Lesson 13: Expected Results Weight-loss & Blood Glucose

Welcome to lesson 13. I'm Andrea. In today's lesson, we will be talking about trends in the objective data points we learned about in lesson number three. I will go through each of those objective data points, provide a quick reminder of why it's important, and take you through what to expect on your journey. If you need a refresher on what any of those objective data points mean, please go back and rewatch lesson number three before watching this one. Quick disclaimer, none of this is medical advice, it's for your education only. Consult your own healthcare provider to discuss your lab work and 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. I'm going to restate this folks, weight is a poor measure of anything. What it does measure is the total weight of your body fat, lean muscle, your organs, your bone, and your fluid.

It's a crude measurement. It says nothing about what's happening with your body composition, whether you are losing fat, gaining lean muscle tissue, or even gaining bone. Daily fluctuations indicate fluid status changes, not representations of true fat loss or lean muscle gain. It's not helpful to weigh yourself more than once weekly, if at all. And just a reminder, we do see people of normal or even low body weight, we're actually comprised of quite a bit of fat inside. And people have elevated body weight who are lean inside. This is also why body mass index is useless.

Let's talk about trends for those of you who are reluctant to give up that scale completely. Men tend to drop on the scale faster and more readily than women at the beginning. And then it paces out. If you are working out, don't expect the scale to drop fast or quick, as you are building muscle to replace fat so you won't see this reflected on the scale. Exercise is terrible for weight loss, and we've been conditioned in the media to think that it will help. Now, exercise is great for optimizing body composition, among other things, which are out of the scope of this course. If you do notice a drop in the scale, you can expect about 0.5 pounds of fat per 36 hour fasting period. Anything above this is fluid shift. Remember that eating carbs causes fluid retention, and lowering carbs or fasting causes fluid loss. So keep this in mind when and if you are still using the scale.

Let's talk about body fat percentage. This one is much more helpful to track when undertaking a weight loss program or fat loss program. So if you did purchase one of the scales that I recommended, an average that you should be aiming towards for women or normal range should be between 25 to 31% body fat percentage. Under this is considered fitness or athletic. And for men, an average is 18 to 24%. Anything under this is considered fitness or athletic. What you can expect as you work through this course, a gradual decrease in this number, especially if you are working out. Waist circumference is very helpful in determining your level of insulin resistance and in the literature, it's closely correlated with your risk for cardiovascular disease. For a healthy range, based on your sex and ethnicity, again, refer to this website. What

you can expect as you work through this course, a gradual decrease, and this is truly great news, because it means that the dangerous fat around your organs is being lost.

Waist to height ratio is another one that we chatted about. Again, a stronger predictor of Type 2 diabetes and cardiovascular disease risk than body mass index. It's ideal to have a waist circumference of less than half your height. What can you expect as you work through this course? A gradual decrease in this number approaching 0.5, or if you get below 0.5, great. This is awesome news, as it means your risk for cardiovascular disease and Type 2 diabetes is going down.

We talked about a number of markers for folks with a goal of improving insulin resistance and pre or Type 2 diabetes. The first one we discussed was postprandial blood sugar and glucose, or after eating. It's helpful in determining the impact a certain food has on your blood sugar. So it's a helpful proxy for determining if you will have an appreciable insulin spike. Normal levels are up to 140 milligrams per deciliter, or eight millimoles per liter. If you're eating low carb keto, you likely won't see over 110 milligrams per deciliter, or over 6.5 millimoles per liter. I'm being very generous with those numbers. You can expect a gradual decrease, especially if you are pre or Type 2 diabetic. Now, this will largely be dependent on what you eat. So if you see high readings, it's likely because of something that you ate. That said, these levels can also be affected by poor sleep or stress. So if you ate well and have high numbers one day versus the next, it's likely because you either didn't sleep well the night before, or you're not managing your stress effectively.

In these cases, you're bumping up your cortisol, which is raising your blood sugar. A great test I like to run using blood sugar is how a new food impacts me. And I encourage everyone to get into the habit of doing this, and equate one experiment with various foods to learn how they impact you. If you have a CGM or continuous glucose monitor, you know what I'm talking about, but you can do this yourself with a regular blood glucose monitor. Do the following, take your blood glucose before eating the food, eat the food. Then wait one to two hours. Remember, if you are not pre or Type 2 diabetic, you can wait about an hour. But if you have pre or Type 2 diabetes, it's best to wait two hours. Take your blood glucose again. Did it go up? Stay the same? This is how you will know for sure, so that you can either avoid that food in the future or make it part of your healthy diet.

It's also a great way to avoid getting to online debates with people about whether X elicits a blood sugar or insulin response. The only answer you care about is whether X elicits a blood sugar or insulin response for you. This is what is known as bio individuality. If you aren't measuring blood glucose, not to worry, you can still do this experiment using your Biosense device. And I will show you how in a few minutes. Fasting blood sugar or fasting glucose. A reminder of why this measure is important. It's helpful in determining how efficient your body is at returning your blood sugar to baseline. If this is elevated, it could be a sign of pre-diabetes, or Type 2 and we are going to talk about the dawn phenomenon in a few minutes. Less than 100 milligrams per deciliter, or 5.6 millimoles per liter is where you want to be.

