

KETTLE & FIRE PRESENTS

KETO DIET 101

EVERYTHING YOU NEED TO KNOW
PLUS RECIPES





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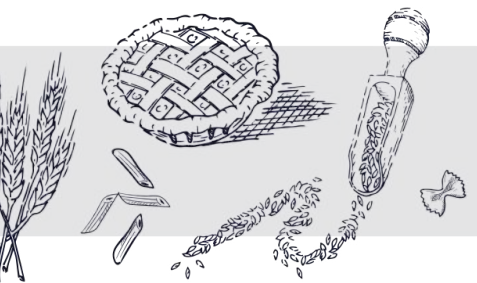
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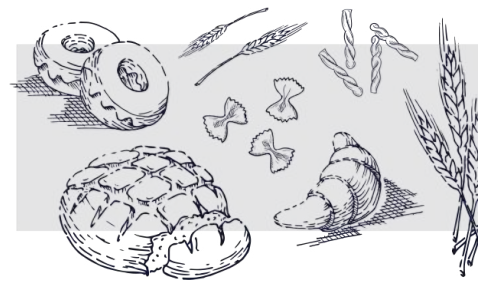
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Kettle & Fire



INTRODUCTION

What if you could train your body to burn fat more efficiently and speed up your metabolism without restricting calories? If you're struggling to lose those last 5 pounds or wondering why the muffin top just won't budge (despite eating clean and exercising), you may find the answers you're looking for in this keto diet master guide.





CHAPTER 1:

Keto Diet Overview

So what exactly is the ketogenic diet? The ketogenic (a.k.a: “keto”) diet is a high-fat, low-carb diet that puts your body in a natural fat-burning metabolic state called ketosis (1). The slogan: “eat fat to burn fat.”

This is done by heavily restricting carbs and focusing on high-fat, moderate-protein meals. (However, in some cases, protein may be also be heavily restricted.) The classic ketogenic diet contains a 4:1 ratio of fat to proteins and carbs.

Now, the keto diet is often grouped with other high-fat, low-carb diets, such as the Paleo or Atkins diets. But the reason these diets boast fat-burning benefits in the first place is because they promote ketosis. Therefore, the ketogenic diet isn’t so much a “diet,” but rather the foundation of these diets, and the biochemical reaction that occurs when you train your body to burn fat for fuel instead of carbs.

While the ketogenic diet has become popular for weight loss, studies also have shown numerous other health benefits of following a keto diet. For example, a keto diet may help reverse type 2 diabetes and reduce symptoms of Alzheimer’s disease, depression, and autism (2)(3). In fact, the keto diet was first used in the 1920’s as a natural treatment to prevent seizures in epilepsy patients (4) — not as a weight loss diet.

Let’s look closer at how the ketogenic diet can work for dramatic weight loss, as well as other ways it can improve your health.



CHAPTER 2:

How The Keto Diet Works

As we've covered, the purpose of the keto diet is to train your body to burn fat for fuel (rather than carbs) by remaining in a state of ketosis. In order for this to happen, you must remove the majority of carbs (in most cases, 90 percent to 95 percent) from your diet.

Why? By default, your body generates energy from carbohydrates (glucose), which are stored as glycogen in your muscle tissue and liver (5). You store enough carbs for approximately 24 hours worth of energy (5). Now, most of us easily replenish our carb stores by eating fruit, vegetables, grains, and legumes, so our carb "fuel tanks" rarely get low, and we continue burning glucose for energy.

However, in the case you do run low on glucose, your body will switch gears and begin converting stored fatty acids to ketones, which can be used as a secondary energy source (6). This is why the ketogenic diet is so effective for losing weight. Instead of starving yourself, you're training your body to burn fat for energy.

Now, since carbs are your body's first choice for energy and fat is secondary, the only way to get your body to burn fat for fuel instead of carbs is by getting your body into a "ketotic state," usually by removing the majority of carbs from your diet. Without stored glucose, your body has no choice but to dip into your fat stores and begin converting those fatty acids to ketones when you need energy (7). Enough fat can be stored in the body to provide weeks (or even months!) worth of energy, which is why people can survive fasting (8). The amount of fat your body can utilize for energy will depend on your body composition and the fat percentage you're carrying.

