

Lesson 8: Nutritional Strategies

Welcome to lesson number eight. I'm Andrea. In today's lesson, we will discuss how the three macronutrients affect blood sugar and insulin levels, and explore three of our recommended eating strategies, paleo, low-carb and ketogenic. There are three macronutrients available for us to consume. So I'm going to go over these three macronutrients on a broad level.

Carbohydrates encompass fruits and veggies, legumes, grains and grain-based products, sugar and all of its forms. Most things with a barcode. It also includes nuts and seeds and dairy, which actually fall under all three macronutrients since they have a little bit of all three. Protein foods, any animal products, eggs, soy products, again, nuts and seeds, which do have some incidental protein, and dairy foods, which also have incidental protein. And then your fats include any oils, butter, animal fats, again, nuts and seeds, and full-fat dairy. Quick question for you now, what are the top five non-junk foods that you tend to cut out of your diet when you want to lose weight? Think about this as we work through today's lesson, we'll come back to the answer in a few minutes.

I want to talk now about macronutrients and blood sugar. Carbohydrates elicit a very fast, very high blood sugar spike. This can be tempered to some degree by the fiber in the food. Protein elicits a slower, modest blood sugar elevation. And fat, barely a blip, as you can see here in the diagram. I want to introduce you to the hormone glucagon, which tends to be underutilized in insulin resistance. So eating high carb or grazing increases our blood sugar and this in turn causes our pancreas to secrete insulin because one of insulin's main roles is to clear sugar from the blood, put it into the cells for use. So insulin can be thought as directing energy into the cells for storage.

By contrast, eating low carb or fasting lowers our blood sugar levels. This in turn causes our pancreas to secrete glucagon. Glucagon's role is to direct energy out of the cells for utilization. Now, why is this significant? Well, here's what we want. We want hormone homeostasis. We want insulin and glucagon on to work in harmony. Our blood sugar is supposed to be kept at somewhere at around five grams of blood sugar circulating in our body at any given time. This is about one teaspoon.

Now, what is actually happening in standard American diets or in Western societies is we are overproducing insulin and glucagon's not really able to keep up. So we have this pressure from insulin and glucagon is really not doing too much. Now, there's a spectrum of insulin resistance that I want to talk about now. Insulin resistance and insulin sensitivity is not an either/or black and white phenomenon. It occurs on a spectrum. So I really want to underscore the importance of this.

So at the far end of the spectrum, you have insulin sensitivity. You can think of yourself as being born into this world with wonderful insulin sensitivity. As you go through life, you might move towards insulin resistance or to the other end of the spectrum. So mild insulin resistance, which

can then progress to moderate insulin resistance, which then progresses into pre-diabetes, type two diabetes, and then insulin dependent type two diabetes at the far end, the insulin resistant spectrum. There are several factors that can contribute to the development of insulin resistance. The three main ones of course are age, genetics, and the third, how much insulin we are exposed to over the course of our life. This is a significant one because it's the one that we have the most control over, and arguably the one that does determine whether or not we will trigger that insulin resistance or not.

I want to talk now about three dietary strategies that we recommend for our clients. Whichever strategy you choose, I want you to keep in mind that the majority of the diet should come from real, whole, minimally processed foods. So keep that in mind. With paleo, low carb and keto, what is the focus? With paleo, it's on food types. With low carb, the focus is moderating and dietary carbs. And with keto, the focus is lowering dietary carbs to the point of getting the body to make ketones. With respect to the level of carbs, in paleo, this can be variable, in low carb, it's moderate, and in keto, the level of carbs of course is low, but this can vary among individuals.

When to choose each of these diets. For paleo, you can choose when you are insulin sensitive or have restored some degree of insulin sensitivity. Use low carb if you struggle with implementing keto or you some degree of insulin resistance that is not severe. So you're not pre or type two diabetic. Choose ketogenic if you are very insulin resistant. In other words, you have pre or type two diabetes, or you are actively trying to lose fat.

What are the top five non-junk foods you usually cut out of your diet when you want to lose weight? Potatoes, bread, rice, pasta, and corn. It's easy to see why this is now. Isn't it? Now, none of the dietary strategies that we will dive into recommend consuming these foods due to their propensity to elevate blood sugar and insulin levels. So I hope you can appreciate that now.

Let's talk about paleo. This is a way of eating that imitates food consumed during the paleolithic era, so 2.5 million years ago or thereabouts, coinciding with the emergence of modern homo sapiens. An emphasis is placed on minimally processed foods and those that were hunted and gathered. Paleo focuses on plants and animals, eliminating foods available with the advent of agriculture. And these include grains and all grain-based products, legumes, this includes beans, soy, peas, peanuts, regular white potatoes, dairy foods, alcohol, refined sugar, and of course processed foods.

