

Week 6:

Intermittent Fasting

Aim: Regulate blood sugar, induce cellular healing and cleaning, improve energy levels, weight reduction

The Gist: Skip a meal

What to expect?

Clearer cognition, increased energy, improved blood sugar, reduced inflammation and fat reduction and super easy preparation!

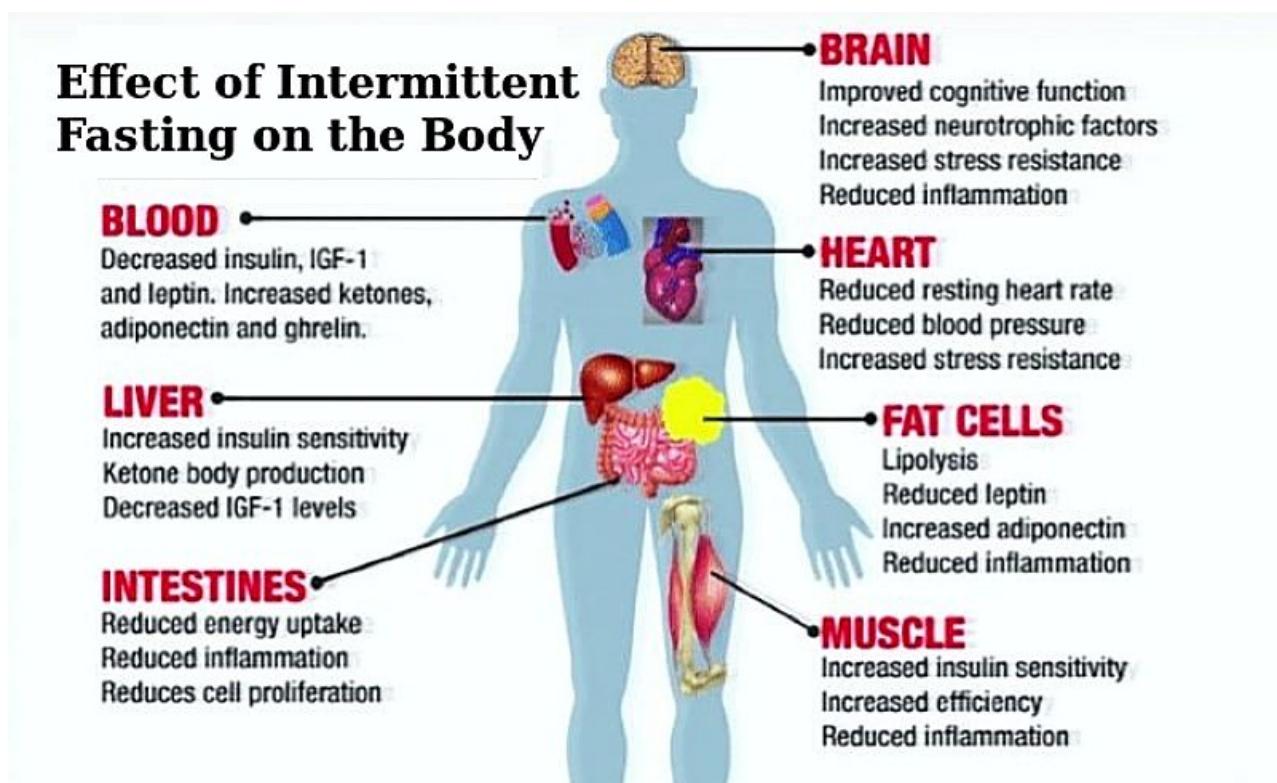


“The best of all medicines is resting and fasting” – Benjamin Franklin

What is fasting?

Fasting is abstaining from food for a given time by choice. Fasting is nothing new by any means. Many regularly practice fasting for religious reasons, and our ancestors were of course forced to fast without 3 square meals a day. Contrary to what you might expect, many people feel **increased energy** and mental clarity during or after a fast. Fasting practices are gaining popularity for their health, weight loss, and anti-aging benefits.