As you can see, keeping your body in ketosis for prolonged periods of time teaches your body to burn fat for energy more efficiently, which is how the keto diet can reduce your overall fat mass without starving, since high-fat foods keep you full longer.

However, the keto diet may not always trigger weight loss, especially if you already have a low body fat percentage.

But weight loss isn't the only benefit or reason to follow a ketogenic diet. Let's look at some of the other benefits.



CHAPTER 3:

Types Of Keto Diets

There are many different ways to follow a keto diet. Here are four of the most common ones:

1. Standard Ketogenic Diet (SKD)

This standard ketogenic diet is one of the most researched versions of the keto diet, and is what we're primarily referring to throughout this article (although, the same principles we've discussed apply to most of the other forms).

The SKD generally includes a diet made up of 5% carbs, 20% protein, and 75% fat.

2. Targeted Ketogenic Diet (TKD)

The targeted ketogenic diet allows you to add extra carbs around workouts, surpassing the SKD 5% carb rule. This one may be a better option for those who are extremely active and train more than twice per week. The easiest way to see if this is working for you is to keep testing your ketone levels when you add carbs after workouts and make sure that they don't kick you out of ketosis.

3. Cyclical Ketogenic Diet (CKD)

This form rotates ketogenic days with high carb days. It's usually five ketogenic days, followed by two high carb days. Sometimes referred to as ketogenic carb cycling, this version of the keto diet can help maximize fat loss and build muscle.

On high carb days, your body will leave a state of ketosis. But these "carb refeeds" may be more effective for muscle growth than the high-protein or targeted keto diet, since glycogen is the nutrient that "feeds" muscles (9). Ketogenic carb cycling is also said to be less of a lifestyle stressor for some people, as the two high-carb days make the CKD feel less restrictive and easier to follow.

The infographic is titled "TYPES of KETONIC DIETS" in a teal banner. Below the banner, it states "The difference between each keto diet type depends on CARB INTAKE." There are three columns, each representing a different diet type with a specific background color and iconography.

Diet Type	Net Carbs	Best For
STANDARD Ketogenic Diet (SKD)	20-50 grams of net carbs per day	General population
TARGETED Ketogenic Diet (skd)	25-50 grams or less of net carbs	Athletes and high activity
CYCLICAL Ketogenic Diet (skd)	Low-carb keto for several days, then higher-carb	Those seeking muscle growth

STANDARD
Ketogenic Diet (SKD)

• 20-50 grams of net carbs per day

TARGETED
Ketogenic Diet (skd)

• 25-50 grams or less of net carbs
• 30 minutes-1 hour before exercise
• Best for athletes and high activity

CYCLICAL
Ketogenic Diet (skd)

• Eating low-carb keto for several days
• Then a couple days eating higher-carb

PERFECT KETO PERFECTKETO.COM

Image courtesy: [Perfect Keto](#)



CHAPTER 4:

Why You Should Follow a Keto Diet

A Keto Diet Is Good for Heart Health

Wait. Doesn't fat raise LDL cholesterol and increase your risk for heart disease?

If that were the case, surely the keto diet would be the perfect storm for a heart attack. However, studies have proven that fat is not the culprit in cardiovascular disease. In fact, to this day, no reputable study has been able to show a link between saturated fat and cardiovascular disease (10).

Instead, research shows diets high in refined sugar and carbs are far more destructive to the heart and arteries than fat, and have a greater ability to raise blood pressure and promote inflammation (11).

Since the keto diet removes all processed carbs and starchy carbs, it may serve as both a preventative and therapeutic diet for those at risk.

A Keto Diet Helps Maintain Healthy Blood Sugar

If you develop a condition related to blood sugar imbalance, such as type 2 diabetes, it means your body has stopped properly responding to insulin, the hormone that brings sugar out of your bloodstream and into your cells to be used and stored as energy (12). This is also known as insulin resistance.

There's good and bad news here: While type 2 diabetes is primarily caused by excess refined sugar and carbs in your diet, it's a condition that also can be reversed by changing the foods you eat (13). Again, since the ketogenic diet removes most carbs, it gives your body a chance to reestablish and reset the communication with insulin, which can improve insulin sensitivity and reverse blood sugar imbalances.

Even when followed as a short-term solution, ketosis may help improve other blood sugar conditions, such as hyperglycemia and hypoglycemia. With the permission (and supervision) of a qualified healthcare practitioner, the keto diet also can be followed safely as a long-term protocol for eliminating type 2 diabetes (14).

