

## **Lesson 3: How to Track Your Progress**

Welcome to lesson number three. I'm Andrea. In today's lesson, we will be talking about why you shouldn't rely on the scale to measure your progress, and instead, how to match your goals with an objective data point. We will also discuss the levels measured in your SoWell at-home lab kit, and how to use your BioSense device. Quick disclaimer, none of this is medical advice. It's for your education only. Consult your own healthcare provider to discuss your lab work or any other markers discussed in this lesson. Do not disregard, avoid, or delay obtaining medical advice from a qualified healthcare professional because of something you may have heard during this lesson. Folks, I want to underscore that weight is a poor measure of anything. I'm going to say that again, weight is a poor measure of anything. What it does measure is the total weight of your body fat, lean muscle, organs, bone, and fluid. It is crude. It says nothing about composition, says nothing about fat loss, lean muscle tissue gain, or bone mass as you go through your journey.

It won't help you identify what's going on. Daily fluctuations indicate fluid status changes. They are not true representations of fat loss or even lean muscle gain. The scale is not helpful to use more than once weekly, if at all. We actually see people of normal or even low body weight who are fat inside and people of elevated weight who are lean inside. This is also why body mass index is a useless measurement. Now, let's talk about what you should be tracking. So if your goal is fat loss, you're going to want to take a few other objective data points to help you track progress towards your goal. Body fat percentage is a great one. It measures the percentage of your body that is composed of fatty tissue. You can obtain this measurement in several ways. There's a DEXA, there's an air displacement or BOD POD, and 3D body scanner. Now, these three methods, of course, are really great, DEXA being the gold standard. That said, you do have to pay for them. You have to find an organization outside or in your community who offers these things.

It can be cumbersome to try to track your body fat percentage on a regular basis. Instead, you can get a home scale. Home body scales have come a long way in the last five to 10 years. You want to find one that also measures your body fat percentage, but you want to find a good quality one. There are several brands that we recommend that we find are quite accurate. Withings, Omron, and Renpho, R-E-N-P-H-O. Why is body fat percentage important? It is much more helpful to track when undertaking a weight loss program. For women, the average range is 25 to 31%. Under this can be considered fitness or athletics. So if you do have a goal to become more fit or athletic, you're going to want to aim to be under 25%. For men, the average or acceptable range is 18 to 24%. Of course, if you are looking for a fitness or athletic goal, you're going to want to be under that.

Waist circumference is another one that I like to recommend to my clients when they're embarking upon a fat loss journey. What it measures is the circumference of your waist. You want to find the narrowest point of your waist, not at the belly button. That's usually the widest point of your waist, and you don't want to take your belt measurement. Take a measurement there and round up to the nearest half inch or to the nearest centimeter. The best time to do this



is first thing in the morning, after you've gone to the bathroom. You want to stand in front of the mirror without any clothes on, use a seamstress or tailors measuring tape. So not the kind that you would use to measure a wall or something like that. You would gently want to place it. Don't be sucking in. Don't be slouching, just stand and breathe normally. It is helpful in determining your level of insulin resistance and the literature closely correlates waist circumference with your risk for cardiovascular disease.

Now, for a healthy range, I want you to check this website based on your sex and ethnicity, because healthy ranges can vary. Something else you can do with your waist circumference is apply it and take your waist to height ratio. This is the ratio of your waist circumference to your height. So you're going to take your waist, divide it by your height in the same unit of measurement. So just remember that the enumerator and the denominator need to be in the same measurement. So if you took your waist in inches, you're going to take your height in inches. If you took your waist in centimeters, you're going to want to take your height in centimeters. My waist circumference is 27 inches and my height is 63 inches. So I'm going to take 27, divide that by 63, and I get 0.43. Why is this important? It is a stronger predictor of type two diabetes and cardiovascular disease than body mass index.

You want your waist to be less than half your height. So in my example, 27 divided by 63, I wasn't always this way, equals 0.43. So right now, I'm at a good waist to height ratio, but I wasn't always there. Postprandial blood sugar glucose is an excellent thing to track if you're trying to improve insulin resistance and diabetes. What does this mean? Postprandial is after a meal or after eating. It is your blood sugar or blood glucose at a certain point in time. If you are pre or type two diabetic, you want to take this two hours after a meal. If you are not a pre or type two diabetic, you can take it one hour post meal. It is helpful in determining the impact that a certain food has on your blood sugar. So it's a helpful proxy in determining if you will have an appreciable insulin spike post meal. Normal is up to 140 milligrams per deciliter or eight millimolars per liter.