If the idea of not eating for 24 hours or more freaks you out, then Intermittent fasting (IF) might be more appealing. IF is alternating periods of eat and fasting and there are many ways to go about it. IF is a more user friendly way to fast because it means you still eat every day. IF is commonly done by fasting anywhere from 12 to 16 hours of your day, to eat in a smaller window of time. It's easily achieved if you don't eat after dinner, and wait at least 12 hours before eating breakfast.



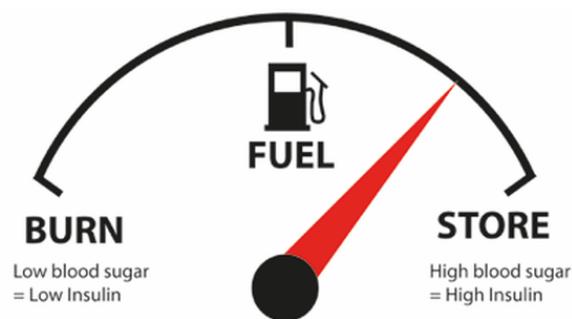
Why fast?

Fasting is a hormetic stressor, meaning it's a positive stressor because it creates a positive adaptation. Fasting promotes a cellular repair process called autophagy and has been shown to improve insulin sensitivity and blood sugar regulation, reduce inflammation and oxidative stress, improve brain health and of course assist weight loss. Simply put, fasting cleanses the body of unhealthy or unnecessary cellular debris.¹

Given that eating is one of the most inflammatory things we do to our body every single day, giving the digestive system a break can be a powerful healer for those who have gut issues, blood sugar problems, reduced immunity, or chronic health challenges. When we feel sick, we often naturally lose our appetite, our bodies way of decreasing inflammation, and using energy for repair processes.

Many of us struggle with blood sugar issues, and a lack of 'insulin sensitivity', meaning we struggle to get energy from our food efficiently. Insulin is the fat storing hormone, and as we lose sensitivity to insulin, the cells become insulin resistant, and struggle to accept glucose (energy) in from the blood. If we are caught on the perpetual blood sugar roller coaster, our body experiences accelerated aging, stress, and is primed for cravings and fat storage.

Fasting is a great solution for many to quickly reset insulin receptors to become more sensitive. Since all foods raise insulin levels, fasting is a great solution. When we fast, we tap into stored energy, and our fat cells release fat to use for fuel.



Fasting Benefits

- Fat burning – the fat cells can finally release stored energy to use as fuel
- Fasting normalises insulin receptors to help your cells be able to better use blood glucose.
- Fasting normalises leptin receptors. Leptin, the satiety hormone can become resistant if we constantly overeat, and fasting can help reprogram us to tell when we are satiated.
- Ghrelin the hunger hormone is often dysregulated with poor nutrition or blood sugar issues. Even after weight loss, your ghrelin ‘set point’ might still be programmed for your higher weight, meaning your thinner body still has your fatter bodies appetite!
- Burning fat or ketones is a cleaner burn for the mitochondria in the cells, producing more energy and less oxidative stress. Burning ketones are a more stable source of energy.
- Cellular cleaning: fasting increases a process called apoptosis, and autophagy, forms of cellular cleansing, which renews cell populations, essential for good health.
- Gut health - A stressed gut can't digest effectively, is often leaky and prone to inflammation. Giving digestion a break, ramps up healing.
- Lower triglycerides as a result of eating less carbohydrates, and less insulin spikes
- Lower inflammation and oxidative stress
- Lower cortisol levels: Stress in any form increases cortisol levels which raise blood sugar. If the body has a stable source of fat as fuel, the stress response will not be ignited.
- Fasting is one of the few things proven to stimulate adult neurogenesis, the growth of new brain cells
- It's easy!

Fasting Misconceptions

There are a few common misconceptions about fasting. Many people think it fasting will slow metabolism, and increase fat storage, or that muscle will be lost. None of these are true!

“Our bodies do not shut down in response to short term fasting. in fact, metabolism revs up, not down during fasting. This makes sense from a survival standpoint. If we do not eat, or bodies use stored energy as fuel so that we can find more food.

