

# Simple Hacks That Make Fasting Easy

Analysis by Dr. Joseph Mercola



#### **STORY AT-A-GLANCE**

- > Key dietary principles for losing excess weight and keeping it off include getting at least half or more of your daily calories from healthy fats, eating the right type and amount of protein, avoiding inflammatory foods including inflammatory vegetables, and having periods of time when you fast (abstain from food)
- A primary benefit of fasting is that it makes your body better at making energy. This in turn has several benefits, one of which is improved blood sugar regulation, which will allow you to stave off insulin resistance, Type 2 diabetes and all the diseases of aging associated with that
- > Fasting is also antiaging because it improves autophagy in your mitochondria and cells
- A simple hack that will make fasting easier is to raise your ketone level with black mycotoxin-free coffee, with or without added MCT oil and grass fed butter
- > Another fasting hack is to make sure you're getting enough prebiotic fiber. Adding prebiotics to your morning coffee is compatible with fasting and will prevent hunger

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Over the years, I've done several interviews with Dave Asprey, a Silicon Valley entrepreneur, founder and CEO of bulletproof.com, including one in which we discuss how ketones may be useful against COVID-19. Here, we discuss his latest book, "Fast

This Way: Burn Fat, Heal Inflammation, and Eat Like the High-Performing Human You Were Meant to Be."

As the name implies, the book is about fasting and all the magnificent health benefits it provides. Is it for everyone? No, and he will be the first to admit that. But it can benefit most of us, certainly, those of us who are either overweight or obese. In his book, Asprey tells his own journey into fasting and what he's learned along the way.

"The word fasting is associated with pain, and I wanted to teach people some hacks for fasting," Asprey says. "I also put a whole chapter in for women, because fasting doesn't work for everyone and there is no one best kind of fasting. The evidence seems pretty clear that fasting the same way every day or every week is probably also not the best strategy.

So, how do you make it so you can fast without pain when you have stuff to do? And how do you make it so you fast with all of the emotions of fasting when you want to really dig deep and do the meditation, personal development side of fasting? Sorting through all that hasn't been done in a book, so that's why I wrote it."

# **Breaking the Starvation Myth**

As noted by Asprey, a common concern is that fasting will put your body into starvation mode, thereby actually preventing fat loss. This is a persistent belief, but it's not true. That said, some strategies will indeed activate starvation mode, such as when you're eating a low-calorie diet for months on end. Asprey tells a personal story that encapsulates this dilemma:

"On my journey of losing 100 pounds, I was doing what everyone said would work. I went to the gym an hour and a half a day, six days a week, halfway tough cardio until I could max out all but two machines, and I would do 45 minutes on the treadmill at a 15-degree angle wearing a backpack — really just pushing it.

And, I went on a low-fat, low-calorie diet. At the end of 18 months, I'm sitting at a Carl's Jr. with friends. I'm eating the chicken salad with no chicken and no dressing and my friends are eating double western bacon cheeseburgers. I looked around and I'm like, 'I exercise more than all my friends and I eat less than all my friends, even though I'm taller than they are. Maybe I'm just eating too much lettuce.'

To have a 46-inch waist after that much exercise, low-calorie dieting and all the suffering and intense hunger ... My god, the sense of personal failure that comes with that, it's one thing that holds people back and makes us stay heavy.

What's going on there is there is a hunger set point that is caused by ghrelin, one of the hunger hormones. It's a precursor to leptin. Research has shown that when you lose weight using a low-calorie diet or excessive exercise — and I was doing both — your hunger set point will remain your fat set point, and it will always do that.

The thing that turns your set point for hunger to your actual weight instead of to your fat weight is ketones. So, if you were to fast for a couple days or use the fasting hacks that I talk about in the book — there are three fasting hacks to turn off hunger, and two of them are going to help get your ketones up — even just one dose will reset your hunger levels."

As explained by Asprey, yo-yo weight loss and weight gain occurs because you're on the wrong diet. Key dietary principles for losing the excess weight and keeping it off include:

- Getting at least half or more of your daily calories from healthy fats
- Eating the right type and amount of protein
- Avoiding inflammatory foods, including inflammatory vegetables (culprits include lectins and oxalic acid, for example)
- Having periods of time when you fast (abstain from food)

# **Key Benefits of Fasting**

So, what are the main benefits of fasting? Is it just the ease of weight loss? As explained by Asprey, there are many other health benefits to fasting beside the fact that stubborn weight will fall off. Importantly, the primary benefit of fasting is that it makes your body better at making energy.

