



Lesson 12: Tracking Results

Hi everyone, welcome to day 12 of our fasting masterclass. In today's lesson, we're going to discuss tracking your progress. Today's lesson is going to focus on fat loss. In tomorrow's lesson, we will focus on glucose trends, and expectations when it comes to improving your blood sugar levels.

All right, let's jump into today's lesson topic. You'll notice that you hear me say "Fat loss" and not "Weight loss." There are very few terms on the planet that I dislike more, at least in the medical space, than "Weight loss." I hate the scale. The scale lies to you. The scale tells you how much water weight you have, muscle mass, and bone mass, in addition to your fat mass. Now, I have been morbidly obese in my life at 186 pounds, and I have been morbidly obese in my life at 97 pounds. Whatever the scale tells you, it does not tell you how much body fat you actually have. It's a representation of the total mass of your body, but not of how much fat that you have.

Individuals with metabolic syndrome who appear to be very slender, or we call them TOFIs, thin on the outside and fat on the inside, meaning they have a lot of visceral fat, this is the type of fat that surrounds and infiltrates our organs, leading to metabolic disease. This type of fat is actually more detrimental to our health than the type of fat that sits in our belly, but between the abdominal cavity and your skin, but doesn't actually infiltrate and surround your organs. We call that subcutaneous fat.

So, slender people can be very obese, because they have a lot of this hidden fat, which makes it very nerve-wracking for people just to look at the total weight on the scale and say, "Hey, I must be in good metabolic health, the scale says 180 or 160 or 120," but you really need to understand what your body composition is.

We've seen patients in our clinic that present similar to I when I weighed very little, a 110 pound, five-foot tall female, type two diabetic. "I don't want to fast," they say. "I want to lose fat, and I'm scared about that." Well, right now at 110 pounds, you are mostly fat. You have weak and brittle bones and you have no muscle mass, you have sarcopenia, meaning that your muscle mass is wasting away. So just because you weigh 110 pounds doesn't mean that you're in good health and that you should stay that way, and if you don't lose body fat, well, your diabetes isn't going to get better, let alone reverse itself. So the goal is not to bring this person

down to 70 pounds, that's not the goal. The goal is to help them, through fasting, lose body fat, but also regain lean mass.

Now, we all know that we can regain lean mass, which is muscle and bone mass, by going to the gym and doing weight training, but you can actually help accelerate the development of lean mass through fasting. Not only have recent randomized controlled trials demonstrated that fasting is far superior for retaining lean mass, muscle and bone mass, while we fast, compared to the traditional calorie restriction diets, fasting also has the ability to help you put on lean mass more efficiently.

How does it do that? Well, you've heard me talk a lot throughout this course about how when we get into a fasted state, our sympathetic nervous system, that flight or fight nervous system, is activated, and we've talked about how that noradrenaline can help us burn body fat and maintain our resting metabolic rate, and how it can sometimes lead to some insomnia in certain cases. We've talked about how cortisol, a little bit of cortisol production and a little bit of stress on the body, is a very good thing, and how this cortisol helps us provide our body with any glucose it needs while we're fasting, at least in most cases.

But we haven't talked about the third counterregulatory hormone that's produced in quite large quantities when we fast, and that's human growth hormone. Human growth hormone helps us gain lean mass, lean muscles, very easily, helps us build strong and healthy bones, and as we age, as we come out of our teenage years, we stop producing it in large quantities, and we eventually stop producing it almost altogether as we age, except for a bit while we sleep, but we all know as we age, our sleep quality does become diminished, and due to the environmental stress from our poor standard North American diets, and just stress in general, and we see declines in muscle mass as we get older, and bone mass.

But when you fast, you get a chance to produce this human growth hormone again like you're a kid, and when you re-enter the eating cycle, the feeding cycle, you have the cocktail of things that you need in your body to help put you... Increase and gain some lean mass, which is really awesome. So when you start eating again, not only do you have higher levels of human growth hormone from your fast, you'll have new and available amino acids from the protein at your meal, and you will have some insulin, and insulin is important for growth, so you will have a bit of insulin, and so a bit of insulin is a good thing, and this will help you put on lean mass.