The human body evolved to survive periods of fasting, we store energy as body fat and use this fuel when food is not available. Muscle, on the other hand, is preserved until body fat becomes so low that the body has no choice but to turn to muscle, this will only happen when body fat is less than 4%”ⁱⁱ

Who Should and Shouldn't Fast

Good candidates for fasting are those who are trying to lose weight, people with metabolic problems like type 2 diabetes, anyone wanting to promote cellular health and improve longevity, people with neurological conditions, and people with weakened immunity or those fighting chronic infections. Those who benefit most from fasting are people who are unwell, highly stressed (if you are stressed your body will often have compromised digestion), traveling, obese, or just want to improve their health status.

Many people don't do so well with fasting, and there are several populations or conditions for which fasting is contraindicated. Children, pregnant women, people with eating disorders, people suffering from Hypothalamus-Pituitary-Adrenal Axis Dysregulation (formerly termed adrenal fatigue), or hypothyroidism (because research suggests fasting decreases conversion of T4 to T3) should avoid fasting. Men tend to do better with fasting than females do.

If you attempt to fast and notice symptoms like anxiety, irritability, feeling wired but tired, shaky etc, extreme cravings and hunger, they it's a sign you probably shouldn't fast. For these reasons, intermittent fasting or a compressed eating window is much easier to implement and ensures you still get the benefits of a fast, and adequate calorie intake. Fasting practice is like building a muscle and it takes time to build up and allow your body to adjust. Going too low on calories too quickly can cause problems with energy, sleep and brain function, and can cause weight loss resistance. When we fast our body switches from burning food, towards creating ketones for fuel. The ability to use ketones for fuel often needs to be trained, especially if you are currently eating an inflammatory diet.

If our body doesn't have the required energy intake, or cannot produce ketones efficiently in fasting, survival mechanisms can be triggered which can cause the body to slow down energy expenditure, store more calories, and then to increase appetite, a vicious cycle that results in metabolic problems and weight gain. So start slowly with fasting, and don't jump straight into a full day fast!

How To Fast

Before you begin, you need to expect your first few attempts might be tricky or uncomfortable. An inflammatory diet high in refined carbohydrate and sugar will make fasting tough because it primes you to experience unstable blood sugar with extreme rises and subsequent crashes in blood sugar, making it impossible to not crave food constantly.

To prime your body for fasting, it's best to help your body become fat adapted, and able to use fats for fuel. This involves eating a higher fat, low carb (HFLC) diet to help lower your blood sugar and insulin levels, and enable your fat cells to release fat, so your body starts to use ketones for fuel. Fasting works best coupled with a HFLC diet.

Ghrelin, the hunger hormone, rises and falls in a natural circadian rhythm and is lowest around 8:00am, and highest 8:00pm. Correspondingly, hunger is lowest in the morning, and the easiest way to begin fasting for many people is to simply skip breakfast. Fasting at night can decrease sleep quality, so morning or daytime works best for most people.

Start with a 12-16 hour fast, by stopping eating after your dinner, and not eating until 12-16 hours later. During a fast you can opt for water only, or fats only, because fats don't interfere with blood sugar, and still allow you to get the benefits of fasting, while feeling full with highly satiating fat. Carbohydrates and protein disturb the benefits of fasting, so avoid those. Fats like coconut oil, ghee, butter are great options to assist in fasting, and we like [bulletproof coffee](#) for its ability to keep you full, boost function and assist fasting. For those who struggle at the thought of not eating, or have some blood sugar issues, this can be a great solution to tell your brain you are full, so you don't struggle with cravings. Bulletproof coffee has the unique benefit of medium chain triglycerides (MCT) oil (exogenous ketones) which helps push you into ketosis, so you are a fat burning machine.

Post fasting meals are important. Eating a nutritious meal is important after a fast to take advantage of your improved blood sugar levels and metabolism. The worst thing you can do is go and binge on a pizza or processed meal and undo all of your good work!

'A little starvation can really do more for the average sick man than can the best medicines and the best doctors.' – Mark Twain



¹ The Complete Guide to Fasting, Jimmy Moore, Jason Fung
ⁱⁱ The Complete Guide to Fasting, Jimmy Moore, Jason Fung