Fasting for Longevity? The Science Behind Fasting-Mimicking Diets & Healthy Aging Transcript

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Introduction to fasting mimicking and longevity

There was a study published in one of the leading journals called Nature Medicine where they were able to show that with fasting mimicking, that deep cellular cleanup that we love and want so much that people are just raving about these days actually does happen on day three, four, and five in fasting-mimicking protocols.

We've been able show a two and a half year biological age reversal or improvement with just three cycles of fasting mimicking. They were able to show a 11-year biological age reversal if you did that for 20 years.

So it just continues. Do you feel like your hormones have turned against you? Trust us, you're not alone. We're Dr. Serena and Dr Heidi and on Hormone Heroines we explore all the root causes that are behind hormone imbalances and we teach you how to thrive through them.

Join us for real talk, expert tips and even a few laughs. Hi and welcome back to Hormone Heroines. Today we're going to be talking about fasting mimicking and longevity nutrition with Renee Fitton who is a registered dietitian, the vice president of education and growth at Prolong and co-founder of Healy AI.

She specializes in nutrition, longevity, fasting science, and digital health education. Welcome, we are so excited to have you. Thank you so much for having me.

I am so excited to be here from across the world. It is truly such a pleasure to get to chat with you guys. And that's the beauty of digital tech. Yes, exactly.

How's, the weather over there in Dublin? It's honestly pretty darn nice. Everybody out here keeps calling that out. They're like, you came at such, I'm not even going to try and do the airfax, but then you come at a such great time.

So something's going down. Yeah, that's good. Well, let's dive right into our topic today. You know, a lot of people out there might not know what fasting mimicking is.

So, why don't you start there? Tell us about fasting-mimicking diet and how it works. Yeah. Fasting- mimicing diet is really cool because it is the ability of getting the benefits of water-only fasting while you eat.

What fasting mimicking is and how it differs from water fasting

So it's really not a fasting diet at all. If you think about fasting in the technical dictionary term, because fasting means you don't eat, but if you just think of it and you understand fasting from the cellular definition, which is really what runs our whole body.

we can actually trick ourselves by giving it very, very specific foods in specific amounts so that we live essentially below the radars or aka nutrient sensing pathways that tell our body whether we're fasted or not.

And so what this means is that with fasting-mimicking protocols and fasting mimicking diets, We can get all these really great benefits of water only fasting and especially like long water-only fasts where we get really good benefits, but we don't have to struggle through it.

We don' have have safety concerns. we can be comfortable, we still work, and we won't lose muscle. So all of these things are really beneficial, not to mention who the heck wants to water fast for like three, four, five days.

Speaking of water fasting, can you kind of describe the difference between fasting mimicking diet and water-

fasting? Because I know a lot of people don't necessarily know what water fast is.

Totally, so water fasting is essentially, well, there's a lot of different definitions of water fast. And I'm just going to use the term fasting to describe water, fasting, and we'll use fasting mimicking to described fasting with food.

So with standard fasting it can be anywhere from 12 hours without food, all the way to like 21 days. Depending on how long you fast, you generally get more and more benefits.

that there is an end cap to benefits where things are getting worse. And also with water-only fasting, there are some definite downsides, of course, that it can be very difficult to do because in water only fasting or general fasting we see that people aren't having any food at all.

You are just drinking water. Sometimes people will let you have electrolytes, which is generally still considered okay in the water, only fast definition.

Other than that, that's it. And you can do that. For most people, they're doing it about 16 hours a day, almost every day. We call that intermittent fasting.

But a lot of people now have started doing something called 5-2, where they are doing two days a week, random days throughout the week. Where they don't eat anything or eat very little, so maybe like 500 calories max.

And then there's a lot of people now that have really started to recognize the benefits of longer fasts. So fast that we call prolonged fast or fast over two days.

The reason why people love those is because once we hit three days of fasting, some new levers in the body get turned on and we're able to get really deep cellular cleanup.

So we see like kind of, I like to think of it like a spring cleaning at the cellular level. All of the junk that accumulates over time, you know, our cells are little machines and they're working away in there and the waste builds up and you have to be able to take it out and things break down and we have be to replace those and that's what Atophix does.

It goes in and it cleans that up, and allows space for new cellular component to built and generated. Your cells, which make up your entire body, every single part of us, inside and out, will work significantly better after it goes through this cleanup.

