time-Restricted Feeding

Image: https://www.health.harvard.edu/u/staying-healthy/is-intermittent-fasting-safe-for-older-adults

DFEND 2.0
Angela Tacinelli, MS
Objectives

1. Define intermittent fasting (IF)

2. Define time-restricted feeding (TRF)

3. Learn about the different forms of IF & TRF

4. Understand the benefits, risks, current research with IF & TRF
Defining Intermittent Fasting & Time-Restricted Feeding

• Intermittent Fasting
  • An eating pattern which includes hours or days of eating minimal to no food without being deprived of essential nutrients.

• Time-Restricted Feeding/Eating
  • Eating only during certain time period (8 or 10 hours) each day.
Intermittent Fasting
• Alternate-day fasting
• 5:2 fasting (The 5:2 Diet)
• 24-hour fast (Eat, Stop, Eat)
• The warrior diet
• Spontaneous meal skipping

Time-Restricted Feeding
• 16/8 method
• 14/10 method
**Intermittent Fasting**

![Calendar Illustration](https://en.wikipedia.org/wiki/Intermittent_fasting#/media/File:IFCalendar.png)
Alternate-day Fasting

Fast every other day by either not eating anything or only having a small meal (less than 500 calories).

<table>
<thead>
<tr>
<th>DAY 1</th>
<th>DAY 2</th>
<th>DAY 3</th>
<th>DAY 4</th>
<th>DAY 5</th>
<th>DAY 6</th>
<th>DAY 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eats normally</td>
<td>24-hour fast OR Eat only a few hundred calories</td>
<td>Eats normally</td>
<td>24-hour fast OR Eat only a few hundred calories</td>
<td>Eats normally</td>
<td>24-hour fast OR Eat only a few hundred calories</td>
<td>Eats normally</td>
</tr>
</tbody>
</table>
The 5:2 Diet (Twice-a-Week Method)

Eat normal 5 days of the week while only 500-600 calories the other 2 days of the week.
The 24-Hour Fast (Eat Stop Eat)

Fast for a full 24-hours 1-2 days a week and eat normally on all the other days.
The Warrior Diet

Eat small amounts of fruits and vegetables during the day & eat one huge meal at night during a 4-hour time period.

<table>
<thead>
<tr>
<th>Time</th>
<th>DAY 1</th>
<th>DAY 2</th>
<th>DAY 3</th>
<th>DAY 4</th>
<th>DAY 5</th>
<th>DAY 6</th>
<th>DAY 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midnight</td>
<td>Eating only small amounts of vegetables and fruits</td>
<td>Eating only small amounts of vegetables and fruits</td>
<td>Eating only small amounts of vegetables and fruits</td>
<td>Eating only small amounts of vegetables and fruits</td>
<td>Eating only small amounts of vegetables and fruits</td>
<td>Eating only small amounts of vegetables and fruits</td>
<td></td>
</tr>
<tr>
<td>4 AM</td>
<td>Large meal</td>
<td>Large meal</td>
<td>Large meal</td>
<td>Large meal</td>
<td>Large meal</td>
<td>Large meal</td>
<td>Large meal</td>
</tr>
<tr>
<td>8 AM</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>12 PM</td>
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<tr>
<td>4 PM</td>
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<td>Midnight</td>
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</tbody>
</table>
Spontaneous Meal Skipping

Skip 1-2 meals when you don’t feel hungry or don’t have time to eat.

<table>
<thead>
<tr>
<th>DAY 1</th>
<th>DAY 2</th>
<th>DAY 3</th>
<th>DAY 4</th>
<th>DAY 5</th>
<th>DAY 6</th>
<th>DAY 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>Skipped Meal</td>
<td>Breakfast</td>
<td>Breakfast</td>
<td>Breakfast</td>
<td>Breakfast</td>
<td>Breakfast</td>
</tr>
<tr>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
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<tr>
<td>Dinner</td>
<td>Dinner</td>
<td>Dinner</td>
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<td>Dinner</td>
<td>Dinner</td>
<td>Dinner</td>
</tr>
</tbody>
</table>
Time-Restricted Feeding/Eating
### 16/8 Method

**Daily 16-hour fasts and eat only 2-3 meals during an 8-hour time period.**

<table>
<thead>
<tr>
<th></th>
<th>DAY 1</th>
<th>DAY 2</th>
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<th>DAY 4</th>
<th>DAY 5</th>
<th>DAY 6</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Midnight</td>
<td>FAST</td>
<td>FAST</td>
<td>FAST</td>
<td>FAST</td>
<td>FAST</td>
<td>FAST</td>
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<td>4 AM</td>
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<td>8 AM</td>
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</tr>
<tr>
<td>12 PM</td>
<td>First meal</td>
<td>First meal</td>
<td>First meal</td>
<td>First meal</td>
<td>First meal</td>
<td>First meal</td>
<td>First meal</td>
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<tr>
<td>4 PM</td>
<td>Last meal by 8pm</td>
<td>Last meal by 8pm</td>
<td>Last meal by 8pm</td>
<td>Last meal by 8pm</td>
<td>Last meal by 8pm</td>
<td>Last meal by 8pm</td>
<td>Last meal by 8pm</td>
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<tr>
<td>8 PM</td>
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<td>Midnight</td>
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</tbody>
</table>
14/10 Method