I'd like to tell you a story about one of our clinic patients. Lovely woman, absolutely adored every time she came in for a visit. Unfortunately, she had some stressful life events. Her husband had a stroke, and she didn't come into the clinic for a checkup for six weeks. She comes in, and we unwind. She lets it all out, just about all of the stress that's been going on the last six weeks, and she said, "If there's one silver lining, Megan, it's that with everything going on, I just

haven't had time to eat. I've never done so much fasting, I think I've even done some multi-day fasts. It's just been so stressful with my husband and I am burnt out."

And then she stood up and she said, "Look at me," and she actually had her belt tied in a knot. It was a cloth belt, and she had it tied in a knot. She said, "I've been too busy to figure out where to get another belt or put a hole in this belt, so she said I'm tying it in a knot." She said, "I should go out and get some leggings." And she said, "I'm really excited to get on that scale today."

So we go over to the scale, and she steps on the scale, and she hasn't lost one pound from her previous appointment. Now we check her waist measurements, and she's down all kinds of inches around her waist over the last six weeks. I know she's lost incredible amounts of body fat during this time, but then came the waterworks. "I'm working so hard, I'm not eating all these comfort foods that I wish I would've eaten the last six weeks," and the waterworks just came, and "Why isn't that number on the scale changing?"

And I just wanted to say, "Listen lady, you have lost half a foot around your waist in six weeks, your pants are falling off, and you have your belt tied in a knot, you look ridiculous, you have lost lots of fat." But what had happened was that she was fasting so much, producing a ton of human growth hormone, but being very active, much more active than usual. She was taking care of the entire house, inside and outside, which she usually wouldn't do, her husband was always there to help her with chores. And not only that, she was doing some of her husband's stroke rehabilitation exercises with him, and also having to physically move him around for various parts of his recovery. She was in fact doing body weight training and weight training without realizing it.

So she was hysterical, as most of us are when we look at the scale and we don't see the results that we expect. But we did some testing, and found out that her osteoporosis had actually almost completely reversed, she had some very mild osteopenia. How cool is that? I think that's pretty darn cool. Now, I'll tell you, when I was 97 pounds, I wore a size five, and I thought I was... "Hey, this is awesome, right?" I'm five foot tall, I was almost 200 pounds, but I felt not great, I just... I had good blood tests, but I still didn't feel awesome, and then I went for a body composition scan, which I'll talk about in a moment, and I thought, "Oh geez." At 97 pounds, I was 34% body fat. That's not healthy, that's obese.

So I got back into my fasting, really tightened up on no snacking. That's the first thing that tends to fall to the wayside as... When we go into maintenance mode, we tend to start snacking again, and really start trying to be more active. Well, today I'm 120 pounds and I'm 24% body fat, and I wear a size two. So even though the total number on the scale is up substantially, I actually have a lot less fat, I wear a smaller size in clothes. So take that for what you will when you look at the scale, so I'm not a huge fan.

Now, let's talk about how you can track your body composition. The gold standard is an MRI, which we can't do, but there is a secondary means that's pretty close, and that's a DEXA body composition scan. Now keep in mind, there are two different types of DEXA scans. There's a DEXA bone mass density, and then there's a DEXA body composition. The body composition gives you an indication of your bone mass density, but is not as detailed as a bone mass density, and the bone mass density doesn't tell you anything about your body composition. So when you talk to your doctor, if you're looking for a requisition or talking, calling around to various clinics to see what they have available, make sure you're very specific, DEXA body composition.

They range anywhere from \$60 to \$100, and you can find DEXA body composition centers at a lot of wellness clinics, or even their own standalone clinics these days, especially in major metropolitan areas. So there are easier to come by than they were even five years ago, more and more people are becoming aware that they shouldn't be focusing on their body weight, they should be focusing on their fat percentage, and these centers are starting to pop up left, right, and center, which is great.

