# THE ADRENAL RECOL

# Redefining Macronutrients

Macronutrients are a type of food substances the human body requires in a large amount.

We define them as protein, carbohydrates, and fat.

Pillar #5 of the Adrenal ReCode clinical strategy circulates around you finding your baseline (the cumulative information of your temperature, pulse, and logs) so that you can customize your macronutrient ratios in order to best fuel your cells because only when your cells are properly fueled, can you heal.

And once you reach a level of healing, you'll adjust your macronutrients again and so on, until you reach a maintenance macronutrient ratio that allows you to thrive.

This strategy teaches you a customized sliding scale which is the secret weapon you can use to adjust your macronutrients depending on what's going on in your life and how that affects your adrenals and nervous system. It can help prevent you from sliding back into adrenal fatigue the next time a big stressor comes into your life.

# Understanding The Adrenal ReCode Carbohydrate Strategy



Since carbs have been the most controversial macronutrient and are the most important of the three in this program, we'll start there.

If you are constantly and chronically tired and having trouble meeting the energy requirements of your life, you need to use carbs to fire up your fuel system - stoke the fire so to speak.

The body can certainly use fat and protein to fuel you, but they are inferior to carbohydrate fuel because your brain operates almost entirely on glucose and having enough glucose stores is what can prevent PTSD in times of stress.



Your body stores glucose in the liver (and the muscles) so that this backup supply can be released into circulation when need be, much like we have generators that we use in case the power goes out.

The problem in the adrenally fatigued person is that they have no glucose backup available.

# What Are Carbohydrates Exactly?

Carbohydrates are foods that break down into sugar and help keep your cells humming along. Carbohydrates include fruits, concentrated sugars like honey, grains, legumes, and starchy (root) vegetables.

### Why We Need The Right Amount of Carbs to Heal

The right carbohydrates (in tandem with protein and fat) prevent blood sugar drops. When your blood sugar level drops, adrenaline and cortisol increase as your body tries to defend against running out of blood sugar (= emergency situation for your nervous system) sending you into the fight-or-flight mode. Increased adrenaline causes negative effects, such as limited blood circulation to the digestive tract, liver, and brain.

#### Excess adrenaline and cortisol can cause:

- Anxiety
- Nervousness
- Anger
- Irritation
- Short temper
- Poor concentration
- Lack of motivation
- Bloated stomach
- Constipation
- Insomnia

#### The long-term effects of excess adrenaline and cortisol include:

- Loss of muscle mass, bone and organ tissue
- Lowered immunity
- Impairment of energy production
- Fat around your middle

#### Goodbye Sugar Cravings...

Sugar cravings are perfectly natural, normal and healthy. You crave sugar because you need fuel so don't beat yourself up, just nourish yourself in the right away and the sugar cravings will become a thing of the past.



#### Using Carbohydrates To Support The Thyroid-Adrenal Team

Your cells can only make efficient energy with glucose, oxygen and the presence of thyroid hormone.

Calorie counting isn't an accurate tool when you take into account bio-individuality because one person may burn 700 calories a day and another person, 2,500 calories a day.

This is due to the effect of the thyroid gland on an individual.

If you are sedentary and have a well functioning thyroid, you may burn many more calories than someone who exercises and has a poorly functioning thyroid.

Carbohydrates spark the thyroid to work and burn more fuel because it is carbohydrates, oxygen and thyroid hormone that are needed to burn calories in your cells.

The right type of sugar (roots and fruit) lowers adrenaline, which can thereby increase thyroid hormone production.

The major action of adrenaline is to release certain stored fats into circulation and these fats can lower thyroid function.

Fruit and roots (along with appropriate protein and fat) will help keep thyroid function high and adrenaline low which is such an asset to both the adrenal glands and the thyroid who have mutual control over your metabolism.

Remember the adrenal glands regulate the availability of fuel. While the thyroid regulates the burning of fuel.

Hopefully, now you can see what a team the thyroid and adrenals are and why when one is compromised, the other invariably becomes compromised and why we are using fruit and roots (complex carbohydrates) to love on these two special glands that control so much of your life experience.

#### Complex Carbohydrates That Work

Tubers like potatoes, carrots, taro roots, cassava (yucca), beets and parsnips are grown underground and contain anti-fungal chemicals to help them ward off the underground fungi. These anti-fungal agents are quite useful in your gut. They help absorb many of the toxins and bacteria (as well as excess estrogen) that live in your intestines which is why we love them and have worked them into your daily diet.

This is also why our Carrot Balancer is one of your 7 Daily Doses. Eating one raw organic carrot every day can help keep your gut healthy.



### Protein for The Adrenal ReCode



We must appreciate protein as a metabolic powerhouse and the main structure of our bodies.

It is the building block of the human body and your most active nutrient and is key to slow aging, increase your metabolic rate and therefore your cellular energy, and help you to repair muscles and tissue and to heal but everything must be consumed in moderation, specific to the needs of your body in order to work well for you.

## Vegetable Proteins vs. Animal Proteins

We prefer to use protein from animals so that your body does not have to work harder to convert the protein into the energy you need. This is especially important when we are in a state of adrenal fatigue and locked into the fight-or-flight cycle as our bodies do not have the extra reserves it takes in the way of bacteria and enzymes to break down and utilize vegetarian sources of protein.

Everything in moderation is key because when we overdo it with animal protein from muscles (versus organs), we can put ourselves in a state of inflammation. This is why we recommend that 30% of your proteins come from power proteins like collagen, shellfish, broth, liver, and eggs and dairy if you can tolerate them.

If you have trouble digesting meat, you might have compromised hydrochloric acid because the chronic release of adrenaline and cortisol suppress HCL function.

