

level2

Level2 Guide to Time Restricted Eating

What is Time Restricted Eating?

Time Restricted Eating (TRE) simply means setting a period of time that you will eat (eating window), and a period of time where you will NOT eat (fasting window).

Level2 supports the TRE patterns listed below:

- **12/12 - 12 hour eating window and 12 hour fasting window. Example:**
 - Eat 7 a.m. - 7 p.m. (12 Hours)
 - Fast 7 p.m. - 7 a.m. (12 Hours).
- **14/10 - 10 hour eating window and 14 hour fasting window. Example:**
 - Eat 8 a.m. - 6 p.m. (10 Hours)
 - Fast 6 p.m. - 8 a.m. (14 Hours)
 - **16/8 - 8-hour eating window and 16 hours of fasting. Example:**
 - Early 16/8
 - Eat from 8 a.m. - 4 p.m. (8 Hours)
 - Fast from 4 p.m. – 8 a.m. (16 Hours)
 - Late 16/8
 - Eat from 11 a.m. - 7 p.m. (8 Hours) and
 - Fast from 7 p.m. – 11 a.m. (16 Hours)

An important reminder: Please check with your provider before attempting an eight or 10-hour eating window.

The human body, with vital organs like the brain, heart, lung, liver and kidney, requires energy (from food) to perform all its normal function. From a metabolic standpoint, our body exists in one of two states:

1. Feeding
2. Fasting

When we eat, our body is mostly storing food energy, known as calories. When we fast, our body must use some of those stored calories. You could say that we are either **storing** calories (feeding) or **burning** calories (fasting).

How does the body know what to do? It depends on the hormone insulin. When we eat, insulin goes up, which tells our body to **store** calories. When we don't eat (fasting), insulin goes down, which tells our body to start **burning** the stored calories.

TRE, a form of intermittent fasting, simply allows the body to spend more time fasting, and therefore burning calories. Fasting is an entirely natural process that has been practiced for thousands of years. So, no, this is not a fad diet. It is literally the oldest dietary intervention in history.

What Happens When We Eat?

Foods are composed of three major macronutrients:

1. Carbohydrates
2. Proteins
3. Fats

Carbohydrates are chains of sugars, mostly glucose. Humans can store calories in two different forms:

1. Sugar (glucose)
2. Fat

When we eat a lot of carbohydrates, our body stores the excess glucose in the liver. Excess dietary protein is also converted into glucose for storage. When we eat dietary fat, our body stores those excess calories in the body fat storage system.

Stored glucose is easily available when needed but has limited storage space. When glucose is full, our body must store the rest as body fat. Calories stored as body fat are harder to get to, but there is almost an unlimited capacity. These two storage systems complement each other very well.

Think about your refrigerator and your basement freezer. Both are methods of storing food. The food in the fridge is easily available but has a limited capacity. Once full, you can put extra food in the basement freezer, which is harder to access, but there is more storage space.

Or consider the money in your wallet (purse) and the bank. The money in your wallet (purse) is easily available but limited in amount. The money in your bank account is harder to access but has an unlimited capacity for storage.

What Happens When We Fast?

When we fast, insulin falls, and the body must burn stored calories. Glucose is burned first since that is the most easily available fuel. If your stored glucose levels are low, such during a longer fasting period, or if you are eating a low carbohydrate diet, then your body burns body fat as a source of calories.

Intermittent fasting is a very simple concept. If your blood glucose levels are too high, such as with type 2 diabetes, simply extend the time your body is burning (as opposed to storing more) glucose to bring it down. If you want to lose body fat, you can simply give your body the time it needs to use up that body fat.

Isn't this harmful? Not at all. This is literally what our body's calories storage systems were designed for. Body fat is not there for looks – it's there as a store of calories when you are not eating, so let your body use it. How many calories are stored? A single pound of body fat contains approximately 3500 calories, which is enough energy for 2 full days of fasting.

Suppose you go to the grocery store 3 times a day to buy food, storing the extras in your fridge and freezer. Now both are completely full and overflowing. What would you do? Stop going to buy groceries, of course! That's precisely what TRE does for your body's store of calories (food energy). It is simply giving your body a break from eating.