So these scans will tell you what your body fat is and how much muscle mass you have, and give you a good indication of your bone mass, and not only will it tell you how much fat mass you have, it will tell you where that fat mass is located. I always think that it's a great idea that when people think that they've reached their goals, that they actually go and get a DEXA body composition scan done. Are you really there yet? And that's what I needed to do, what I should've done, and that's when I really encourage it with individuals.

Now, let's talk about this in a little bit more granular detail about testing. It's always great if you can get one at baseline, but then again, the most important thing is to get one when you think you're at your goal, and then see what the real situation is that you're dealing with. Now, on a regular basis, I wouldn't recommend getting them done more than every four to six months. It takes a long time to actually see body composition changes, so it can be nerve-wracking if you're going on a month-to-month basis, and there are some caveats with these DEXA composition scans.

So if you do carb up before DEXA composition, so if you have a test on Monday or Tuesday, and that weekend your eating goes out the window, well, your body's going to store lots of glycogen, lots of excess glucose from that meal, and it's going to make you look like you have more muscle mass than you do, because we store that glycogen in our organs, which the DEXA scan picks up as muscle mass, and in our actual muscles, so it makes our muscles look larger than they are on the scans. So that's something to be mindful of, you want to make sure that your diet's been very consistent for a good two weeks before you go for your DEXA body comp.

And also, if you have fatty liver, fatty pancreas, fatty spleen, any of these fatty organs that we unfortunately see so much of nowadays, the DEXA body composition at baseline will pick that up as more muscle mass. So it picks up the fat that's around the organs as fat, but once fat makes it inside of the organs, well, it picks that up as muscle mass instead of fat, so there's a caveat there. So as you continue to fast and you lose fat from your liver, for example, your liver's going to look smaller, but the right size, because at baseline it's just looking too big because of all of that fat, but the DEXA scan might indicate a minor loss in lean mass as a result.

So this is why I say go every four months, because these trends end up getting accounted for, or blurred out of the bigger picture, and really going every four to six months, you can get a much better idea of if you're trending in the right direction, or seeing any unwanted side effects from fasting, but I would really try to space them out, just to make sure you're blurring out these little in-between moments that are uncomfortable for you to digest the information when they're just caveats of the DEXA scan. Nothing is perfect, unfortunately.

Now, there are body composition scales you can get at home. Some are more accurate than others. Unless they're being properly maintained, they become inaccurate over time, they need to be calibrated, but the idea is to look for trends, regardless of how accurate or how close it is to your ideal DEXA scan results under normal circumstances. So just be mindful of those trends, don't get too discouraged. But the same is true that it does take a while to see changes in body composition, so even looking at it on a weekly basis can be frustrating, even two weeks, so I check my body composition on a monthly basis, and over the course of the month, you should see a great improvement in your body composition.

Now, there's a couple of scales out there, we used... We use a Cardio Scale right now, and so I've been testing that out. I'm really enjoying it. It's going to link in with our health integration, but there's all different types of body composition scales out there, and play around with them, see what works best for you. They range in price anywhere from just a few dollars to hundreds or thousands of dollars, but the idea is it doesn't really matter which one you get, as long as you just look for the trends on the same device. We used to talk a lot about the Omron scale, which I still think is a fabulous body composition scale too, and it's almost always 100% on the mark when I compare it with my regular, routine DEXA scans.

Now, for the body fat percentage for females, we really want to get the body fat under 30%, and ideally around 25%. With males, we're looking to get it around 25%, and ideally under 25%, closer to 20%. Now, these scans, all of this, if this is sounding complicated to you, overwhelming, you have no... It's just too much, don't worry about it. Let's talk about some other strategies that you can track your fat loss progress with that are good accountability tools, that don't necessarily involve a scale.

The best one is progress photos. The camera's not going to lie to you, and nowadays with smartphones, it's so easy to take progress pictures. We really recommend that you take them on a weekly basis, or at the very least, on a monthly basis, because you'll be able to see huge changes in your body, even though you might not necessarily be seeing those changes on the scale.