Okay, now let's move on to keto. I'm going to skip over low carb. And the reason I'm going to do this is because there's a finer point between low carb and keto. So just stick with me for a moment. Keto is a metabolic state prompted by the lowering of insulin and elevation of glucagon, where the body switches its primary fuel source from glucose to fatty acids. Now, the by-products of this process are small molecules called ketones and our bodies produce three of these. How do you achieve ketosis?

Well, your insulin production must be low. So to achieve this, you must lower your carb consumption or fast. Most people can achieve nutritional ketosis with around 20 grams of net carbs per day, but this is very person-specific. To count carbohydrates, I encourage you to count the net carbs for real whole foods. This is the total carbohydrates of the food minus the fiber. Since we trust mother nature, we can subtract the fiber from the carbohydrates in minimally processed or whole foods. Now, for processed foods, you're going to count the total carbs since we don't trust processed food companies.

The difference between low carb and keto is a very fine point. It's simply the level of carb restriction at which point your body switches to the fat burning state. That's it. Now, this is very bio-individual and in general, the more insulin sensitive you are, the more carbs you can get away with while still maintaining ketone levels. The more insulin resistant you are, the less carbs you can get away with. For example, at the beginning of this journey, I needed to maintain about 30 grams of net carbs or less, but now eight years later, eight years after starting my journey, my body can make ketones at 40 or more net carbs per day.

We recommend anybody starting out to go with 20 grams of net carbs or less per day. Here's the pyramid here for quick reference. So strict, low carbohydrate or a ketogenic diet is 20 grams of net carbs or less. A moderate, low carbohydrate diet is anywhere between 20 and 40 net grams of carbohydrates per day. And then a liberal low carbohydrate diet can be thought of as anywhere between 40 and 100 grams of carbohydrates per day. To count or not to count? That is the question.

You'll want to count your carbohydrates or keep track of your daily carbs if you want to become fluent in knowing the number of carbs in particular food items, or you are new to this eating strategy, or if you are having difficulty getting into ketosis. Choose not to count or not to track if you find carb counting disruptive to your life. We do have quite a bit of clients who come to us and say, "This is triggering a diet mentality for me." And that's completely fine. By all means, don't start counting. Choose no counting if you want to learn to eat more intuitively.

How to meal plan without counting carbohydrates. Here's the plate method that we recommend clients follow. You can generally stay within 20 grams of net carbs per day by following this plate method. You should be well satiated after your meals and not hungry. If you are still hungry, eat more of what was initially on your plate and let your appetite guide you. This is what is referred to as intuitive eating. So you're going to fill your plate a quarter with protein, a quarter with fat, or half of your plate with protein and fat, and then the other half with non-starchy veggies and what we call incidental carbohydrates.

Okay, what to eat? Non-starchy veggies and incidental carbohydrates, lettuces of all kinds, cabbage, spinach, broccoli, broccoli rabe or rapini, cauliflower, asparagus, eggplant, green beans, cucumber, tomato, zucchini, mushrooms, olives, snap peas, Swiss chard, avocado, chia seeds, hemp seeds, unsweetened coconut. Fats, any kind of a natural unprocessed fats, including butter or ghee, which is clarified butter, full-fat cream, full-fat sour cream, full-fat mayonnaise made with avocado oil, full-fat cream cheese, cheeses, coconut oil, avocado oil, olive oil, lard, tallow, bacon fat, chicken fat, duck fat.

Just a quick word about dairy. Some people tolerate it very well. Others, they don't tolerate it. So in that case, obviously avoid it. And if it does trigger you, because dairy can be easy to overeat, you're going to want to scale back or avoid it as well. Protein sources, any kind of natural animal product, beef, pork, lamb, game, poultry, eggs, fish and seafood, organ meats. Feel free to eat the skin too. A note about dairy here, full fat avocado cheese and full fat unflavored or Greek yogurt can be considered protein foods for those that are vegetarian. Again, if dairy triggers you, best to avoid.

We're going to go easy on the following foods, the non-starchy veggies of carrots, sweet bell peppers, onions, tomato puree, or tomato sauce, Brussels sprouts, spaghetti squash, rutabaga, jicama and celeriac. These are vegetables that you're going to want to just be mindful of and not overdue. Nuts and nut butters, easy to overdo, avoid cashews and pistachios for now. Your fruits, stick to raspberries, blackberries, strawberries, and melons. For now, avoid all other fruit. Your treats, go easy with the dark chocolate, aim for greater than 80%, and you're going to want to stay away from keto branded foods. If you need something in the short-term, you can reach for foods for now, but it is best to avoid them and get rid of them eventually.

Let's talk about some popular low carb alternatives or ketogenic alternatives. So with your starchy veggies, blood sugar spikers are corn, peas, squash, white potato and sweet potato. You're better off having non-starchy veggies instead, spaghetti squash, rutabaga or jicama are great replacements for potatoes. Pumpkin, cauliflower, you can make cauliflower mashed potatoes. There are so many recipes circulating online, so just look this up.