Again, notice I haven't given a lower threshold, and this is because the level that is considered hypoglycemic can vary, depending on how insulin-resistant someone is. I might not experience a hypo at 54, whereas someone who is pre or Type 2 diabetic likely will. A word about safety here folks, break your fast and seek medical attention if at any time you see your fasting blood sugar of less than 63 milligrams per deciliter, or 3.5 millimoles per liter, or if you feel unwell independent of your blood sugar reading for any reason.

What can you expect as you work through this course? This one might jump around a bit, especially if you are pre or Type 2 diabetic. When you're fasting, it's not uncommon to see blood sugars go up or be elevated to levels above your postprandial. And we refer to this as you dumping stored sugar. Think of yourself as burning off that donut you ate three months ago. Check with your doctor if you are concerned with your fasting glucose readings at any time during this course. The dawn phenomenon. So every diabetic who checks their morning sugars knows these will be the highest sugars they see over the course of the day. Just before awakening, our body secretes growth hormone, cortisol, glucagon, adrenaline. To get us ready for the day, these hormones counter insulin so they raise blood sugars. But this will slowly improve over time. Dawn phenomenon is usually the last thing to improve, so patience and perseverance.

Let's talk about hemoglobin A1C. A reminder of why this marker is important. It indicates if someone is at risk for, or has Type 2 diabetes. It's used to monitor and type treat diabetes medications among physicians. The following are the most agreed upon reference ranges in North America, you may see or read slight variations. Discuss optimal ranges for you with your healthcare provider.

Normal is less than 5.5%, at-risk is 5.5 to 5.9%, pre-diabetes is considered six to 6.4%, and then Type 2 diabetes is 6.5% and above. If you are not on a blood sugar lowering medication, you can expect a decrease in your hemoglobin A1C at the end of this course. If you are on a blood sugar lowering medication, or insulin, and you work with your doctor to either lower the dose or come off of that medication completely, your first hemoglobin A1C after this may be elevated, but your next one after that should be lower. So don't be too disappointed if you see this, just remember that those medications are specifically designed to lower your hemoglobin A1C.

Let's talk about fasting insulin now. A reminder of why this is important. It's an indicator of how hard your pancreas is working to maintain your current blood sugars. Optimal levels are below three MIU per milliliter, or 21 PMOLs per liter. Acceptable is between three and 10 MIUs per milliliter or up to 70 PMOLS per liter. And then over 10 MIU per milliliter or over 70 PMOLS per liter. And your pancreas is working very hard. There's hyperinsulinemia present. So you do have some work to do there. What can you expect as you work through this course? Similar to hemoglobin A1C, if you are not on a blood sugar lowering medication, you can expect a decrease in your insulin at the end of this course when you submit your SoWell at home blood kit. If you are taking a form of cortisol for any reason, inhaled corticosteroid, intranasal during allergy season, a steroid for rheumatoid arthritis or some other autoimmune condition, you may not see a decrease since cortisol raises insulin. If you started on one of these during the course, it won't be unusual to see fasting insulin higher.

If you are on a blood sugar lowering medication or insulin, and you work with your doctor to either lower the dose or come off of it completely, your first fasting insulin may be elevated, but your next one after that should be lower. So don't be too disappointed if you see this, just remember, those medications are specifically designed to lower your insulin. HOMA-IR or homeostatic model of insulin resistance. A reminder why this one is important. Go to thebloodcode.com, scroll all the way down to where it says the bloodcode calculators, click on that, and then plug in your fasting insulin and fasting glucose from your SoWell kit. A healthy range is 0.5 to 1.5, and less than one means that you are insulin sensitive, which is great. What can you expect as you work through this course? This should decrease. Caution if you are using any medications that I just discussed.

Let's talk now about a cholesterol lipid panel. Total cholesterol, a reminder of why this one is important. Doctors will use it to determine if you need to be put on a statin drug. I don't provide any reference ranges because what is considered acceptable can vary widely depending on who you ask, and HDL and triglycerides among other things need to be taken into account. What can you expect as you work through this course? Well, this total cholesterol is not tested in the SoWell kit, but if you do get a panel done by your doctor, it may go up, down, or stay the same. High-density lipoprotein or HDL, this is one that is included in your kit. It's anti-inflammatory, antioxidant. It helps keep blood vessels dilated. So we consider it protective against cardiovascular disease. Ideal for women, is greater than or equal to 50 milligrams per deciliter, or 1.3 millimolars per liter. Ideal for men is greater than are equal to 38 milligrams per deciliter, or 1.04 millimolars per liter.

