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Intermittent Fasting & Time-Restricted Feeding

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

Intermittent Fasting *and* Time-Restricted Feeding

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.*

Forms of Intermittent Fasting & Time-Restricted Feeding








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

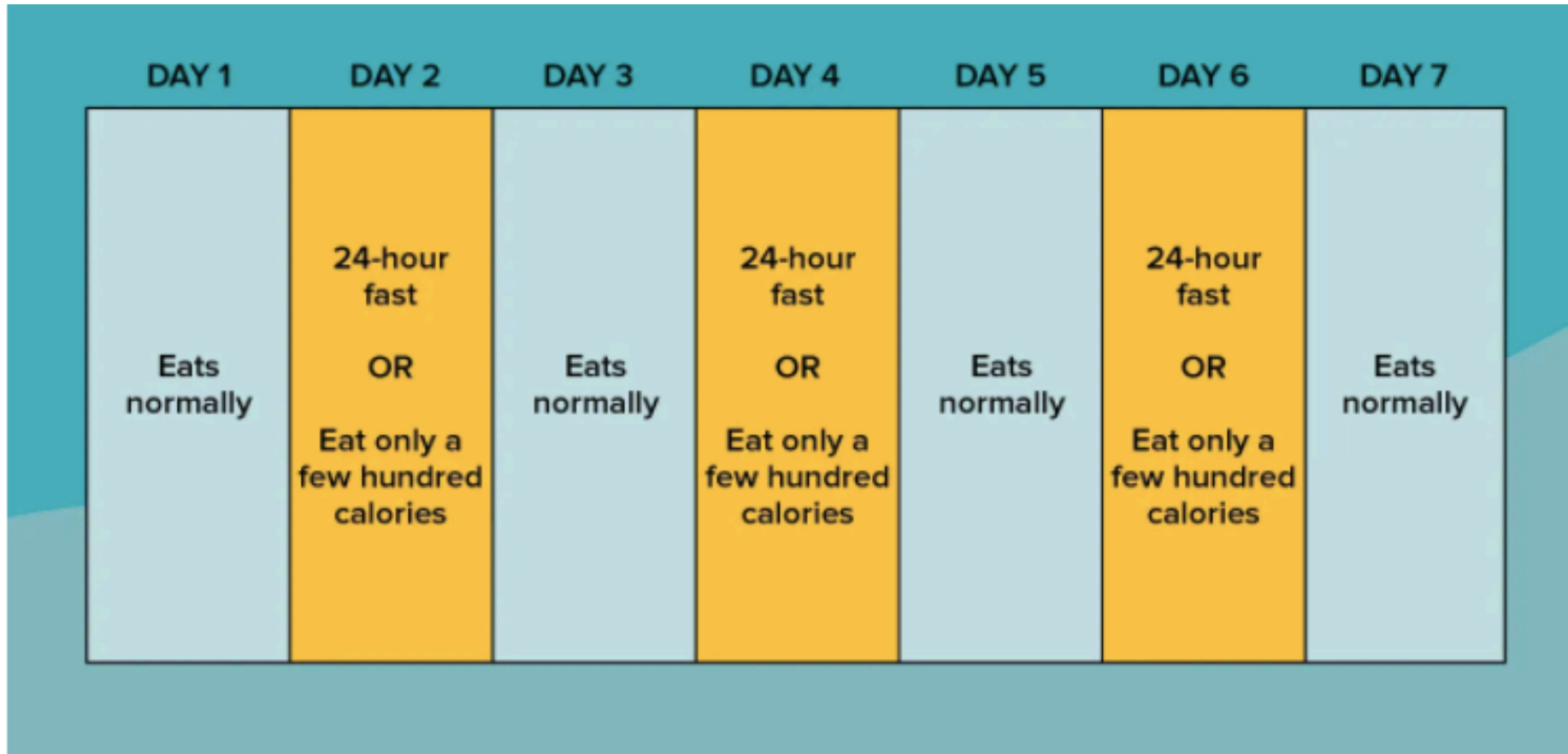
- 16/8 method
- 14/10 method

Intermittent Fasting

30	