But this autophagy, this clean up, it only really turns on at any significant level after about three days of water only fasting. It's really one of the only ways to turn it off.

Otherwise it's just kind of happening at this low level and not really being optimized. Okay, so then for the fasting mimicking. Mimicking seems like a key word here.

Can you talk about the benefits you can get with that? Totally. Oh my gosh. Well, the benefits you can get from fasting mimicking are immense. There are now over 40 clinical trials using five-day fasting-mimicking protocols across a lot of different health conditions, healthy individuals, et cetera.

So I'll touch on some of the major reasons why people would do a fasting mimic diet, but know that this is not a full comprehensive list. there are many other things.

And so for that reason, if you're like, Ooh, I wonder if it could help with XYZ. Go on your favorite AI or go on Google or PubMed, type it in and very high chance you will find it.

Okay, so these are the main things that we see. One, autophagy.

Autophagy, biological age, and metabolic benefits

Just actually this past year, there was a study published in one of the leading journals called Nature Medicine where they were able to show that with fasting mimicking, that deep cellular cleanup that love and want so much that people are just raving about these days actually does happen on day three, four and five in fasting-mimicking protocols.

So we're putting our money where our mouth is. You really do get this. So this is really, really great for deep cellular cleanup. The next one is biological age or longevity.

Our biological is how our cells in our body actually behave. Who cares what the number on your birth certificate is? our biological age really is the true metric of how old we are.

Now, with this, we've been able to show a two and a half year biological-age reversal or improvement with just three cycles of fasting mimicking. That means that just doing five days a month for three months in a row, two-and-a-half years of your biological ages was peeled off and improved.

Huge. That was incredibly significant. And in fact, that study was also published in Nature and it was the number three most downloaded publication that year because of how impactful this is.

The next one is going to be metabolic health. What is metabolic? Metabolic health, I like to think of it as like pretty much your doctor tests, right?

When you go to the doctor. So we're talking about cholesterol, triglycerides, blood pressure, and blood sugar. Anybody who has pre-diabetes, type 2 diabetes, all of those things can be impacted with fasting mimicking.

And really quite significantly and to a point where we are seeing patients with type two diabetes. that have had type 2 diabetes for decades even. Doing this for about six months, so just five days a month for six month, about 67% are seeing significant reduction in their A1Cs and coming off of medication at the same time, putting them into remission.

Nice. Yeah. That's amazing. Right? Okay. Another couple of little ones that I'll just breeze through. We have immune health, which is really impacted as well.

There's a ton of studies over there as. Well, we also see improvements in skin health. So there's the dermatology study. And then just like kind of as a little aside is behavior change.

so there have been studies in even depression, but we see mostly in our patients that are using this to optimize their health and their longevity. we're seeing improvements in confidence, improvements their relationship with food, less food cravings, all of these additional kind of energy and mind clarity benefits.

So all these extra adjacent benefits are also worth noting. That's not even half of it. It's the tip of the iceberg. To summarize it, you could say that our cells make up our entire body, fasting is going to improve how well your cells are working, so the benefits could be really far-reaching.

Like a seriously deep facial getting those layers off. Yeah. The deepest, right? Because like ourselves literally go, you know, all the way to front and back inside.

That's it. Yeah, exactly. Yeah, it's like you're getting all new cells when you do the fasting and then that's obviously going to improve your health in all aspects.

But I was curious because you mentioned that with the study for longevity, if you did it for three months in a row, the five days for 3 months, in row it is about two years off your biological age.

Are there studies with like longer use or doing that every year? Can you tell us a little bit more about that? So two things to note. So one, in that study, they actually did an extrapolation of the data using NHANES data, which just really means like one of our best databases of information.

And they looked at what would happen if you did three a year. this five-day protocol three times in the year, usually we recommend quarterly, so every three to four months, they were able to show a 11-year biological age reversal if you did that for 20 years.

So it just continues. And it's not like every year you get 2.5 years off, right? Because the health year get at some point like, you're not going to be Benjamin Button reversing zero, right?

Man, come on. That's what we were all hoping. I know, I can't. Not a magic worker out here, but I do make magic happen for sure. So there's a lot of really cool things that can be done.

It's just not a miracle pills, maybe what else. There you go. But yeah. That was one note that I wanted to make. The other note I want to made is that right now there's an ongoing study with individuals over I believe the age of 65 in Italy.

There's 500 people doing this long-term study where they're doing three cycles a year for several years and we're going to be measuring how that's improving.