The two key factors in our diet are:

1. What (and How Much) We Eat
2. When (and How Often) We Eat

BOTH factors are critically important to reverse dietary diseases like type 2 diabetes and metabolic disease. At Level2, we address both these factors with low carbohydrate diets and TRE.

Benefits of Fasting & Time Restricted Eating

Studies show that TRE offers many health benefits for people with type 2 diabetes, including:

- Lower blood glucose
- Healthy weight loss
- Increased fat burning
- Improved insulin sensitivity
- Improved heart health
- Decrease in inflammation
- Remission of type 2 diabetes

Many people who fast regularly report that it:

- Increases their day-to-day energy
- Improves their concentration and focus
- Makes them feel better
- Reduces hunger

Key Advantages to Fasting

- It's free! You will eat less food overall and you don't have to buy any new types of foods or supplements.
- It's easy to understand – no complicated rules.
- It's convenient - save time. Simplify your life. Spend less time preparing and eating meals.
- It's flexible – you can fast any time you want or don't want. You can do less fasting during the holidays and more afterward
- It works with any diet – vegan, gluten free, paleo, keto whatever.
- It's powerful – you can't eat less than zero

Won't I Get Hungry?

Yes. Expect it and prepare — especially at first, when you are not used to it. But there are ways to deal with the hunger that many Level2 members have found useful.

1. Ride the hunger waves – hunger doesn't continue to build. If you don't eat, your body will 'feed' itself from its stores and the hunger will pass.
2. Use natural appetite suppressants like:
3. Coffee
4. Green Tea
5. Apple Cider Vinegar
6. Salt in water
7. Cinnamon
8. Chia Seeds
9. Stay busy. Take your mind off eating, and hunger often vanishes

Here's a list of things you can do instead of eating:

- Take a bubble bath
- Listen to music
- Call your mom/ dad/ old friend
- Dust the baseboards
- Organize your jewelry/ room
- Do your taxes
- Spring cleaning
- Try a new hairstyle
- Research your next vacation Go for a walk outside
- Vacuum
- Pet your cat
- Walk your dog
- Go swimming
- Organize your dresser
- Read a book

- Try Zumba
- Pick wildflowers and put them in a vase
- Go to the library
- Watch old family videos/ YouTube
- Catch up on work

Here are some things NOT to do during your fast. They are often food related, making fasting more difficult:

- Social Media
- Grocery shopping
- Cook
- Go to the Mall – food courts everywhere
- Go see a Movie
- Party

Fasting Tips

Fasting is simple, effective, but not easy to stick to. Here are some tips to get you going:

- Drink tea, coffee, sparkling water to stay hydrated
- A small amount of cream or milk (1 oz) is acceptable
- Don't add any sugar, syrups, creamers or artificial sweeteners or flavors
- Avoid "diet" beverages with artificial sweeteners — the sweetness will make you hungry
- Try using a cinnamon stick to flavor your coffee
- Try apple cider vinegar in water

Break your Fast

What is the best way to break your fast? Pretend like it never happened! Eat as normally as possible. Avoid the temptation to eat a huge meal after fasting. That's a mistake we've all made and paid for with a stomachache! Break your fasts gently.

During fasting, you want to "feed" your body with its own glucose or body fat. If you over-indulge after a fast, you are undoing all the hard work that you just put in.

Fasting is not an excuse to eat whatever you want! When you are finished fasting, stick to low carbohydrate, natural foods.

Here are several other tips:

- Try breaking your fast with a small, pre-portioned snack and then waiting 15 to 30 minutes before having your meal. Many people find that this helps them refrain from eating too big of a meal.
- Eat your snack and your first meal slowly. It takes time for your body to realize that it's full, and if you eat too quickly you can get overfull before realizing it.
- Don't forget to continue to stay hydrated and drink water

- Maintain consistent protein and fiber intake during eating window

Typical Fasting Side Effects

Fasting is the process of switching fuel sources – from food calories to the calories stored in your own body (glucose or body fat). Sometimes, some troublesome things happen when you are undergoing this metabolic switch. Be sure to check your blood sugar levels to ensure that your levels are in the normal range.

