Is Fasting Good for Your Heart? A Cardiologist Explains the Science. Transcript

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Cleanse Diet vs Fasting

You're shaking. Are you alright? Just leave me alone! I am on the third day of my cleanse diet. All I have to do is drink maple syrup, lemon juice, cayenne pepper, and water for all three meals.

Okay, hold on. I love that show. But every time I see a cleanse scene like that, my cardiologist brain starts twitching. Because what most people call a cleanse is usually a crash diet dressed up as detox.

I'm Dr. Columbus Patisse, interventional cardiologist and lifestyle advocate. And the first time I fasted, my family thought I lost it. Wait, you're not eating for how long?

But by day three, something began to change, Something flipped. My focus got razor sharp, almost like limitless. Colors looked brighter, My smell intensified.

and now, we actually have randomized trial data suggesting that maintaining a simple eating window, a type of fasting, may improve your heart function after a heart attack.

Of course in the right patient, and of course, done the the way. But there are also people who should not do this without medical supervision. Ready to find out more?

Let's go deeper. But before we do, quick check in. Are you leaning towards the time-restricted eating camp or the intermittent fasting camp? All right, type TRE or IF in the comments so we know which camp you're down with.

Alright, let's build. Fasting is not magic. It's not a replacement for your medications, and it's for not everyone. But when it is done safely, for the right person, the science shows fasting can help.

What Fasting Can Improve

it can improve insulin resistance, it helps lower your blood pressure by around 4-7 points, It can shrink your waist circumference and your weight, And it modestly improves your cholesterol and inflammation.

That's why today we're going to cover what fasting truly is. We're gonna explore time-restricted eating vs. intermittent fasting. into what's happening inside your body.

And then we have to collect receipts. We have the collect the proof from clinical studies showing that this is validated. Were gonna look at the safety stop signs and were going to explore how to start without guessing.

Now I know some of you might be wondering about cleanses like the master cleanse that we just saw in that clip. But let's quickly separate that from what we're talking about.

The master cleans, it's essentially a very low calorie liquid diet. Lemon juice, maple syrup, cayenne pepper, and water for several days. I don't know if that sounds good or not.

Now, while some people see short-term changes like quick weight loss or a dip in inflammation markers, that's mostly due to severe caloric restriction, not any unique detox magic.

Now in contrast, what we're focusing on here today, time-restricted eating or intermittent fasting, it's about when you eat, now replacing food with a liquid diet.

It's a sustainable timing tool rather than a short term cleanse, and we have stronger evidence for long term heart health benefits. Now, it's important that we define fasting.

Fasting is simply intentionally not eating for a planned period of time.

Fasting Types and Definitions

That's it. You might say it is almost like when you slept, you were fasting, and we need to separate two words, fasting and starvation. it's uncontrolled.

It's when stored fuel is depleted and the body starts to break down the central tissues. Think of it like this. The store is closed. Nothing new is being delivered.

So your body has to use what's already stocked in the back. Now, because fasting can mean so many different things, it is so important that we categorize it.

One category is water only fasting. That means no calories at all. Just water. Some people will add electrolytes to this, then you have a zero calorie clean fasting Still no calories, but it may allow black coffee or unsweetened tea.

Then you have modified fasting. Very low calorie fast days. often around 5 to 600 calories like a 5-2 or modified alternate day fasting. Then you have your fasting mimicking diet, a structured low calorie plan designed to mimic fasting effects while still eating typically over 5 days.

There's one category that deserves a warning, dry fasting, no food no water. It's not something I recommend for cardiometabolic health, especially with heart disease or blood pressure medications.

Now, let's break down time restricted versus intermittent fasting a bit more. The internet uses intermittent fast for almost everything, like an umbrella term.

But we need to simplify it. Time restricted eating means that you eat every day, but only within a daily time window, Like a 12 hour fasting, 12-hour eating window.

a 14 hour fasting or a 10 hour eating window, a 16 hour fast and an 8 hour eat window. Versus intermittent fasting on the other hand, this usually means that you have fast days or very low calorie eating days mixed in with normal calorie days like a 5-2 or alternate day fasting, or even a 24 hour or fast once a week.