So it is currently ongoing but I don't have the data yet. How are you measuring their biological age? Great question. So this is done with the pheno age test.

It is Dr. Morgan Levine out of Yale's equation. Is generally considered right now the gold standard for biological age because what it's using and this the reason why I really like this one is because it uses biomarkers that we pretty much all already have.

We're not like saying, Hey, go look up your telomeres and see how long they are. And let's hope that that has to do with our biological age, but we're.

Thousands of dollars later. Yeah, exactly. This is, hey, Go get your HSCRP, get blood pressure, blood sugar. And what they did was they looked out these values in people, in thousands and thousands of people and then looked at their mortality rates and how long they lived and were able to extrapolate what someone's biological age was from those anywhere from like seven to nine markers.

And so it's a cool calculation. There's, if you type in pheno age calculator in Google, you can actually, If you have all of those markers, You can just go ahead and get your bio age measured.

So it is awesome. Okay. We should do that. Cause I get like a biological age on my whoop band. Yes. It's like just from that, I haven't put my labs in it or anything.

If it does have a place to do, that I just haven´t.

Measuring biological age and weight loss effects

Yeah, I know the bio the biological agent whoop it's funny I've been in conversations with with who because of what we can do and we're actually top secret like exploring whether we should do a study together so that we Can also show improvement in bio age on the who band because the loop band is using things like HRV and other metrics that are in the pheno age test, but that are in their biometric measures.

And so because we are very confident in all of these wonderful things that fasting mimicking can do, we want to put it to the test. That would be great because it even uses composition scales too.

So like it'll take my composition scale information and use that too, so I'm two and a half years younger than I actually am, just so you know. I mean, there's a lot of people, unfortunately, that are older than their true age.

Their biological age is above. To me, it's like an even bigger delta than two and a half under because it could go the other way too, right? And I think the average of most Americans, especially today, are over their their True Age.

So that's worth noting too. But I just realized when you said body composition, I missed one of the biggest reasons that people fast, which is for weight loss, of course.

And the reason why I miss it is because it's just a cherry on top to, at least that's the way that El Neutra and the company that I work with, Prolon, look at this.

It's like, this is awesome for a lot of people where this their goal, but it really is a chair on the top when you think about all of other benefits that are happening at the steep level.

But what's so critically important about the weight loss that we see with fasting mimicking specifically is that it is muscle protective. So you are losing fat or you were being your muscle.

And that has been shown in now dozen plus studies with DEXA scans, which are again gold standard for measuring body comp. And we also see that the fat that people are losing are visceral fat, which is the hardest fat to lose, trunk fat.

And so they're losing the fact that that is so difficult to use and is most important to loose because it's also the most dangerous. Right. So that kind of leads me to my next question that I've been thinking about.

Why does the body respond to fasting mimicking diet the same way it kind response to water fasting, which it seems like it would be a lot nicer to have the fasting-mimicking-diet because you at least get something.

Plus if that is going to preserve muscle, because I know water-fasting does not preserve muscles because your body's going eat it because it needs food.

It needs fuel. Seems like in a better way. Yes. So there's two important things that are going on here. One is the same and one is different and that's for very, very different reasons, right?

So the reason why it responds similarly in that it gives the benefits is that the foods that you are having are not triggering those nutrient sensing pathways.

I like to think of them like alarm bells on the cell's surface that say, food is here, it's time to grow. And that's really what those alarm bills are for.

They're telling our body that food as present and when food has present, we can use that energy to build and build, and create things, new materials. But if you're constantly building and building, you are just building a never cleaning up.

And when food is not present, it tells the body, okay, stop building. We don't have any more building blocks coming in. Let's take time and repair. Now, what happens when we do fasting mimicking is that we give nutrition that doesn't trigger the alarm bell.

It's like 007 style going under those radars. And- Let me sneak you a little chocolate underneath now. Right? Well, you actually can have dark chocolate with very low sugar as part of plastic mimicking, believe it or not.

But that's because those nutrients aren't triggering the alarm bell. And so the body will still say there are not nutrients here to grow. So we're going to focus on repair.

All of those pathways, not to get too nerdy, but things like AMPK are being turned on, autophagy is being turn on. mTOR and IGF-1 are turned off. These are like these pathways that kind of determine what the body is going to do are all behaving like as if you are just having water because the alarm bells have not been sounded because you were eating very specific foods that are going below the radar.