This in turn has several benefits, one of which is improved blood sugar regulation, which will allow you to stave off insulin resistance and metabolic dysfunction and all the diseases of aging associated with that. As noted by Asprey, if you can avoid cardiovascular disease, cancer, diabetes and Alzheimer's disease, you're probably going to live longer, as these are the primary killers.

Fasting is also antiaging because it improves autophagy in your mitochondria and cells. Autophagy is a natural process that cleanses and detoxifies your mitochondria and cells. By breaking down old, damaged organelles, fresh, new ones can be made to replace them. And, with healthy, new mitochondria, your body can make more energy, more efficiently.

"That's an unappreciated side of fasting," Asprey says. "High-intensity interval training will do something similar, but when you combine that with fasting, your body is like, 'Get rid of that old stuff.' It's kind of like a snake shedding its skin. It's that autophagy process that is a really big deal."

### The Most Important Fat to Avoid

As mentioned, about half or more of your daily calories should come from fats, but it's crucial to avoid certain types of fats. I'm currently writing a book on what I believe might be the primary disease-maker in the Western diet, namely omega-6 linoleic acid (LA).

LA makes up the bulk — about 90% — of the omega-6 consumed and is the primary contributor to nearly all chronic diseases. While an essential fat, when consumed in excessive amounts, LA acts as a metabolic poison.

The reason for this is because polyunsaturated fats such as LA are highly susceptible to oxidation. As the fat oxidizes, it breaks down into harmful sub-components such as

advanced lipid oxidation end products (ALES) and oxidized LA metabolites (OXLAMS). These ALES and OXLAMS are actually what cause the damage.

One type of advanced lipid oxidation end product (ALE) is 4HNE, a mutagen known to cause DNA damage. Studies have shown there's a definite correlation between elevated levels of 4HNE and heart failure. LA breaks down into 4HNE even faster when the oil is heated, which is why cardiologists recommend avoiding fried foods. LA intake and the subsequent ALES and OXLAMS produced also play a significant role in cancer.

HNE and other ALES are extraordinarily harmful even in exceedingly small quantities. While excess sugar is certainly bad for your health and should typically be limited to 25 grams per day or less, it doesn't cause a fraction of the oxidative damage that LA does.

Processed vegetable oils are a primary source of LA, but even food sources hailed for their health benefits contain it, and can be a problem if consumed in excess. Cases in point: olive oil and conventionally raised chicken, which are fed LA-rich grains.

Many now understand that your omega-6 to omega-3 ratio is very important, and should be about 1-to-1 or possibly up to 4-to-1, but simply increasing your omega-3 intake won't counteract the damage done by excessive LA. You really need to minimize the omega-6 to prevent damage from taking place.

### **Simple Hacks That Make Fasting Easier**

Contrary to popular belief, fasting doesn't have to be difficult or painful. Asprey details three fasting hacks in "Fast This Way." The first one is to increase your ketone level. As explained by Asprey, hunger hormones start shifting when your ketone level hits slightly below 0.5, which is not yet the level at which you enter nutritional ketosis. He explains:

"Ghrelin will drop at 0.38, so almost no ketones. The hunger that comes with the ghrelin turns off. But there's also a satiety hormone, the one that makes you feel full, which is called CCK or cholecystokinin. CCK, when you hit levels of 0.48, CCK makes you feel full. So, if you can get your ketones up to that level in the morning, then you will not pay attention to food.

The first step to get your levels up is mycotoxin-free black coffee — the Bulletproof beans are that. I did the original research about this. Anything that causes inflammation is going to make you hungry because inflammation just means the electrons that should be powering your thoughts are going to create inflammation in the body. They must go somewhere.

These toxins are present in very small amounts. Coffee that has more than five parts per million is illegal to sell in China, Japan and Europe, but it gets sent to the U.S., and we wonder why we get really hungry two hours after we have coffee and why we want sugar in our coffee.

It has to do with toxins, not coffee itself. A study at UC San Diego is really interesting. They found that the amount of caffeine present in two small cups of black coffee will double ketone production.

The second way is to make the coffee 'bulletproof.' And what that means is, you take your mycotoxin-free beans and you add some MCT oil. The 8-carbon chain (C8) MCT is the correct one. C8 MCT raises ketones four times more than coconut oil. [Then] you [add] butter and blend it or really shake it."