Eating a low carbohydrate diet makes the transition to fasting easier and lessens the hunger. Make sure you eat plenty of of protein, fiber, and good fats to keep you feeling full longer.

<i>Side-Effect</i>	<i>Is it Normal?</i>	<i>What to Do</i>
Hunger pangs	Yes. Your body is used to a different eating schedule, so it's trying to remind you to eat.	Eating a low-carb, moderate protein, high-fat diet during your eating window helps reduce hunger pangs during fasting. You may also be thirsty or dehydrated, which can easily be mistaken for feeling hungry. Make sure to drink lots of water!
Gurgling stomach	Yes. Again, your body is used to a different eating schedule and so it is producing stomach acid to prepare for the meal it thinks is coming.	Try hydrating with water or mineral/electrolyte water.
Heartburn	Yes. Similar to a gurgling stomach, your body is preparing for a meal that doesn't arrive.	Try drinking mineral water, carbonated water with lemon, or taking an over-the-counter antacid that is sugar free. If you take prescription antacids, talk to your provider before taking it on fasting days. Avoid eating over-sized meals during your eating windows.
Headaches	Yes, especially the first several times you fast. You are likely dehydrated.	You may not be getting enough water or electrolytes. On fasting days, make sure to drink plenty of water. Try taking a bit of salt with your

		water, drinking mineral water or bottled water with electrolytes.
Light-headedness	Sometimes, especially the first several times you fast. You are likely dehydrated. Check your glucose and blood pressure levels just in case.	Same as headache remedy: make sure you are getting enough water and electrolytes on fasting days. Stay well hydrated and make sure you get enough salt and electrolytes. Extreme light-headedness, dizziness, and confusion are not normal. If any of these are happening, break your fast and reach out to your medical provider or 911 if necessary.
Constipation	Yes. If you eat less, you'll produce less waste.	It's not a problem unless you experience discomfort. If you do, try over-the-counter laxatives/stool softeners. You can also try a magnesium supplement. If that doesn't work and the discomfort persists or gets worse, stop fasting and discuss it with your care team. Eat plenty of fiber along with plenty of water during your eating window.
Fatigue	Sometimes, especially the first several times you fast. Check your blood sugar just in case.	Being a little tired or a little less motivated can be normal, especially as your body adjust to fasting. It's getting less fuel than it's used to and it may be under stress. However, chronic or extreme fatigue is not normal. If this is happening to you, break your fast and reach out to your medical provider or 911 if necessary.
Irritability	Yes, especially the first several times you fast.	The body systems that regulate appetite also regulate mood, and when

		you begin fasting those systems must adjust to a new schedule. Make sure you are getting enough sleep and eating balanced meals during your eating windows.
Sleep	Yes.	Some people have increased energy during fasting, so much so that they cannot sleep. Stay busy and go to bed when tired.

Fasting and Blood Sugars

During fasting, your body uses glucose as a source of energy. If you are not taking any medications for diabetes, your blood sugar should not go too low. If it does, stop and seek medical attention.

If you are taking diabetes medications, then the combination of the medication and the fasting may push your blood sugars too low, and you may feel the symptoms of sweating, tremors and feeling anxious. Stop and seek medical attention. Your medications may need to be adjusted. The goal of fasting in type 2 diabetes is to lower the blood sugars, but if it goes too low, you may be over-medicated.

Sometimes, the blood glucose can go **up** during fasting. This is normal and does not mean you did anything wrong. Ask yourself – where did this glucose come from? It was the glucose stored in your liver that is being released into the blood. That’s what is supposed to happen. If your liver has a lot of glucose, it may be a little over-exuberant in releasing it when allowed, just as an overfilled balloon releases air more quickly. It means that you have more work to eliminate the excess glucose from your body.

Exercise & Activity During the Fasting Window

You can do all of your normal activities during your fasting window, including exercise. Remember that your body will get all the energy it needs from your stores of calories (glucose and body fat).

At first you may have less energy or get winded more easily, but you may also find that you have more energy! And eventually, your body will adjust. So, keep up with your normal activities.

If you are taking diabetes medications and add an activity to your schedule that involves intense exercise during your fasting window, discuss with your medical provider first.