So here's the takeaway, time restricted eating, it's a daily eating windows. You're able to eat, intermittent fasting includes fasting days or periods of time.

So if you only catch this part, here's the simplest on-ramp for an otherwise healthy adult cleared of course by your doc.

How Fasting Changes Fuel Use

Start with time-restricted 12-hour fasting, 12 hour eating window, then 14 hour fasting and 10 hour And consider a 16 hour fasting, 8 hour eating, only if you're feeling good.

But make sure irrespective of which category, hydrate with water, unsweetened tea, or possibly black coffee. Break your fast with real food. Not ultra processed, not fake food, and if feel shaky, dizzy, confused, faint, stop and reassess.

That's what I tell my patients when they're taking medications. Now let's look under the hood and actually begin to explore how fasting really works in the body.

Here's the simplest way to understand fasting physiology. Your body basically has two main fuel tanks that power

it. The first tank is the sugar tank, glycogen, stored carbohydrates, mainly in your liver, also your muscle tissues.

Quick and easy to access. Tank number two, your fat tank. Body fat. your long-term stored energy. Now when you're eating all day, you keep topping off that sugar tank.

When you fast, stop topping it off, and your body starts to lean more into that fat tank, that's the shift that happens in phases, right? So phase A, the sugar first, at zero to 12 hours, your running on what you ate plus historic glycogen.

A lot of people still call that crashing. It's oftentimes a routine signals that comes along with hunger. it comes in waves, it rises, It falls, and it usually passes.

Now phase B, you're going into that fat plus ketone, that 12 to 24 hours. As glycogen drops, your body increases your fat breakdown called lipolysis. Your liver starts making ketones and alternate fuel for your brain and muscles that they can use.

That's why some people feel steadier energy and fewer cravings. And here's, why this matters so much for you heart. less constant insulin stimulation and less all day snacking, it actually can improve your insulin resistance over time.

And this will support your blood pressure and metabolic control. Now the last phase or maintenance phase, this is 24 hours and beyond. This is where researchers begin to discuss deeper adaptations and cellular maintenance pathways.

But here's the important nuance, right? You don't need multi-day fast to see blood pressure or insulin benefits.

Who Should Start Slowly

We start seeing it just with things like time-restricted eating. Fasting changes your fuel and your signals, not just your calories. So far you've gotten a time restricted eating versus intermittent fasting and what happens inside the body.

But now we need to understand how to use it without overdoing it. Now first you have to choose your lane. Now if you want the easiest plan, I think time restricted eating is probably the easy pathway to begin.

If you like a structured but more intense, that may be like the 5-2 plan. if your thinking alternate day fasting or 24 hour fast, thats a little bit more advanced.

And if thinking 48 to 72 hours, pause. Thats not a casual experiment. You probably need to have a bit of more mentoring and physician guidance. Now remember I did the fasting and I remember that my smell intensified and my mind was sharper and believe it or not I actually had more energy.

I mean at first I thought it was all in my head and then I realized there's actually a biological reason for this and there are some mechanisms associated.

Fasting can actually smooth your energy swings, fewer spikes, fear of crashes, so focus can feel more steady. As fasting continues some people produce ketones and thinking feels more even.

And the fasting may actually influence your brain resilience pathways, including the BDNF, that brain-derived neurotropic factor. So important for learning and memory, and this may explain my limitless moment.

It's not universal to all, but it's imaginary for everyone. I also experience enhanced smell. And so studies have shown that in fasted states, smell sensitivity often trends higher because your body is basically in the go find food mode.

Brain Effects and Autophagy

Now, underlying all this, it's what's called autophagy. And this is your cells cleanup and recycling program. So if your cell were a house, autrophagic clears out all the damaged parts and recycles materials so your sales run better.

