

Table of Contents

Fasting 101: Introduction	3
The Benefits of Fasting	4
How Fasting Works	5
Fasting Myths	6
Types of Fasting	7
What To Eat When You're Eating	9
Fasting Resources	10

Introduction

Here at Restoration Healthcare, we're on a mission to restore hope and optimize the body's innate ability to heal from within through the compassionate delivery of functional medicine. Sometimes, depending on your treatment plan, that may include recommending you participate in a medically-supervised fast.

As you'll learn in this primer, fasting - the intentional abstinence or reduction from consuming some or all food, drink, or both, for a specific period of time – has as many health-related benefits as it does widely held but largely false beliefs.

Looking back over the annals of time, it's easy to see that we humans have been doing it (choosing not eating for set periods of time) for as long as our ancestors can recall. Fasting has



been around for centuries as a spiritual practice – promoted by the likes of Buddha, Jesus, and Muhammad. It was even mentioned as a means of promoting healthy living as early as 400 B.C. by Hippocrates, with the sentiment echoed later by Paracelsus, Benjamin Franklin, and Mark Twain.

What we offer here, in this Restoration Healthcare primer on fasting, is an overview of what actually occurs to your body when you fast. In addition, we dispel myths - or "wrong thinking" - about the act of fasting itself. And finally, we offer suggestions related to the various methods of fasting, as well as information on where to go to learn more about fasting itself.

As always, should you have any questions about anything referenced in this primer or about the role fasting may play in your journey to optimal health, check with your Restoration Healthcare doctor or health coach.

The Benefits of Fasting

When you choose to fast, you choose not to eat certain foods or all foods for specific periods of time. And when you do so under the supervision of your Restoration Healthcare doctor or health coach, the health benefits of fasting become abundantly clear.

For example, when properly undertaken, fasting:

- Improves memory and concentration
- Induces weight and body fat loss
- Lowers blood sugar levels
- Increases insulin sensitivity
- Boosts energy
- Lowers blood cholesterol
- Extends life
- May aid in prevents Alzheimer's disease
- Slows down the aging process by promoting autophagy, the body's process of cellular cleansing. Damaged cellular parts are discarded to facilitate replacement by new ones.
- Decreases inflammation
- Decreases bloating by eliminating excess salt and water

Additional advantages of fasting include:

- It's simple and convenient
- Fasting is cost-effective
- Powerful fasting often works when other diets fail
- Flexible you can fast or stop fasting at any time. If at any time you do not feel well (not just hunger pangs), you can eat.
- Works in combination with any diet



How Fasting Works

What happens when we eat?



What happens when we fast?

BODY STORED SUGAR BODY FAT NO FOOD DECREASES (GLUCOSE) IS **BURNED BURNED INSULIN**

In addition to burning body fat, fasting encourages body to increase adrenaline, which provides added energy and speeds up your metabolism. The growth hormone increases also, improving muscle mass and decreasing body fat.

Fasting Myths

Myth No. 1: Fasting puts you in starvation mode.

Starvation mode refers to the notion that our metabolism slows down when we are not constantly eating. Studies demonstrate that this happens when reducing calories, but not with fasting. In fact, fasting has been shown to increase metabolism! If we do not eat, the body cannot decrease metabolism to zero (we have to burn some calories to just to stay alive). Instead, the body switches energy sources from food to stored body fat.

Myth No. 2: Fasting makes you burn muscle.

It doesn't make sense to store fat as an energy source and then turn to burning muscle when food is not available. It would be like storing firewood for heat, but then burning your furniture instead. We actually lose less muscle during fasting. Remember this: Fasting stimulates growth hormone secretion, which helps maintain lean body mass. Only when body fat falls below 4 percent (much lower than the typical 8 percent body fat percentage of elite athletes) will the body turn to burning protein from muscle for fuel.

Myth No. 3: Fasting causes low blood sugar.

Our bodies are adapted to not always having food readily available. If food isn't available, our body will derive the glucose by breaking down glycogen (short-term glucose storage) in the liver. After the glycogen stores are used up, the liver begins making glucose by breaking down stored body fat.

Myth No. 4: Fasting results in overeating.

Studies do show a slight increase on the first day after fasting (for example, an almost 500-calorie increase from 2,436 to 2,914 after a one-day fast). When you consider that a person might otherwise consume 4,872 calories over those two days, there's still a net deficit of 1,958 calories.

Myth No. 5: Fasting deprives the body of nutrients.