Tues 31	
Wed 1	
Thurs 2	
Fri 3	
Sat 4	
Sun 5	

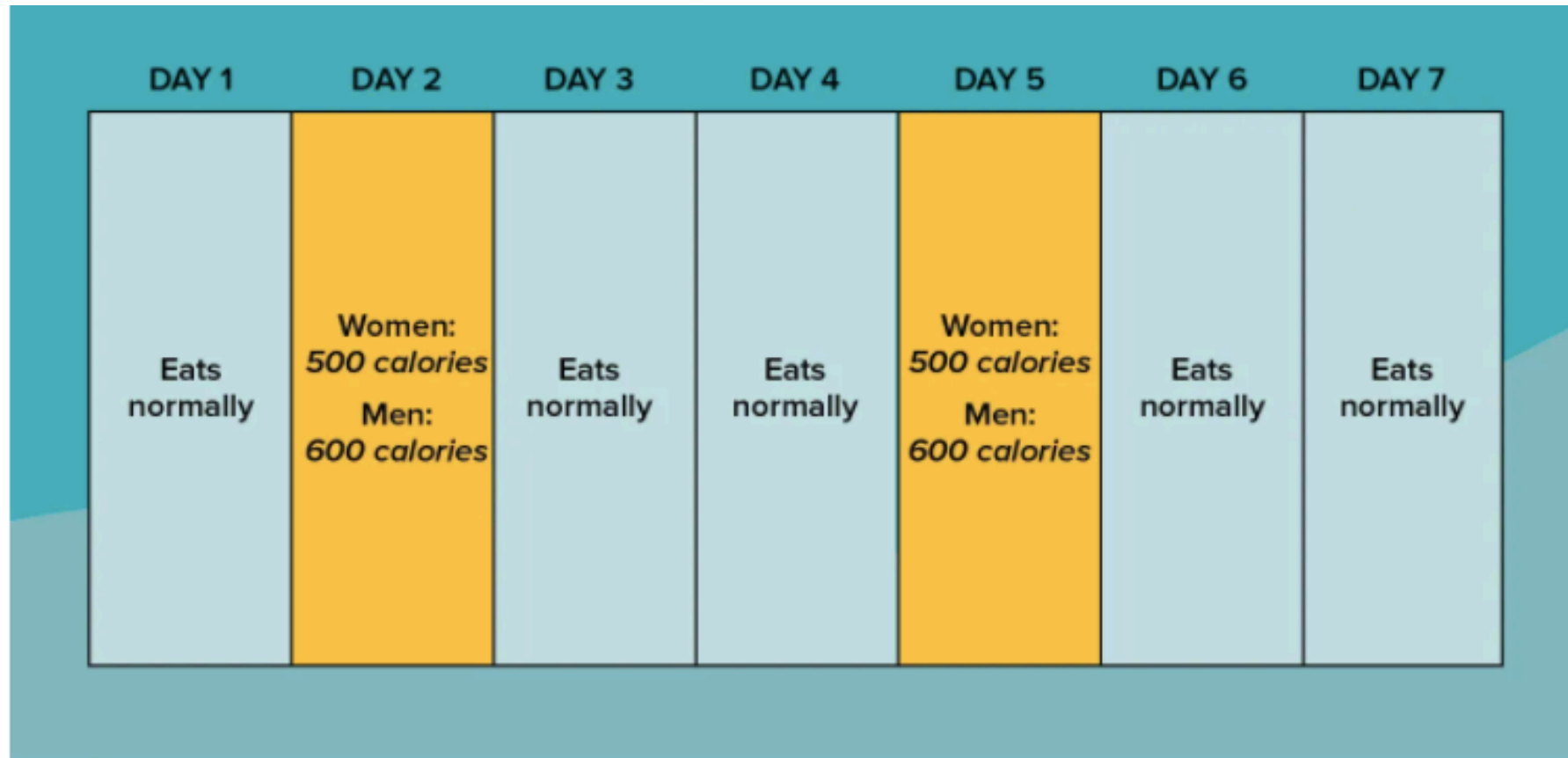
Alternate-day Fasting

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



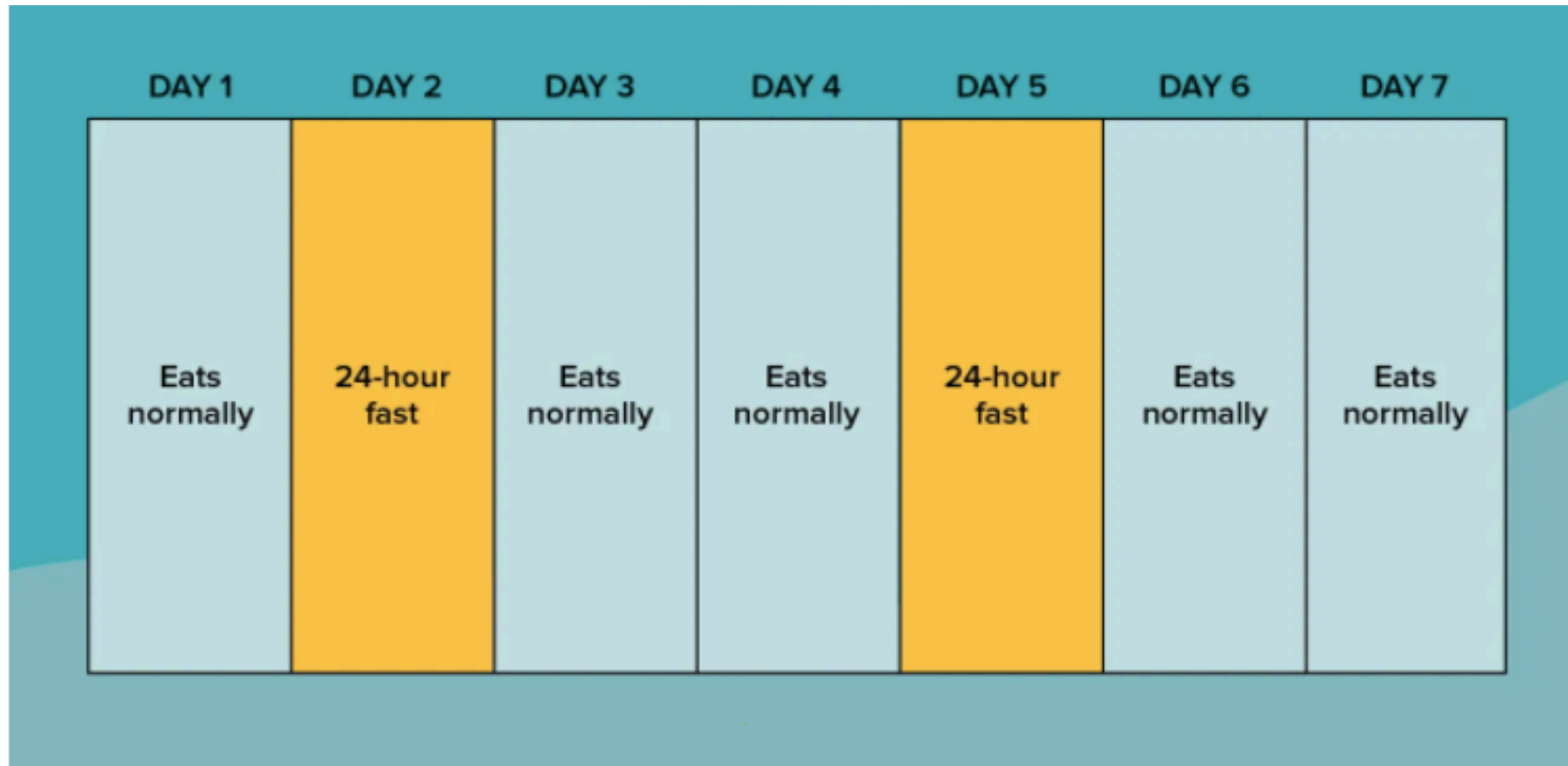
The 5:2 Diet (Twice-a-Week Method)