It's associated with all they help benefits and longevity. Now to be clear and transparent, most of the autophagy evidence is mechanistic. Humans are much harder to measure this in.

But here's the key, you don't need to chase autrophagies in humans to get the blood pressure insulin benefits. All right, let me give you three quick receipts from clinical research that proves the value of fasting.

So receipt number one, interface in mind. heart attack patients were randomized to 16-8 time-restricted eating versus usual care. The time restricted eating group, it improved their left ventricular ejection fraction around 6.6% versus 1.5% early on.

Now that's important because the heart normally squeezes about two thirds of blood out of it. And so every amount of reduction below 55%, we call that reduced heart function.

That's something that you don't want. So anything that improves your heart functions is so valuable and it's so prognostically important is what we understand.

So we understand that these differences, they persisted even later in follow-up, but we also didn't stop there. We saw that there were blood pressure and weight improvements.

So what does this mean for you? If you've had a heart attack or heart event, time-restricted eating may be a legitimate adjunct conversation.

Clinical Trial Evidence

Of course, if you're the right patient, and of course coordinating care with your cardiology team. The second receipt's from The Wonderful Trial. I love that name.

It was a scheduled 24-hour water-only fast. Now in this, the found LDL didn' change much, But the insulin resistance, it improved significantly, and metabolic syndrome features, they moved in a favorable direction.

So what does this mean to you? If your main problem is blood sugar biology, insulin resistance, and belly fat, fasting may actually help your heart indirectly, even if your LDL doesn't drop dramatically.

Now the third receipt comes from meta-analyses. in the cross-pooled randomized trials. Patterns are consistent. Blood pressure often improves. 4-7 mmHg systolic blood pressure improvement.

Your weight and waist circumference decrease. You lipids are modest reduction and your C-reactive protein the marker of inflammation and most predictive of future events drops.

So what does this mean? Blood Pressure and Weight are the problem. Time restricted eating is a reasonable move. If your cholesterol is the main issue, don't expect statin level work from fasting alone.

You have to focus on food and then reassess whether or not medications are needed. But let me give you the real world version because this is where people miss it.

I had a friend who nailed the 16-8. That's 16 hours of fasting, 8 hours eating. Nailed it perfect. Perfect window, very disciplined. But he was breaking his fast with drive-thru.

Fast food, most nights of the week. And I'll tell you, even though his fasting window was tight, his food quality was

loose. As a result, blood pressure didn't budge as much.

His labs barely moved, but we changed one significant aspect. the food he ate, the foods he broke the fast with. Whole foods, real foods. Plant rich foods and that's when his numbers started to change.

So here's our 10 second breakfast bowl we start to use. We start with some legumes, black beans, lentils, we add greens and veggies, brown rice, quinoa, salsa, lemon, herbs, done.

Food Quality and How to Begin

I'll tell you timing helps, but your food still matters. All right, if we look at the quick headlines, you may have seen this in reports from American Heart Association that time restricted eating was linked to higher cardiovascular mortality in observational studies.

And I'll tell you that this study, it highlights a potential confounder like I saw on my friend. What you eat can disrupt all the benefits from the timing of when you ate.

So ultimately, highlights that observable studies cannot prove cause and effect. It may also reflect reverse causation, sicker people eating differently for reasons not captured.

So we don't ignore this study, but we also dont treat it as a verdict against time-restricted eating. We need continued long-term randomized trials with hard outcomes as best as possible.

Now, how do you get started? Well, use a simple daily window. Start with a 12-hour eating window for a week, then move to a 10- hour eating, and if you feel good, that doesn't trigger the rebound eating then you can consider an 8-hours eating.

Always remember to hydrate. Break your fast with whole foods, real foods and plant-rich foods. And of course, if feel dizzy, shaky, confused or faint, stop.

Talk with your doc. Remember, fasting is a miracle cure, but it can be a powerful timing tool for cardio metabolic health, especially when you pair it with high quality food.