During fasting, the body holds onto much of its essential nutrients, fatty acids, and amino acids, and recycles them instead of excreting them. For fasts lasting longer than 24 hours, consuming a multivitamin prevents any nutritional deficiencies.

Types Of Fasting



During any of the following fasts, bulletproof coffee (coffee with butter and/or MCT oil), plain coffee or tea is allowed. Unlike proteins and carbohydrates, fats elicit a minimal insulin response, so the fasting state is still maintained.

For longer fasts, homemade bone broth is acceptable, but it does provoke a bit more of an insulin response. Because it contains some protein, bone broth might inhibit autophagy – the programmed cell death that clears room for generation of new cells. However, the insulin response will still be considerably lower than an actual meal, enabling you to fast for a longer period of time. If weight loss is your objective, use the bone broth.

Note: Regardless of your approach to fasting, be diligent about staying hydrated by drinking plenty of fresh filtered water.

Intermittent Fasting

The range of your fast can extend from 12 to 23 hours per day. We usually suggest 16-hour fasts simply because they are more effective than 12-hour fasts, but more doable than 23-

Types of Fasting continued

hour fasts. This means limiting your eating to an eight-hour time frame – for example, 11 a.m. to 7 p.m., or 9 a.m. to 5 p.m. The latter will have a greater benefit than the former because a larger rise in insulin is seen in the evenings.

24-hour Fasts

One-day or 24-hour fasts involve fasting from dinner to dinner (or breakfast to breakfast, whatever your preference), so you are still getting one meal daily. For example, if you finish dinner at 7p.m. on one day, you fast until 7pm the next day. One advantage to this, of course, is you can sit down with your family for a meal. These can be done daily or as often during the week as you would like. Perhaps one to three times per week would be more palatable, but again – check with your Restoration Healthcare doctor before beginning any fast.

5:2 Diet

The 5:2 Diet (a/k/a The Fast Diet) consists of five normal eating days and two low-calorie (500 to 600 calories) days, which can be consecutive or spaced apart. The 500 to 600 calories can be eaten in a single meal or spread over the course of the day.

Alternate-Day Fasting

This involves fasting every other day. As with the 5:2 Diet, 500 to 600 calories are allowed on fasting days.

36-hour Fasts

With this fast, you skip meals for an entire day. For example, if you finish dinner at 7p.m. on Day One, and you fast through all of Day Two (including the up until 7a.m. on Day Three).

Extended Fasts

With an extended fast, you fast for as many consecutive days as you desire in order to achieve weight loss or health-related objectives. A good multivitamin (preferably one recommended by your doctor) will likely prevent any nutritional deficiencies. And it should go without saying – be sure to drink plenty of fresh filtered water if participating in an extended fast.

What To Eat When You're Eating

If your medically supervised fast allows for the consumption of a set number of calories per day, be sure to:

- Eat whole, unprocessed foods
- Avoid sugar/sweet tastes
- Avoid refined grains
- Eat a diet high in natural fats

Note: Restoration Healthcare patients are encouraged to keep carbohydrates under 100 grams per day (less than 50 grams per day for cancer patients).



Fasting Resources

To learn more about fasting, we recommend the following resources:

- Bulletproof Radio Podcast Episode No. 367: Why You Shouldn't Fear Fasting with Dr. Jason Fung and Jimmy Moore
- Restoration Healthcare Blog post: <u>Understanding the benefits of Intermittent Fasting</u>
- Johns Hopkins Health Review article: <u>Are There Any Proven Benefits to Fasting?</u>
- Dr. Jason Fung's 2016 book: The Complete Guide to Fasting: Heal Your Body Through Intermittent, Alternate-Day, and Extended Fasting

ATTRIBUTION

Portions of this Restoration Healthcare primer on medically-supervised fasting was derived from Dr. Janson Fung's 2016 book, The Complete Guide to Fasting: Heal Your Body Through Intermittent, Alternate-Day, and Extended Fasting.

DISCLAIMER

Medical supervision is recommended for any Restoration Healthcare patient attempting to fast for 24 hours or longer. Fasting is not recommended for pregnant/lactating women, diabetics, individuals under 18 years of age, anyone with an eating disorder, or anyone with an illness or medical condition where fasting is not recommended.



We're on a mission to restore hope and optimize the body's innate ability to heal from within through the compassionate delivery of functional medicine.

> Restoration Healthcare, Inc. 18818 Teller Avenue, Suite 170, Irvine, CA 92614

Phone: (949) 535-2322 | Fax: (949) 535-2330 | info@rhealthc.com | www.RHealthC.com