*Daily 14-hour fasts and eat only 2-3 meals during a 10-hour time period.*

<table>
<thead>
<tr>
<th></th>
<th>DAY 1</th>
<th>DAY 2</th>
<th>DAY 3</th>
<th>DAY 4</th>
<th>DAY 5</th>
<th>DAY 6</th>
<th>DAY 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midnight</td>
<td>FAST</td>
<td>FAST</td>
<td>FAST</td>
<td>FAST</td>
<td>FAST</td>
<td>FAST</td>
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<td>4 AM</td>
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<td>FAST</td>
<td>FAST</td>
<td>FAST</td>
<td>FAST</td>
<td>FAST</td>
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<tr>
<td>8 AM</td>
<td>First Meal- 10am</td>
<td>First Meal- 10am</td>
<td>First Meal- 10am</td>
<td>First Meal- 10am</td>
<td>First Meal- 10am</td>
<td>First Meal- 10am</td>
<td>First Meal- 10am</td>
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<tr>
<td>12 PM</td>
<td>Second Meal</td>
<td>Second Meal</td>
<td>Second Meal</td>
<td>Second Meal</td>
<td>Second Meal</td>
<td>Second Meal</td>
<td>Second Meal</td>
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<tr>
<td>4 PM</td>
<td>Last Meal- 8pm</td>
<td>Last Meal- 8pm</td>
<td>Last Meal- 8pm</td>
<td>Last Meal- 8pm</td>
<td>Last Meal- 8pm</td>
<td>Last Meal- 8pm</td>
<td>Last Meal- 8pm</td>
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<td>8 PM</td>
<td>Last Meal- 8pm</td>
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<td>Last Meal- 8pm</td>
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<tr>
<td>Midnight</td>
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</tbody>
</table>

Image Adapted from https://www.healthline.com/nutrition/6-ways-to-do-intermittent-fasting#section7
What is allowed during the fast…

• Water

• Black Coffee (NO MILK, CREAM OR SUGAR)

• Zero-Calorie Beverages

What is NOT allowed during the fast…

• Solid or caloric foods & beverages
What foods should you eat?

• Avoid processed, high-calorie foods
• Lean proteins
• Fruits
• Vegetables
• Carbohydrates
• Fats


Check out the DFEND website for facts on:

• Foods in a healthy eating pattern
• How much of each food group is recommended
Are intermittent fasting & time-restricted feeding good for you…?
The Potential Benefits

• May help you naturally eat less\(^1\)
  • Some studies have found that TRF can help reduce the number of calories you eat
  • However this was not the case across all studies. Some did not observe a reduction in calorie consumption.
    • How to avoid this? Avoid high-calorie foods.

• Weight loss
  • THE KEY: Lower glucose levels when fasting because our body metabolically switches to using energy from fat instead of glucose (blood sugar) \(^2\) \(^3\)
  • Help reduce the risk of obesity-related disease\(^4\)
The Potential Benefits

• Improve health conditions\(^5\)
  • *Obesity, diabetes, cardiovascular disease, cancers, & neurological disorders*

• It may help reduce inflammation and improve disease-related conditions associated with inflammation\(^2\)
  • *Alzheimer’s disease, Arthritis, Asthma, Multiple sclerosis, Stroke*
The Possible Risks or Side Effects

- Hunger
- Fatigue
- Insomnia
- Nausea (do you have to eat with medication?)
- Headaches
- Concern about losing too much weight for some individuals

Image: https://www.sleepassociation.org/sleep-apnea/cpap-treatment/cpap-side-effects/
Current Research

• Most research uses diet records to look at the effects of IF or TRF and diet records are not always the most accurate

• Most studies have looked at short-term effects but the long-term health effects are lesser known

• Most research has been done in overweight and middle-aged adults so more research is needed in healthy weight, younger, and older adults.
Things to keep in mind…

• As with any healthy dietary pattern, the most benefits are gained when they are implemented as a long-term, or lifestyle, change.

• Pick what works best for you and your schedule! Also consider a gradual, phased-in schedule.

• It is important to make sure that the meals you DO EAT contain healthy fruits & vegetables and are balanced to meet nutritional needs including carbohydrates, fats, proteins, and other micronutrients.
Summary

1. IF involves full days of completely fasting or limited calorie intake

2. TRF is a specific type of IF that involves fasting and eating during set time periods each day

3. Research has showed that IF can have health benefits much like diets that focus on caloric restriction \(^8\)

4. It is important that you are still getting all the necessary nutrients from the food/meals that you DO EAT when not fasting

5. Pick what works best for you **AFTER** speaking with a licensed dietician or physician!

   *If you can’t stick to it long-term, it may cause more harm than good.*
Next week...

Carbohydrates & Dietary Fat