A Keto Diet Can Improve Cognitive Function

The brain can only use two types of nutrients for fuel: glucose, and ketones (15). This is why — despite information that states a certain amount of glucose is needed per day for optimal brain function — a keto diet can actually support cognitive function. In fact, some people report improved focus, concentration and mental alertness when they enter ketosis.

The improved mental performance may be due to the fact that certain ketones, such as beta hydroxybutyrate (BHB), produce more ATP (energy) than glucose, which would actually make fat a more efficient fuel source. However, there are few studies to back up this claim.

As mentioned above, the keto diet also has been used effectively for preventing seizures in epileptic patients, especially those who don't respond well to medication. While it's not entirely clear how this process works, research suggests removing carbs and mimicking the effect of starvation may block the neuron channels that lead to the "electrical storm in the brain" that results in a seizure (16).

Additionally, the keto diet also may help patients with degenerative disorders, such as Alzheimer's disease (17). Research shows that with the onset of Alzheimer's, the brain's cells stop responding to insulin (much like type 2 diabetes), which causes inflammation in the brain (18). By restricting carbs, the keto diet may help improve insulin sensitivity when it comes to blood sugar and brain function.

A Keto Diet Can Provide a Metabolism Boost

Some studies suggest ketosis can increase your metabolism by causing even more calories to be expended during the fat-for-fuel burning process (26).

A Keto Diet Can Improve Skin Health

A high-carb diet (especially when it comes to dairy products and refined sugar) has been shown to trigger sebum (oil) production in the skin, which is a major cause of acne (19). Removing sugar from your diet also may help improve inflammatory skin conditions, such as eczema and psoriasis (20). The healthy fats encouraged on the keto diet also provide the building blocks of healthy skin cells (21).

A Keto Diet Can Help With Hormonal Balance

Since ketosis has the ability to improve how insulin functions, it may also improve the rest of your hormones and correct hormonal imbalances, such as polycystic ovarian syndrome, or PCOS (22).

An easy way to understand how your hormones work is to picture them as strands of a spider web: you can't remove one strand without affecting the rest. In other words, when one hormone is out of balance, the rest are negatively impacted. But when the functioning of one hormone is improved, the rest are improved, too.

A Keto Diet Could Have Anticancer Properties

Cancerous tumorous use glucose as a main source of energy to grow (23). For this reason, a keto diet is recommended to slow tumor growth in cancer patients of all stages by starving the cells.

Research shows the keto diet may also enhance a patient's response to chemotherapy. In fact, one study reported an improvement in sleep and emotional functioning in patients undergoing chemo who were also following a keto diet (24).

A Keto Diet Can Help Control Food Cravings

Another way a keto diet can contribute to weight loss is by balancing your blood sugar levels, which reduces cravings for carbs (25). Since high-fat foods also are richer and more satiating than carbs, they fill you up in smaller portions, further leading to weight loss.



CHAPTER 5:

How to Follow a Keto Diet

Since each person has a different body fat percentage and nutrient requirements, there is no one-size-fits-all caloric or macronutrient rule for getting into ketosis.

For example, athletes who train four to five times per week will still be able to enter a state of ketosis by eating a higher percentage of carbs, compared to someone who's mostly sedentary.

The amount of carbs you're allotted each day and the best type of keto diet for you to follow will depend on:

- Your current weight
- Your current body fat percentage
- Your height
- Your gender
- Your fitness and activity levels
- Your fitness and health goals (for example, body builders may experience more muscle gain from a cyclical ketogenic diet vs. a standard keto diet)

If you're not already a keto pro, you can calculate your personal optimal macronutrient ratios by using this [ketogenic calculator](#).

How Long Do I Have To Stay Keto For?

There's really no set rule for how long you have to stay on a ketogenic diet.

Many keto proponents think of it as a tool for aiding weight loss or mental clarity. Many will do a ketogenic diet for several weeks, then a Paleo diet for a few months, and back to a ketogenic diet.

However, if you're using a ketogenic diet for therapeutic purposes, then you may need to stay on it for longer – that's something to discuss with a health practitioner.

Personalizing Your Ketogenic Diet

One of the best things about a keto diet is that many people in the community love figuring things out. There's a lot of self-experimentation and sharing of data and ideas.