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

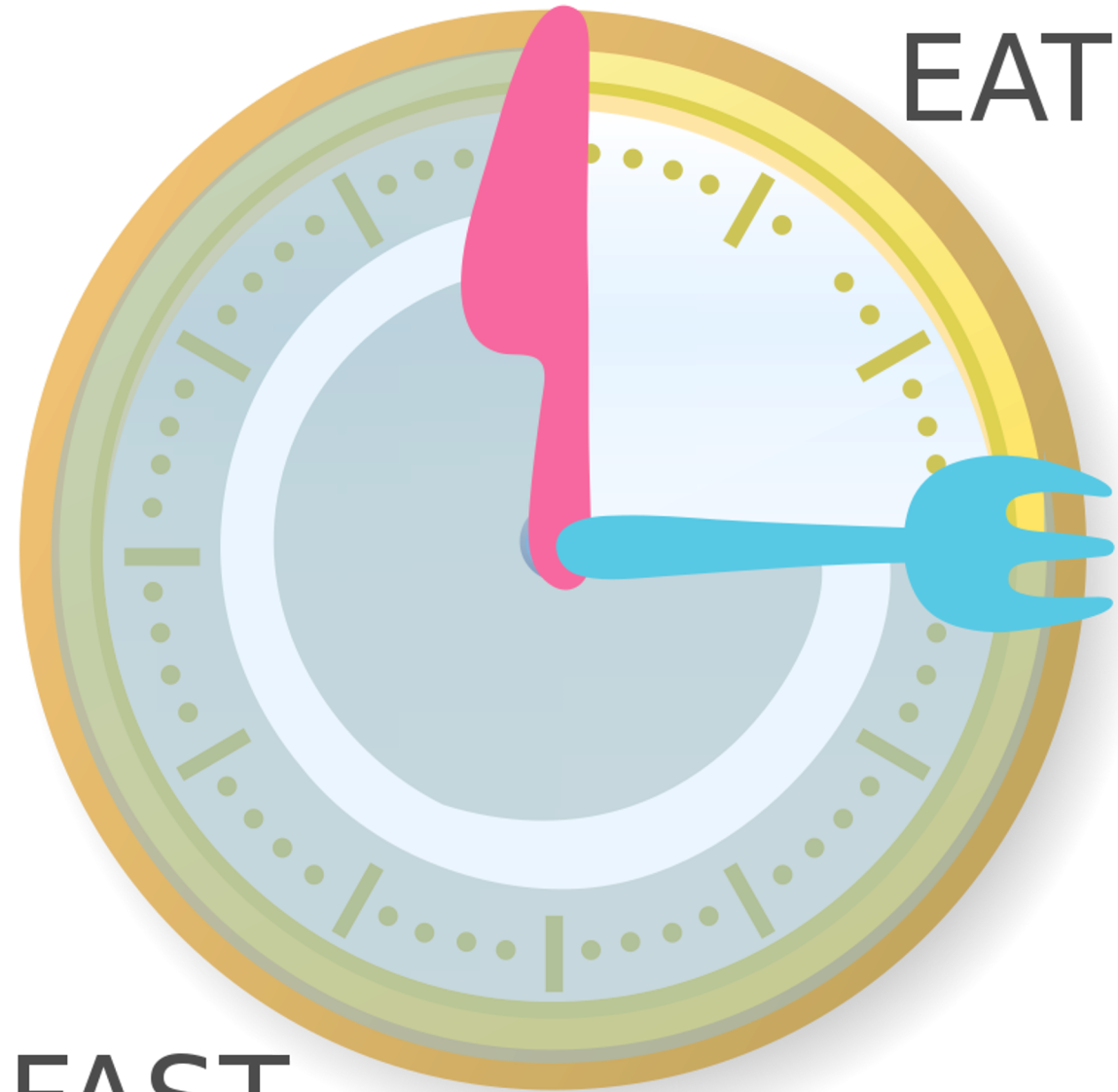
Eat small amounts of fruits and vegetables during the day & eat one huge meal at night during a 4-hour time period.