Your fruits, you're going to want to avoid grapes, bananas and pineapple. I would even add mango to that list. These are blood sugar spikers. You're better off having berries, except blueberries for now, melons and the low sugar fruits, avocado, olives, coconut, and tomato. For pasta, if you really miss pasta, trust me, I get it. I'm Italian. Instead of regular white whole grain or even gluten-free varieties, try black bean pasta, try Hearts of Palm pasta, Shirataki noodles, spaghetti squash, or spiralized zucchini.

Rice is another very popular food. I would avoid all kinds right now. Instead, try cauliflower rice or cauli rice, Hearts of Palm also makes a rice product now. With legumes like lentils and chickpeas, kidney beans, black beans and white beans, it's best to avoid these for now. If you must, a very small amount can be consumed. And by that, I mean a little bit of a sprinkle on a salad, that's about it.

Let's talk about some other low carb alternatives that people like to reach for. Baked goods, so muffins, cakes, cookies, all of the things in this category, they are going to sabotage you. You're better off having dark chocolate, try over 80%, and nuts or berries and whipped cream. If dairy, you cannot tolerate dairy or it triggers you, try a whipped coconut cream. You are going to want to avoid alcohol as much as possible. It does pause and put the brakes on any fat burning that it's taking place.

That said, if you are going out or you are being social and you do want to have a bit of alcohol, avoid fancy mixed drinks, avoid dessert or ice wine, no Moscato, no wine coolers and no regular beer. Instead of these, what can you have? Well, spirits, all have zero carbs, dry champagne or a dry sparkling wine, a dry red, a dry white, and of course, light beer. Chocolate, so you're going to want to avoid milk chocolate and white chocolate at this point. Try to train your taste buds. You will get there to enjoy dark chocolate, I promise you. Try for anything over 80%, the darker the better. If you're still finding that really bitter, you can start with 70% and gradually work your way up.

Crunchy foods, notice I didn't say snack foods because we don't want you snacking, but for crunchy foods, for that crunch factor, if you're creating crackers, chips, corn tortillas or popcorn, I invite you instead to try pork rinds, avoid those fried and hydrogenated oils. We'll talk about this in a minute. Go for nuts. Again, accept pistachios and cashews. Cheese and cheese crisps, olives, pickles, veggies, or veggies dipped guacamole bacon.

Okay, what about polyunsaturated fats? So these include omega-3s and 6s. They're also called essential fatty acids because we cannot make them. Omega-3s are anti-inflammatory, omega-6s are pro-inflammatory. Our ancestors consumed these fats in a ratio of one to one. Whereas in modern day, we are consuming these at a ratio of one to 16, omega-3 to omega-6. The single thing you can do to reduce your omega-6 consumption is to avoid processed seed and vegetable oils, and I'll identify these in just a moment.

Trans fats are naturally present in small amounts in animal products. So they are neutral to health when present in this form. More often, however, they are found as artificial fat created when polyunsaturated fats are bombarded with hydrogen, known as hydrogenated, to make it saturated. Food manufacturers do this because it increases product shelf life, decreases the roof refrigeration requirement, and it's cheaper. These fats are highly inflammatory and atherogenic, meaning they are causing heart disease. Any food with the words listed here, strongly avoid. Hydrogenated, partially hydrogenated, mono and diglycerides, vegetable oil shortening margarine.

Let's look at some fat comparisons here. So with your saturated fats, your good choices, as I said before, are butter or ghee, clarified butter, full fat dairy, coconut oil, MCT oil or medium chain triglyceride oil, palm oil and any animal fat. You're going to want to avoid trans fats. So these are, again, saturated fats created from polyunsaturated fats. For your monounsaturated fats, olives and extra virgin olive oil, avocados and avocado oil. Nuts, bad choices, canola oil, safflower oil, peanut oil, sesame oil, avoid all of these. Your polyunsaturated fats, the good ones, chia and hemp seeds, fatty fish, salmon, mackerel, herring, tuna, trout, walnuts are a great source, and sunflower seeds. Bad choices, avoid the following, trans fats, corn oil, sunflower oil, soy, soybean oil, and flax. You'll see in the chart, some asterisks. Use these fats to cook with as they are heat stable, extra virgin olive oil is good for low heat cooking, like sauteing.

Action points from today's lesson. If you haven't already done so, select one of these eating strategies and start following it. To start, eliminate at least one processed and refined sugar in



your diet or sweeteners. Read labels and make sure you are not consuming processed or trans fats. To help implement these action items in our community, go to programs and take our nutrition course. Don't forget to register for the next masterclass Q&A, where we will answer all your questions. Sessions are listed in your course syllabus. Make sure to check out regularly so you don't miss out on anything. And finally, if you haven't already done so, drop into the exclusive masterclass forum, say hello and let us know how you're doing and any questions that you have. Have a great day.