Your HDL should go up, especially with the reduction of dietary omega-6s and increased omega-3s. We talked about these dietary strategies in a previous lesson. Low-density lipoprotein, or LDL. A reminder of this one, again, a standard lipid panel doesn't show the breakdown of pattern A versus pattern B. That said, it is the target of statin drug treatment. But I want to point out that a 2016 systematic review found that high LDL was inversely associated with all cause mortality in people over the age of 60. So you might want to give that study a read, bring it to your healthcare team and discuss. What can you expect of you to work through this course? Your LDL could go up or stay the same. We rarely see it decrease. Again, I don't provide a reference range because what is considered acceptable can vary widely depending on who you ask, and HDL and triglycerides among other things really should be taken into account when looking at one's LDL.

If you are concerned about your level, I do encourage you to speak with your healthcare provider about getting a lipo-profile test, which will show how much of your LDL is pattern A versus pattern B. Triglycerides is a problematic lipid, and we generally want to see this go down. The ideal for men and women is less than 88 milligrams per deciliter, or less than one millimolar per liter. The good news is that what can you expect as you work through this course is that number to go down. TSH and B12. These are markers that you'll receive from your SoWell at-home kit. TSH is thyroid-stimulating hormone. A reminder, it's a 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 a thyroid issue. Speak with your doctor if your level is abnormal

so he or she can run further tests. What you can expect as you work through this course, TSH could go up, down, or stay the same.

B12, a reminder, this is a vitamin, and B12 deficiency is easy to correct, and is not common in Western cultures. People who follow vegan or vegetarian diets may be prone to a deficiency. So it's important to recognize and correct. What you can expect as you work through this course, it can go up or down or stay the same. It can decrease if you lower the consumption of animal foods. So if you plan on switching to a plant-based diet, it is important to check this level a few months after switching to this new diet, to see where your levels are at. Biosense device. So the data points here are ACEs. And just a reminder, this tells you whether you are in the state of ketosis, that is, whether you are burning fats as your predominant fuel source, rather than glucose. Zero to four ACEs is low. You're still burning glucose as a primary fuel source. Anything between five and nine ACEs, you're moderate, you're burning predominantly fat for fuel. You're lowering blood sugars and insulin levels.

Between 10 and 14, you are experiencing further benefits. So there's a potential for increased mental clarity, easing inflammation and enhancing brain health. 15 plus ACEs and you're in the advanced stage. You realize the benefits of all of the above. Plus the additional benefits such as regenerating cells, enhancing health, and energy. When using your Biosense device, I want you to remember that a necessary condition for the presence of ketones is the lowering of blood sugar and insulin levels. Now, since we don't have a device that measures in real-time what our insulin levels are, the presence of ketones is a great proxy or surrogate marker for insulin. That said, let's dive into some advanced analysis using your Biosense device.

If you have diabetes or prediabetes, you may notice your AM ketones or ACEs to be the lowest. Why is this? You know the answer. And it's because of the dawn phenomenon. Remember, your AM sugars are the highest. So you would expect your AM ACEs to be on the low end. Again, think about why this is, it's because your blood sugars are likely elevated. Remember that slice of pizza you were burning off from last year? For those of you without pre or Type 2 diabetes, you'll see your ACEs can go quite high during a fast, and lower once you resume eating. If you are eating a quality, low-carbohydrate or ketogenic diet, it's not uncommon to consistently be reading high on your Biosense. And in fact, I see this often even when I'm not fasting. Now, let's talk about how to use your Biosense device to run your N equals one experiment on various foods, similar to how you would do so using a blood glucose meter.

The benefit here though, is that you don't have to prick your finger. Take your baseline Biosense reading, eat the food, wait three to four hours. Notice you do have to wait a bit longer than you would with a blood glucose reading. And this is because it takes time for the metabolic processes to happen. Remember, ACEs is measuring the ketones in your breath from your lungs. Then take another Biosense reading. Did it go up? Did it stay the same? Did it drop a bit? Did it drop a lot? A large drop means a significant blood sugar response, and therefore an insulin response. What about the other markers we talked about? One was a subjective self-report scale. If you are experiencing any symptoms such as joint pain, mood, energy level, sleep disturbances. So it's done on a scale of zero to 10, with zero being the worst in 10 being great.

This is helpful for you to stay in tune with how you are feeling as you progress through this or any health journey. So just remember to mark yourself weekly. What can you expect as you work through this course? Well, you can expect improvement. Progress photos are fun. Did you take yours? This can lead to increased confidence and greater motivation. So I want to underscore the importance of this. If you took a photo of yourself at baseline, take a photo of yourself and see how your body might be changing. What can you expect as you work through this course? Well, as I said, higher self-satisfaction and time to buy new clothes. The action points for today's lesson, have a look at your objective data points and the one to two other metrics you decided to track after watching lesson number three early on, and see if you can identify the trends that I just discussed.

If you are still focused on the scale, I know there's still some of you out there, consider abandoning it completely and look at other objective data points. It's not too late to pick one or two others to track. To help support you while trying to implement these action items, try joining a group challenge in the community this week. Don't forget to register for the next masterclass Q and A, where we answer all of your questions. All sessions are listed in your course syllabus, make sure to check it out regularly so you don't miss out. And finally, if you haven't already done so, drop into the exclusive masterclass forum and say hello. Let us know how you're doing and what questions you have. Have an awesome day.