Some people do better on a slightly higher fat ketogenic diet, while others can eat slightly more carbohydrates. Intermittent fasting is also an area that many people on a ketogenic diet experiment with.

This is an exciting growing field that's helping a lot of people, so if you're ready to give it a try, keep an open mind and have fun improving your body and mind.





CHAPTER 6:

The Keto Diet Foods

Main Food Groups to Avoid on a Keto Diet

Grain: any type of whole grain or grain-based product (pasta, bread, cereal, rice, etc.)

Fruit: all fruit (a few blackberries or strawberries are the exception if you're not at your total carb percentage for the day, since they're lower in sugar)

Root Vegetables: potatoes, sweet potatoes, parsnips, yams, carrots

Beans and Legumes: lentils, garbanzo beans, peanuts, peas, kidney beans, navy beans

Unhealthy Fats: the keto diet encourages healthy fats, not unhealthy fats, like those found in refined vegetable oils, including canola, soybean, sunflower, and peanut oil

Processed Foods: avoid anything in a package or box, because it will most likely contain either a grain, sugar alcohols (such as xylitol), refined sugar, or all of the above

Condiments: salad dressings, ketchup, and sauces are generally high in carbs

Alcohol: since alcohol is a carbohydrate, even one glass of wine or a beer can throw you out of ketosis

Main Food Groups to Eat on a Keto Diet

Meat: beef, elk, bison, bacon, ham

Fatty Fish: wild salmon, halibut, sardines, mackerel

Poultry: chicken, organic eggs

Nuts and Seeds: almonds, walnuts, macadamia nuts, cashews, flaxseeds, pumpkin seeds, chia seeds

Healthy Fats: avocado, coconut oil, extra virgin olive oil, avocado oil

Low Carb Vegetables: leafy greens, onions, tomatoes, peppers, broccoli, asparagus

Herbs and Spices: turmeric, black pepper, basil, mint, parsley, cilantro, mustard seed

Here's a complete food list on what you should eat and should not eat on a keto diet.

**Note: these percentages are based on the Standard Ketogenic Diet (SKD).*



KETO DIET

FOOD LIST

HEALTHY FATS, OILS, AND NON-STARCHY VEGETABLES 75% OF YOUR DIET *



VEGETABLES

- Leafy greens
- Bok choy
- Cucumber
- Celery
- Eggplant
- Tomatoes
- Peppers
- Lettuce
- Brussels sprouts
- Zucchini
- Fennel
- Chives
- Kale
- Endive
- Radicchio
- Mushrooms
- Onion
- Garlic
- Celery
- Fresh herbs (mint, parsley, chives, basil, rosemary, cilantro)
- Root vegetables* (butternut squash, yams, carrots, turnips, spaghetti squash, pumpkin, sweet potato)

* Very small amounts of root vegetables are allowed, but be careful not to consume more than your 5% carb allowance to stay in ketosis

ANIMAL FATS

- Lard
- Ghee
- Tallow
- Grassfed butter
- Organ meats (liver, bone marrow, tongue)
- Fish (wild caught preferred to avoid toxins and PCBs): salmon, tuna, mackerel, cod, eel sole, trout, halibut, snapper
- Shellfish (crab, lobster, prawns, shrimp, squid, scallops)
- Egg yolks
- If you include dairy in your diet, stick to organic dairy products in smaller amounts, such as cheese, cream and greek yogurt.

NUTS AND SEEDS

- Pecans
- Walnuts
- Cashews
- Pine nuts
- Hazelnuts
- Pistachios
- Chia seeds
- Hemp seeds
- Sesame seeds
- Sunflower seeds

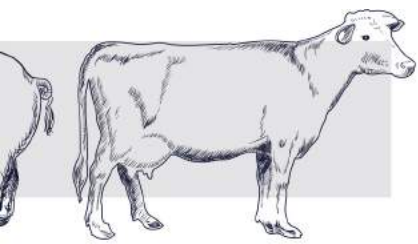
- Sugar-free Nut and seed butter (excluding peanut butter)
- Flax oil
- Walnut Oil
- Macadamia Oil

COOKING OILS

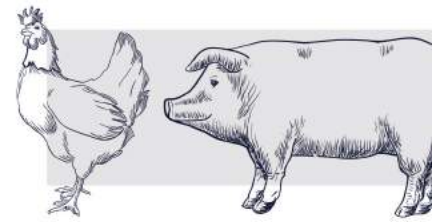
- Olive oil
- Avocado oil
- Unrefined coconut oil