So that's important number one. And also worth noting, it's not just the type of food, but the amount. Like you can have, there is a cap, like there's no freebies.

There's just things in a certain amount, so- It's like Weight Watchers where you just like, you know, put a- Yeah. Certain amount of calories that you have and you could have like a whole cake.

You could like have a million celery sticks. Yeah, no you- You can a lot of celery stick on Fasting Mimicking, But not, You know there a, There is cap.

Right? And so, though that is, phase one of the question. Part two is why do we get the protection where we didn't before? And I think like we can understand one, there's nutrition, right?

So the body is essentially, I like to think of it like a bowl in a ring and with the little red flag where you're like, hey, look over here, don't look at the muscle, Don't go get your energy from that.

Come take these little pieces of nutrition that we're giving you over to distract you. And so it's enough to spare the muscle. The other thing that we see in fasting mimicking programs like the one with Prolon is that they will give you the little L drink.

And what that is, is a glycerol based beverage that your body only uses when you're in a fasted state. And what it does is that it will, in a fasted state, be converted to a little bit more glucose.

But it's only when your body needs it, because the body doesn't really like to do all of the work to turn glycerol into sugar.

Why fasting mimicking preserves muscle

So it'll only do it when it is forced to. And so this is a really cool little system where it really just creating enough of that little red flag for the bull that is needs without breaking the fast.

because it won't use it unless it's in this deep fasted state. So all of that protects the muscle. And then the last thing that I will note is that, and this is also true for water only fasting, unless you do it for a very long period of time, is Our body has this natural response that we have gained through our evolution to be like, okay, there's no food here and we know that muscle is important.

So we're going to turn on all of these. prevention mechanisms to try and limit the amount of muscle that we use. So our muscle is always going to be attempted to being spared, even with water only fasting.

It's just when we do fasting mimicking, we are able to take it to the max, to a point where you're seeing essentially no muscle loss at all. Nice. That is amazing.

I think especially for women, because it's a huge conversation on how we can try to preserve our muscle and improve our longevity, it's going to be beneficial for overall health.

And especially in like perimenopause and postmenopausal because we really need our muscle. Yeah, exactly. Muscle is like part one of the issue, especially, in women's health, the other one is cortisol and stress, which fasting will just naturally increase.

So one, I generally don't recommend everyday intermittent fasting. for women, especially if they have a higher stress load already. Instead, doing periodic longer fasts will get you more bang for your buck.

Yes, there will still be some of that stress induced, which is good. It's actually what we call hermetic stress or positive stress. But it's too much of a good thing is a bad thing.

So this is giving it to you all in one go, giving you the most you can get within that period of time. And then it is letting you eat regularly and rebuild and focus on muscle building and all these other wonderful things for three months in between your next cycle.

Yeah. And also you could, I think you can phrase it like women live on cycles and this allows you to cycle it in within your cycle. Yes. Even though it's on a quarterly basis, which is, i think is really important when you are talking about any type of fasting for women is timing it with your cycles.

Totally. Well, there is a lot of conversation around timing with your cycle and fasting. There has been, I've seen, you know, research in both camps, both molecular and and both have valid reasons.

I am waiting to be honest. for a full study that puts half the women fasting during their luteal and half of women fast during the follicular. And I want to see that study before I have a whole opinion, but the mechanistic studies kind of have validity to both.

I would say that if you are trying to get pregnant, then I actually probably, well, there's a lot, pregnancy is a big one, but we don't want to fast before we ovulate because it may impact ovulation, But it can also be a great time to pass because your body just does better in that lower carbohydrate state at that time.

Long and short of it is, at this point, I always just tell people try both and see when you feel better and listen to your body. Yeah. I was going to say, for the research study, you should have the same women do it one month or one cycle, like the three months, do in their follicular phase.

And then, obviously, after you're done bleeding, don't do while you are bleeding. But then the second phase that they do, in the next quarter, the 3 months have them do their luteal phase because then you'll get the real data because it's the Yep, exactly.

And so I'm patiently waiting for that study. I've actually thought about taking a little hiatus opposite of a sabbatical and just going to school and getting my PhD and doing this specific study because I want it so bad.

Womenu2019s health, cycle timing, and fertility considerations

I think that would be a really good one. Yeah, it would make a good study. And I just think it will be really helpful to see. I am like you, where it's usually a little more like I tell people to listen to their body, but I do as bar and fertility, like, you said.