And you can also take your measurements, you can take your waist measurement, and you can take measurements around parts of your body that you're hoping are going to shrink, so for a lot of us, it's biceps and triceps, hips and thighs as well, and keep track of your total inches lost. Our waist, we actually want to be half of our height in inches or less, so that is something that you can use as a target to help you track your fat loss as well.

Now, how much fat in general should you expect to lose for a 24-hour fasting period? Well, 24-hour to 36-hour, and this will range for everybody, but every full day of fasting that you do, you should expect to lose about half a pound of body fat. So if you're doing, say, three 36-hour fasts a week, you're looking at about one and a half pounds of body fat loss, and if you're doing three 24-hour fasts a week, that's going to be closer to the pound of body fat loss a week. Might not seem like much, but we're talking about fasting consistently, so at the end of the month, at the end of two months, three months, it all adds up. Slow and steady often wins the race.

Now, when people first start fasting, the number on the scale seems to go down really rapidly. A lot of that is due to water loss as well, so the expected fat loss is about half a pound per day, so if you do a three-day fast, that's one and a half pounds. If you do a five-day fast, that's two and a half pounds. If you do a seven-day fast, that's three and a half pounds, and that is the ballpark from what the data shows.

Now, men tend to lose fat fairly consistently throughout their journeys. It might be a little bit slower to start in some older populations because of just low testosterone. Testosterone levels really do go down as we age, so as we age, we do see fat loss be a bit more challenging even in our male counterparts, but the good news is that fasting is an excellent way to help boost testosterone, so most men are able to do so fairly quickly, and they do see that consistent half a pound of fat loss per fasting day.

Now, women in general struggle a little bit, especially as we age as well, due to deficiencies not just in testosterone, but estrogen, and imbalances and low progesterone levels, and these things can work themselves out and improve with a healthier diet and with fasting as well, but women do find that fat loss can be slow at the start, especially if they have a history of calorie restriction diets on top of that, which has lowered their metabolic rate over time.

So most women, it's not uncommon to do a month of three 42-hour fasts before you even start to see any sort of substantial fat loss, and usually two to three months down the road, we are losing fat at the same rate as our male counterparts, but because we are more hormonally complicated, it just takes more work for us to actually lose this body fat.

And for both men and women with severe insulin resistance, we really need to tackle lowering that insulin, our internal levels of insulin, first and foremost, before we can start to make significant progress in losing weight. If our body is full of fat-trapping hormones and it's available in plentiful quantities, it's going to be tough, but that doesn't mean that your fasting is not helping. The fasting helps to lower the insulin levels, to improve the insulin resistance, and make it such that in a month from now, you are able to lose fat loss at a decent rate. So the bottom line is if you are a diabetic with severe insulin resistance, you have to put in some time up front, but it will pay off, so just be patient that first month.

Women in general with fat loss also need to be patient that first month. You should see the fat loss start to pick up in months two and three, and by month four, we should be losing weight at the same rate as our male counterparts. And for men in general for fat loss, we do see it to be mildly challenging for a week or two, but after that, it seems to pick up, and we do hit that half a pound fat loss per day target in most men.

So those are the trends that we see, of course it'll be different under different circumstances, and we need to remember that it's just so important to control stress if we're looking to improve our metabolic health and lose body fat. Stress, cortisol is our primary stress hormone, and it's a fat-trapping hormone as well, so even if you're doing all of the fasting in the world, even if you're eating the best diet for your physiology, you've got to keep control of the stress, everybody.

On that note, I really highly recommend that you check out coach Terri's support groups on mindset and habits, they're golden. They run for about 60 to 90 minutes, really tackling a lot of stress and emotional relationships when it comes to food. All right everyone, we'll see you back here tomorrow for lesson 13 on measuring glucose and ketone levels, and how to track glucose trends as you get better. Bye for now.