Asprey funded research at the University of Washington with Dr. Gerald Pollack, who determined that when water is mixed with grass fed butter or MCT oil, it creates a very large exclusion zone (EZ) in the water, and this EZ is important during fasting.

When you drink regular water, your body takes the water and puts it near your cell membranes, which are made of tiny droplets of fat. Body heat warms the water, converting it from bulk water into EZ water, which your body requires for ATP production and other biological processes, including autophagy and protein folding.

"When you put that tiny bit of butter and the MCT oil and you blend it in the morning, the MCT is going to raise your ketone levels very meaningfully. I can always get to 0.5 with just a Bulletproof coffee. But you're also getting this water in the form of the coffee that is already primed for your body to use it to start burning fat, to start making energy," Asprey explains.

"This is why taking a bite of butter and drinking a cup of coffee isn't going to do it for you. It's a different process. And I have noticed profound differences from doing that ... I have found that for women, in particular, starting out with this really helps, especially if you're over 40."

## The Importance of Prebiotic Fiber

A third fasting hack is to make sure you're getting enough prebiotic fiber. According to Asprey, long-term fasting and/or eating a carnivore-like, zero-carb diet for extended periods of time without cycling healthy carbs back in can alter your gut microbiota, which in turn can cause sleep disruptions.

# 66 Adding prebiotics to your morning coffee is compatible with fasting and will prevent hunger. 99

When you feed your gut bacteria with prebiotics, they convert the prebiotics into propionic acid and butyric acid (butyrate), and butyrate is very pro-ketogenic.

"In fact, you can get into a state of ketosis by taking a handful of butyrate capsules," Asprey says. "You want more butyric acid if you want to live a long time and have a healthy metabolism, and studies show massive hunger suppression when you do this.

So, if you put prebiotic fiber, which has essentially no flavor, in your coffee in the morning ... you'll also find that you care nothing about food. I was able to quadruple the number of species of [beneficial bacteria] in my gut using this. It's totally compatible with fasting and it turns off hunger like no one's business.

So now you're saying, 'Wait, a minute. I could have the coffee I was going to have anyway. I don't put the sugar and artificial crap in it. I get the mold-free coffee and then I have a choice of drinking a black, of adding butter and MCT, and/or adding prebiotic fiber.'

What you do then is you drink this and you just stop caring about food, you go into the zone and you have the best morning you've ever had. Then the next morning, maybe you only have black coffee or maybe you have tea or maybe you have nothing at all, but it's OK and it's even preferable to mix up your length and style of fasting."

### **Cyclical Keto and Fasting Are the Safest Approaches**

In the interview, Asprey discusses several of the diet traps that people get themselves into. As a general guidance, Asprey and I both agree that the best strategy to stay out of trouble is to cycle in and out of whatever routine you're doing, be it low-carb keto or fasting.

While you may need to be very strict in the beginning, once you're metabolically flexible, mix things up once or twice a week. Eat three meals instead of one and/or spread them out. Add in more carbs.

"The idea is to be flexible about your fasting regimen," Asprey says. "I don't even like the word regimen. It's just a practice that we do and it's a practice that makes us feel good, it makes us perform better. And it makes us age less, but doing it too much is a real danger.

If you're going to do something like a four-day fast, after about 48 hours, there's all sorts of additional forms of autophagy that turn on. Once every three or six months, doing a 48-hour fast is really well-advised. But man, as a weekly practice, that'll mess you up ...

Women will hit the wall before men do. I think there are evolutionary reasons for this. But it's a big problem and I oftentimes see thyroid problems manifest and autoimmunity. There are good studies that show chronic stressors trigger autoimmunity, and over-fasting is a chronic stressor almost by definition."

# **How Activated Charcoal Can Help**

One reason why fasting is a stressor is because it releases toxins from your fat cells. A simple intervention to address this is the use of activated charcoal when you're fasting. This is particularly beneficial if you're also doing saunas.

"The universal thing that will happen is you will experience massive brain fog. You'll feel like a zombie. This was a big thing for me because I had toxic mold exposure [and] I had heavy metals. You have these very interesting things in your gut, these gut bacteria that make lipopolysaccharides (LPS).