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
Midnight							
4 AM	Eating only small amounts of vegetables and fruits	Eating only small amounts of vegetables and fruits	Eating only small amounts of vegetables and fruits	Eating only small amounts of vegetables and fruits	Eating only small amounts of vegetables and fruits	Eating only small amounts of vegetables and fruits	Eating only small amounts of vegetables and fruits
8 AM	Eating only small amounts of vegetables and fruits	Eating only small amounts of vegetables and fruits	Eating only small amounts of vegetables and fruits	Eating only small amounts of vegetables and fruits	Eating only small amounts of vegetables and fruits	Eating only small amounts of vegetables and fruits	Eating only small amounts of vegetables and fruits
12 PM							
4 PM	Large meal	Large meal	Large meal	Large meal	Large meal	Large meal	Large meal
8 PM							
Midnight							

Spontaneous Meal Skipping

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

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
Breakfast	Skipped Meal	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
Lunch	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch
Dinner	Dinner	Dinner	Dinner	Skipped Meal	Dinner	Dinner



Time-Restricted Feeding/Eating



FAST

16/8 Method

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

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
Midnight							
4 AM	FAST	FAST	FAST	FAST	FAST	FAST	FAST
8 AM							
12 PM	First meal	First meal	First meal	First meal	First meal	First meal	First meal
4 PM	Last meal by 8pm	Last meal by 8pm	Last meal by 8pm	Last meal by 8pm	Last meal by 8pm	Last meal by 8pm	Last meal by 8pm
8 PM							
Midnight	FAST	FAST	FAST	FAST	FAST	FAST	FAST

14/10 Method

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

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
Midnight							
4 AM	FAST	FAST	FAST	FAST	FAST	FAST	FAST
8 AM							
12 PM	First Meal- 10am	First Meal- 10am	First Meal- 10am	First Meal- 10am	First Meal- 10am	First Meal- 10am	First Meal- 10am
4 PM	Second Meal	Second Meal	Second Meal	Second Meal	Second Meal	Second Meal	Second Meal
8 PM	Last Meal- 8pm	Last Meal- 8pm	Last Meal- 8pm	Last Meal- 8pm	Last Meal- 8pm	Last Meal- 8pm	Last Meal- 8pm
Midnight	FAST	FAST	FAST	FAST	FAST	FAST	FAST

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

<https://health.usnews.com/wellness/food/articles/intermittent-fasting-foods-to-eat-and-avoid>

Check out the DFEND website for fasts 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 less¹**

- *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 disease⁴*

The Potential Benefits

- **Improve health conditions⁵**
 - *Obesity, diabetes, cardiovascular disease, cancers, & neurological disorders*
- **It may help reduce inflammation and improve disease-related conditions associated with inflammation²**
 - *Alzheimer's disease, Arthritis, Asthma, Multiple sclerosis, Stroke*

The Possible Risks or Side Effects⁶

- 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 adults⁷*



Image: <https://www.sleepassociation.org/sleep-apnea/cpap-treatment/cpap-side-effects/>

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 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 restriction⁸
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



Images adapted from:
<https://365performance.com.au/blog/carbs-fats-proteins-good/>