If you are eating low carb or keto, you likely won't see over 110 milligrams per deciliter or over 6.5 millimoles per liter, unless you have pre or type two diabetes. What about fasting blood sugar or fasting glucose? This is another great one to track when you have a goal of improving insulin resistance and type two diabetes. It measures your blood sugar or blood glucose in a fasted state, usually at least 12 hours fasting. It's helpful in determining how efficient your body is at returning your blood sugar to baseline levels. If it's elevated, it can be a sign of pre-diabetes or type two diabetes. We will talk about the dawn phenomenon in a future lesson. Less than 100 milligrams per deciliter, or 5.6 millimoles per liter is where you want to be. Notice, I haven't given lower thresholds. This is because the level that is considered hypoglycemic can vary among individuals, depending on how insulin resistant someone is. I may not experience a hypo at 54, whereas someone who is pre or type two diabetic likely will.

Break your fast and seek medical attention if at any time you see fasting blood glucose of less than 63 milligrams per deciliter, or 3.5 millimolar per liter, or you feel unwell for any reason, independent of your blood sugar readings. Very important to keep in mind, folks. Safety first. Hemoglobin A1C is my favorite. This is a great one, again, when you have a goal of improving insulin resistance in diabetes. What does it measure? It is the percentage of your hemoglobin,



the protein that carries oxygen in your blood, that is glycated or bound with glucose. In the majority of people, your red cells live two to three months, and this is why we call the hemoglobin A1C or HVA1C a three month average. By now, you have your HVA1C from your SoWell kit. So let's talk about why it's important. It's an indicator of your risk for or if you are type two or even prediabetic. Doctors use it to monitor and titrate diabetes medications. The following levels are the most agreed upon reference ranges in North America. You may see or read slight variations. So discuss optimal ranges for you with your healthcare team.

Normal is anything under 5.5%. At risk is considered anything between 5.5 and 5.9%. Some may say this is normal, but it is actually a new category that was added several years back. Pre-diabetes is considered 6.0 to 6.4%. Then type two diabetes lives at 6.5 and above. Fasting insulin is another one to track when you have a goal of improving insulin resistance in diabetes, and you have this from your SoWell kit. What it measures is your insulin level in a fasted state. Why is this important? It's an indicator of how hard your pancreas is working to maintain your current blood sugars. An optimal level is less than three MIU per milliliter, or less than 21 pmol per liter. Acceptable is anywhere between three and 10 or up to 70 pmol per liter, and then over 10 or over 70 pmol per liter, and your pancreas is working quite hard and may be indicative of hyper-insulinemia. So you do have some work to do there. What you can do with your fasting insulin and your fasting glucose from your SoWell at-home lab kit is plug them into something called a HOMA-IR.

Homeostatic model of insulin resistance, which is a marker of insulin resistance and risk for cardiovascular disease. Go to the bloodcode.com, scroll all the way down where it says blood code calculators. Click on that and then plug your fasting insulin and fasting glucose from your SoWell kit into the calculator. It'll show you healthy ranges and insulin resistant ranges. So a healthy range is 0.5 to 1.5 and less than one means you are insulin sensitive, which is great. Now, we're going to talk about cholesterol or a lipid panel. I'm going to use cholesterol and lipid interchangeably. So if you have a goal to improve your cholesterol panel, we're going to talk about some of these markers, the first one being total cholesterol. This one was included as part of the SoWell kit. That said, is part of a standard lipid panel your doctor would run. It measures crude or total levels of cholesterol, but like the scale, is a crude measure and says nothing about body composition.

So too is total cholesterol a crude measure, and says nothing about the composition of that cholesterol. Doctors will use it to determine if you need to be put on a statin drug. I'm not going to provide any reference ranges here because what is considered acceptable can vary widely, depending on who you ask, and also HDL and triglycerides, among other things, need to be taken into account. Let's talk about HDL or high density lipoprotein. This was one that was included in your kit. HDL is a lipoprotein. It's part of a standard lipid panel. It is known as the good cholesterol. Why is this important? HDL's anti-inflammatory, it's an antioxidant, it helps keep blood vessels dilated. So it is protective against cardiovascular disease. The ideal for women is greater than or equal to 50 milligrams per deciliter, or 1.3 millimolar per liter. Ideal for men is greater than or equal to 38 milligrams per deciliter, or 1.0 for a millimolar per liter. Low density lipoprotein or LDL was included as part of your kit.