LPS's can cross the gut barrier and then they cause inflammation in the body and trigger cravings in the brain. So, when the bad bacteria in your gut are going, 'I didn't get my sugar. I didn't get any food. Oh, my god, it's a mortal threat. If there's a threat, I should release toxins.'

So, they ramp up their LPS production and then you'll feel like garbage. Then you have to use even more willpower to get through your fast — or you could take activated charcoal that binds directly to LPS. Then you don't feel the hunger and you don't have to take the biological hit of all the toxins you're releasing from your fat, and that really makes a big difference."

# **Tripling Down on mTOR**

In his book, Asprey also discusses how to integrate exercise into your fasting regimen. The best time to exercise is at the end of your fast. He explains:

"There's something in the body called mTOR, which drives growth. mTOR will drive muscle [growth]. So, if you want to get a bicep, then you need some mTOR. But if your mTOR is chronically elevated, your risk of cancer and the diseases of aging go up. If you eat too much protein, especially certain amino acids, your [mTOR] level goes up and stays up, and that's not good for you.

It's not enough to trigger muscle growth, but it's just enough to trigger inflammation. The way mTOR works is you suppress mTOR and then when you

stop suppressing it, it surges forth and you get a big spike, which is what causes the benefits.

There's three things that suppress mTOR and I call the strategy 'tripling down on mTOR.' The first thing that is shown to increase mTOR is fasting. The longer you fast, the lower your mTOR goes, which is good for triggering autophagy and things like that.

Other things that lowers mTOR are coffee and exercise. So, by having coffee during the fast, you keep cranking down on it, and then you exercise and it's really low.

Then when you eat, which releases mTOR, and you have adequate protein in that meal, the body is like, 'Woo-hoo, I've got a huge surge of mTOR and I've got protein present. Now, I'm going to go to work and I'm going to fix everything. I'm going to replace all the cells I got rid of during autophagy. I'm going to grow the new mitochondria."

This is why you get more out of exercise when you do it at the end of a fast. I'm convinced this strategy has helped me radically build my muscles and improve my strength. One small tweak that may be helpful if you're doing very heavy exercise is to eat a small amount of food about 30 to 60 minutes before you start, essentially breaking your fast right before your exercise.

"There's great logic in that advice," Asprey says. "You fasted and then you broke the fast right before the exercise, because by the time those calories are digested and hit the blood sugar, you will be done with your workout. It's going to be a good half hour before that stuff really hits the bloodstream.

So, I would totally support that unless you're doing the kind of high-intensity workouts that I'm a fan of, the ones where if I tried to do it with a full stomach, I think I might throw up. They're very short but they're very intense."

### **More Information**

Asprey discusses a number of other antiaging strategies in this interview as well — things like hormone regulation and the use of testosterone, and how fasting affects these levels — so for those details, be sure to listen to the whole interview.

He also goes into some of the problems that can occur when you're on a plant-based diet, and/or if your omega-3 to omega-6 ratio is off-kilter, as well as how your diet and exposure to sunlight influence your circadian rhythm, and which supplements are helpful when fasting and which should be avoided.

Naturally, you'll also want to pick up a copy of his book, "Fast This Way: Burn Fat, Heal Inflammation, and Eat Like the High-Performing Human You Were Meant to Be," where he covers everything in greater depth. In addition to everything already mentioned, his book also includes information about intermittent hypoxic training and breathing exercises.

"What we know now, and what is in 'Fast This Way,' is that when you show your body that it will be required to regularly go without something it thinks it needs, you walk away from that as a stronger person.

Your willpower is stronger, but more importantly, your cells are stronger, and then they will give you more energy all the time. And, going from a 300-pound tired, fat, uncomfortable guy to where I am now, even though I'm 48, if I could do it, I think anyone could do it," Asprey says.

### Sign Up for a Guided Fast

To help you on your way, Asprey also provides a two-week program where he guides you through a 24- or 48-hour fast and answers questions on a daily basis. All you need to do is order "Fast This Way," and then send a copy of your receipt to FastThisWay.com and sign up for the program. There's an upload form on the website.

"I'll teach you the fasting hacks. We'll do some intermittent fasting together in a community, and then towards the end of this, we will actually do a 24-hour or 48-hour fast. I'm going to lead you through it," he says.

"We also [cover] mediation and the gratitude side of this. I just want to teach you this book because I spent thousands of hours writing it and I want you to get it ... So, if you want to ask me questions, I'm going to be there for you."