Typically, I usually think is better in the first half, and that's what I see with my patients most commonly is like they can tolerate it better. That's when they feel like can do it.

It feels better tied with their cycle that way. Exactly. And I do have a lot of our OBGYNs and more fertility specials that also recommend, sure, do your fasting, fasting mimicking to optimize your health, but then three months prior to your desired date of conception, then you want to pause.

So that's all in summary. Yeah, definitely. That's pretty much my thinking as well. Optimize it, and then, you're going to need building, because then your going build a human.

And you really can't pass then. Yeah, exactly. Anyways, so just to kind of wrap things up, we've been talking a lot about fasting mimicking. Can you run us through what it is?

Like how do macronutrients play into it? Who's a good fit for it. Are there any like strict contraindications? Just kind a quick summary of fasting and how you could start it Awesome.

So fasting mimicking, the concept is high fiber, high fat, low protein. I know people always get surprised by this, but it's only five days. It's because we're mimicing a water fast where you would have zero protein, at least we are giving you some.

And then also low sugar. What you typically see in a fasting-mimicking protocol is a lot of nuts, a lots of seeds, lots vegetables. You're drinking tons of water, you can have non-caffeinated teas.

What else? You're having a lot of electrolytes to support you through this as well. There's even dark chocolate included in there with some grains as Well.

So that's kind of what you're typically seeing. The way that it is structured the easiest and the, in my opinion, the most scientifically sound is through the Prolon five day fasting mimicking kit, because that is where all of the research is based out of is using that kit.

So that is nice also because it just comes to your door already packaged breakfast, lunch, dinner, snack in every individual five day box. Takes the thinking out.

No thinking, no measuring, know anything. It honestly, it makes it an even bigger, better breeze. So I definitely recommend that. And then for who it's for, I mean, what my recommendation is for is pretty much everybody who wants to optimize their health.

with a few exceptions. So these are the contraindications. Anybody who has an allergy to nuts, it's impossible to really do it without nuts at this point in time.

anybody who has a very, very low BMI, our recommendation is under 18. Bmi is not really the best measure of health, to be honest, but that's like kind of a rough estimate.

Anybody who is pregnant or breastfeeding, anybody is who under the age of 18, and then anybody has late stage or end stage heart, kidney, etc. condition, probably not, although work with your doctor.

All of those things I think are the ones Did that jump out to me? I might be missing one, but that's it. That's fine. Oh, history of syncope. So AKA, you have a common, your fainting often.

Gotcha. Yeah, that'd probably be a good idea. Especially if it's due to low blood sugar. Low blood pressure, right? Both of those are going down. Yes, because those do tend to drop when you're in a fast state.

Okay. Well, the last thing I wanted to follow up with, you already said it's pretty low protein, but it is suitable. You said, it isn't suitable for people with nut allergies.

But what about vegetarians or vegans? Because I'm vegetarian. fully plant-based. So if you're doing the ProLon five-day fasting mimicking protocol, the only thing that is not vegan is that there's a little bit of honey in it.

If you are also excluding honey, then that's the thing only that isn't vegan. It's also soy-free, dairy- free, gluten- I don't know, all of the frees except the free and so many.

How to start fasting mimicking and who should avoid it

Okay. All right. Well, thank you so much for being on the show today. This has been a super fascinating discussion. Always like learning more about longevity science and how we can optimize our quality of life for longer, which is what I really think longevity is about.

Yes. You don't want to live long if you're not feeling good. Correct. Health span for the win. But that has been another episode of Hormone Heroines. Thank you for being on and we will see you next time listeners.

Bye. Bye, everybody. You know how us women are always just pushing through it, and then when we go to find help, we're often not taken seriously or told, oh, that's just far to be in a woman.

Yeah, We've lived through prioritizing everybody else, And then our own health falls to the wayside. That's why we started blossoming longevity by women or women.

We created programs that meet women where they are, addressing the root causes and all of the struggles that come with every stage of life, like our vitality program.

It reconnects you with your youth and your life so that you can thrive through the years. And with Clarity, we go beyond the skin to restore your health, clear your complexion so you feel radiant from the inside out.

With our silhouette program, we help you reclaim your strength, optimize your metabolism, and your body composition so that you can feel great in your own body again.

And with Harmony, We help rebalance your hormones to heal from within so you feel vibrant and ready to take on the world. That is why it's time to stop saddling and start flourishing.

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And write a review. That helps more people find their way back to balance. See you next week.