It is also a lipoprotein part of a standard lipid panel. It is the most controversial marker on a lipid panel. That's because there are two types. There's pattern A, which are known to be neutral, and pattern B, which are known to be harmful. Now, a standard lipid panel does not show the breakdown of pattern A to pattern B. So if you are interested in seeing this breakdown, you will have to work with your doctor or healthcare provider to order a particle test or NMR lipo profile, as it is also called. Now, LDL is also the target of statin drug treatment like total cholesterol. A 2016 systematic review found that high LDL was inversely associated with all cause mortality in people over the age of 60. So this is an interesting one to read and review and maybe bring to your healthcare team and see what it might mean for you. Triglycerides is another lipoprotein, or TGs, and they are part of a standard lipid panel. It represents excess glucose converted into triglycerides in the liver. So it is not surprising that triglycerides are correlated very well with fatty liver disease and insulin resistance.

So the ideal for men and women is less than 88 milligrams per deciliter, or less than one millimolar per liter. Very important to get this one down. We're going to talk now about TSH and B12, which were two lab markers available to you in your SoWell at-home kit. TSH, or thyroid stimulating hormone, is a hormone made by the pituitary to tell the thyroid to make hormones T3 and T4. So TSH is not actually made by the thyroid, despite thyroid being in its name. It's a crude test to measure thyroid function, but like the scale and total cholesterol, is not very helpful and requires other measures, namely T3 and T4 to drill down on a thyroid issue that may or may not be present. Speak with your doctor or healthcare team if your level is abnormal so that he or she can run further tests and investigate. B12 or vitamin B12, this is a vitamin that plays a vital role in red blood cell formation, cell metabolism, nerve function, and the production of DNA.

B12 deficiency is actually easy to correct, not common in Western cultures. That said, people who follow a plant-based diet, whether it's a vegetarian or vegan diet, may be prone to this deficiency. So it's important to recognize and correct, but by now you've received your BioSense device. I love my BioSense device and use it every day. The data point here is Aces. What this is breath acetone expressed in these units, exclusive to the BioSense device. Aces are a measure of breath acetone, which is one of the three ketones that our bodies make when in the fat-burning state called ketosis. We will discuss ketosis in more depth in lesson number eight. It tells you whether you are in the state of ketosis, that is whether you are burning fat as your predominant fuel source, rather than glucose.

Zero to four Aces is low. So you're still burning glucose as a primary fuel source. Five to nine, congratulations, you are in ketosis and you are burning predominantly fat for fuel, lowering your blood sugars, lowering your insulin levels. Between 10 and 14, you have the additional benefits of the potential for increased mental clarity, easing inflammation, enhancing brain health. Then 15 and above is advanced. All of the above benefits, plus the additional ones such as cell regeneration, enhancing health and energy. So it's important to be taking these measures on a daily basis and track how you're feeling to see if it correlates with these benefits. We'll talk more about what your BioSense data means in lesson number 13. For now, remember to be taking readings several times per day, during fasting days, and at least twice daily on non-fasting days, upon waking, and before bed at a minimum. You won't have to do this forever unless you want to, but it will provide you with great feedback on your behaviors, how you are fasting, how you are eating, sleeping, and stress management.



Going to talk about two other things that you can do now to track on your journey. One is a self-report scale. What I mean by this is we can subjectively measure things like general aches and pains, energy levels, appetites, mood, and general wellbeing. When my clients come to me, I try to help them identify what goals they have for embarking upon this lifestyle. Some of my clients will say that they feel aches and pains, low energy, low mood. So what I will ask them to do is on a scale of zero to 10 is tell me how they're doing that week with zero being the worst and 10 being feeling great. So it's helpful for you to stay in tune with how you are feeling as you progress through this or any health journey. So maybe pick one or two of these, again, if you are experiencing them, and track them on a weekly basis. If you're not experiencing any of these things, great, then there's no need to track.

Progress photos are fantastic. Now, they're not an objective data point, but they are subjective and can really be powerful in your journey. Taking photos can lead to increased confidence as you see changes in your body and lead to greater motivation. Commit to only weighing yourself once per week, if at all. Take a baseline photo of yourself and select one to two other metrics that we talked about to track. Your goal for next week, eliminate snacking. If you find yourself wanting to snack between meals, it's because you didn't eat enough at the preceding meal. So the next day, try to eat a little bit more and see if that helps. To help support you while trying to implement these action items, try joining a group meeting or two in the community this week. There are lots happening on a daily basis.

Don't forget to register for the next masterclass Q&A next Tuesday where we will answer all your questions. All sessions are listed in your course syllabus. Make sure to check it out regularly so you don't miss out. Finally, if you haven't already done so, drop into the exclusive masterclass forum, say hello, let us know how you're doing, and what questions you have. Have a great day.