The HCL Challenge can be executed to help you optimize your HCL once again and you can do that at the end of the program, but for now, if you are having trouble digesting meat, you might consider adding in full-spectrum digestive enzymes that also have betaine hydrochloric acid with pepsin and ox bile. Not only will this product assist with the digestion of protein, but also with the digestion of fat and carbohydrates, supporting all of your digestive organs while you are healing. Once you are healed, you can eliminate their use. Suggested dose is 1-2 per meal.

If you can palate them, organ meats are the most nutritious. We have included a recipe for the only liver Christa has had that she liked. It comes from her friend Mary Shenouda, the Paleo Chef and is called Bangin' Liver and can be found in the recipe handout. We suggest you make and eat this recipe once a week while healing your adrenals, but don't worry if you can't do it. This is why we include desiccated liver in your supplement recommendations.



#### Protein and Blood Sugar

Eat protein with a carbohydrate always. For example, eat cheese and an apple together or almonds with berries. This is because protein alone can stimulate the release of insulin and lower your blood glucose levels too much, which can make you tired and anxious and crave sugar.

Insulin's role is to carry sugar and protein into cells and convert excess glucose into fat. An excess of protein, or protein alone, can cause low blood sugar just as readily as a high-carb diet or skipping meals. An important note for the adrenally-fatigued!

#### Debunking the Milk Myth

Most protein foods like eggs, meat, fish, and cheese contain no carbohydrates. However, milk contains lactose—a sugar. And if you tolerate organic, 100% grass-fed milk (and preferably raw if you know and trust the source) it is a perfect snack because it contains the perfect ratio of protein, carbohydrates and fat all in one.

However, we have found most people do not do well with liquid fuel (with the exception of pre and post exercise or first thing in the morning or in the middle of the night) and need more sustenance to anchor blood sugar by slowing the rate by which the body digests which is why we suggest adding a piece of fruit to your milk (as well as collagen).

# The Right Kind of Fat



Fat satiates us and allows us to go for longer periods of time between meals.

Fat is also your most valuable macronutrient to help stabilize your blood sugar because it works wonderfully to slow down the release of carbohydrates from your digestive tract into circulation, keeping you safe and stable for longer.

We also produce energy from fat and can burn fat for fuel, but the body's preference to run optimally is to use carbohydrates (glucose) for fuel and have fat as a backup energy source.

As mentioned in your Adrenal ReCode Clinical Strategy handout in Module 1, we are emphasizing saturated fat for it's healing properties and minimizing your polyunsaturated fatty acids that come from nuts and seeds (and other plants).



Our cells prefer a ratio of 50% saturated fats, 45% monounsaturated fats, and only 5% of polyunsaturated fats.

We explain each type of fat below.

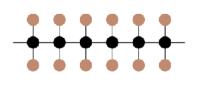
#### Three Types of Fats

Fats are made of up carbon chains surrounded by hydrogen molecules.

They come in three forms: saturated, monounsaturated and polyunsaturated.

#### Saturated Fats

Saturated fats are very stable and remain solid at room temperature (liquid at body temperature) because they are fully surrounded by hydrogen molecules. This means that oxygen cannot break these fats apart and change them.



Saturated

They are "safe" and this is why your primary fat source is coming from saturated fats in the Adrenal ReCode.

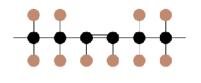
Saturated fats are the best fats to use when cooking: They don't smoke and burn as fast as other fats, and they resist oxidation even when heated.

#### Examples of saturated fats in food include:

- Butter
- Ghee
- Dairy
- Coconut Oil
- Animal fat (tallow)

Saturated fat is necessary for satiety, improved digestion, energy production, and cell structure and critical when creating a new nervous system from the inside out, healing the adrenals, and nurturing the thyroid gland and brain.

#### **Monounsaturated Fats**



Monounsaturated

Monounsaturated fats (MUFAs) are liquid at room temperature and cloudy in the refrigerator.

They have one open carbon bond and are stable, so they are safer than polyunsaturated fats and allowed on the program (but can be affected by oxygen over time which is why it's important to keep them away from light, heat, and air". MUFAs should not be used for cooking but can be added for



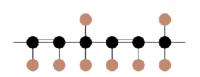
taste after cooking.

#### **Examples of MUFAs in food include:**

- Olives and olive oil
- Avocados and avocado oil

#### Polyunsaturated Fats

Polyunsaturated fats (PUFAs) are liquid at any temperature above freezing, have two or more open carbon bonds, leaving them vulnerable and making them unstable - definitely too unstable to consume in excess for a person healing from Adrenal Fatigue or any chronic issue. Plus, ladies, excess PUFAs can cause an increase in cellulite as they are stored in the tissues.



Polyunsaturated

Oxygen can break these fats apart (oxidation) and create free radicals which are toxins that destroy important enzymes you need to digest your food and to use and create hormonal balance.

After years of eating processed foods or vegetable oils, we inadvertently store a lot of these fats in our tissues, particularly in our brain. Stored fats are regularly released when our blood glucose dips and adrenaline rises. If we stop

eating PUFAs and increase our metabolic rate, our bodies neutralize these unhealthy fats and they will leave your body over time.

This is a primary reason why we limit nuts and seeds within the Adrenal ReCode.

We only include the ones that are supportive of your brain and nervous system function and include them in moderation including almonds or almond butter, sunflower seeds, walnuts, pumpkin seeds, and cashews.

We will help you customize the amount of proteins, carbs, and fat you eat at each meal. You are keeping your food logs with temperature and pulse and once you understand how to interpret them, you will be able to make customized adjustments which we go over in the Customizing Macronutrients handout next.