You can do all your normal activities during fasting. But if you decide to try something new and you are taking diabetes medications, discuss with your prescribing medical provider first. At all times, if you are not feeling well, stop fasting and talk to your Level2 care team.

Common Pitfalls of Time Restricted Eating and How to Avoid Them

- **Using fasting as an excuse to eat poorly**
 - If you overeat junk food, carbohydrates and sweets, you will cancel out all the benefits of your fast (not to mention make your next fast harder).
 - Maintain a balanced diet during your eating window – consider increasing protein and healthy fat intake
- **Being sedentary**
 - Stay active when you are fasting. Psychologically, some people assume they won't have any energy when they are fasting and they'll spend a lot of time sitting around. However, your body has plenty of energy stores. Plus, staying active will keep you busy and less likely to eat out of boredom.
- **Not staying hydrated**
 - It is important to drink even more water than usual when fasting since your body isn't getting any liquid from food.
 - Try different ways of drinking water – add fruit, try flavored sparkling water, unsweetened iced tea with lemon, etc.
- **Obsessing about food**
 - Thinking about food all the time will just start hunger cycles and make it harder to fast. Don't spend all your time planning meals, thinking about food and fasting, or talking about food and fasting. If you find yourself obsessing about food, find something to distract you.

Making TRE Easier with a Supportive Environment

Making a new lifestyle change and trying to sustain it can be challenging. One practical way of supporting yourself on this journey is to create an environment that promotes the behaviors you are striving for. This can include things like your workspace, in the home and the kitchen, social gatherings, etc.

Below are some simple ways to set yourself up for success when starting and maintaining Time Restricted Eating:

- Make sure you have easy access to your favorite fasting beverages (e.g., sparkling water, black coffee, cinnamon tea, water with fresh lemon).

- Put food away in cupboards, the pantry, or the refrigerator. Out of sight, out of mind!
- If your pantry doesn't have a door, consider covering it with a curtain.
- Avoid being places where food is cooking, especially during mealtimes, and especially during your first week or two of fasting. Food smells trigger hunger or cravings.
- Find an activity, such as going on a walk or running errands, when other people in your home are cooking/eating during your fasting window.
- If you're unable to leave an environment where people are cooking or eating while you're fasting, find an activity that keeps you distracted.
- Put away things that remind you of eating, such as TV trays, you might otherwise always leave out.
- Fit fasting into your life. Don't fit your life into fasting. If you have a social gathering that involves food, then plan around it. Fasting is flexible. Maybe you fast more before the gathering, or after.

Talking with Your Family & Friends About TRE:

It is a good idea to talk with your close family members (especially if they are in the same household) and friends about your interest in Time Restricted Eating. This provides your support system with understanding of how TRE works, why you are excited about it, and how you it will look like for you. This will help provide an environment where your social circle is respectful of your eating patterns.

Trying and maintaining TRE with someone you are close with is a great way to make TRE easier, especially if you live in the same household. Talk with your partner or close friend that might want to join you in trying TRE – this helps to build some accountability and comradery around your shared eating patterns.

Recovering from a Setback

There will certainly be times when you break your fast earlier than planned, and that is completely normal. Maybe it's because you had a health concern, maybe someone offered you food and you didn't want to turn it down, or maybe you just really wanted a snack. Regardless of the reason why, don't be hard on yourself. We all experience setbacks and changing the way you eat can be challenging!

If you experience a setback, try not to feel stressed out and don't give up all together. After all, you'll get another chance to fast in a day or so. Instead, decide to learn from it: what triggered you? Is there a way you can avoid that trigger or handle it differently next time it comes up?

If you break your fast, make sure to just continue to stay with your regular schedule. For example, continue to eat, as usual, during your non-fasting periods, and then begin your fasting period again as usual.

For Level2 Members Proceeding with Medication Management:

- Do not change the TRE window without contacting your provider first

- If you do not feel well after starting TRE, stop and let your provider know
- Certain TRE protocols may not be advisable in the following medical conditions. Contact your provider if:
 - You are pregnant or breast feeding
 - You have end state renal disease
 - You are in active treatment for cancer

©2022 United HealthCare Services, Inc. All rights reserved