OTHER

- 100% Dark Organic Chocolate
- Raw cacao powder
- Spirulina
- Chlorella
- Maca root
- Unsweetened nut milk (cashew milk, almond milk, hemp milk, hazelnut milk, coconut milk)
- Seltzer or mineral water
- Herbal tea and coffee (as long as no sugar is added)
- Almond flour
- Coconut flour
- Fish oil supplements
- MCT oil
- Brain Octane oil
- Collagen & Gelatin supplements



PROTEINS 20% OF YOUR DIET



ANIMAL PROTEIN

- Chicken
- Turkey
- Wild game
- Duck
- Beef
- Pork

ORGANIC FULL FAT DAIRY PRODUCTS

- If you include dairy in your diet, stick to organic dairy products in smaller amounts, such as cheese, cream and greek yogurt.

BONE BROTH

- Kettle & Fire Beef Bone Broth: 6g protein, 2g carbs, 0g fat
- Kettle & Fire Chicken Bone Broth: 10g protein, 0g carbs, 1g fat



CARBOHYDRATES 5% OF YOUR DIET



BERRIES

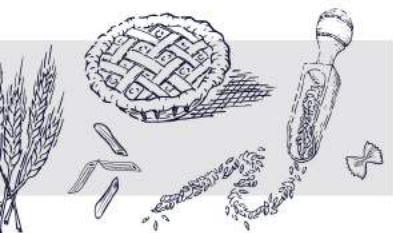
- Raspberries
- Blueberries
- Blackberries
- Strawberries

FRUIT

- Citrus: lemon & lime
- Berries, apples, and pears are low sugar fruits that can be eaten in very small amounts

LEGUMES

- Green peas and beans are low in starch, so they're the only legumes allowed



FOODS TO AVOID 0% OF YOUR DIET



- Grains
- Refined sugar
- Alcohol
- Soda
- Beans and legumes (chickpeas, lentils, kidney beans)
- Low-fat dairy products (which are higher in carbs)

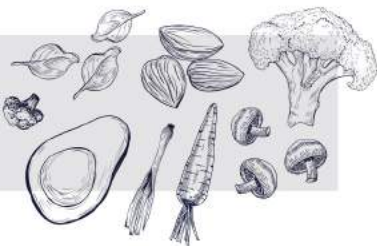
- Peanut butter (which is a legume, not a nut)
- Sugar alcohols (xylitol, maltitol, and sorbitol that is found in chewing gum)
- Refined vegetable oils (canola, peanut, sunflower) Although vegetable oils are fats, they're heavily processed with chemicals and deodorizers, which makes them far from a health food

* Note: these percentages are based on the Standard Ketogenic Diet (SKD)



KETO DIET

CHEAT SHEET



We know that's an insanely long food list, so to keep things simple, here's a simple cheat sheet of keto diet approved foods to choose from. You can refer back to this keto cheat sheet to help guide your choices when it comes to grocery shopping, meal prep and eating out at restaurants.

- **NON-STARCHY VEGGIES**
- **LEAFY GREENS**
- **NUTS AND SEEDS**
- **OLIVES**
- **AVOCADO**
- **FATTY FISH**
(SALMON, TUNA, MACKEREL)
- **BONE BROTH**
(CHICKEN, BEEF)
- **COOKING OIL**
(COCONUT OIL, AVOCADO OIL, OLIVE OIL)
- **UNSWEETENED NUT MILK**
- **EGGS AND EGG YOLKS**
- **NUT FLOURS** (ALMOND, COCONUT)
- **COCONUT MEAT**
- **ANIMAL PROTEIN**
(CHICKEN, BEEF, DUCK, BISON, ELK)
- **COLLAGEN PROTEIN & GELATIN**
- **HERBS AND SPICES**
(TURMERIC, BLACK PEPPER, GINGER, CURRY SPICE, CHILI, CILANTRO, PARSLEY, PINK HIMALAYAN SALT)
- **CONDIMENTS**
(APPLE CIDER VINEGAR, MUSTARD, STEVIA)
- **COFFEE AND TEA**
(NO SUGAR ADDED)
- **SUPERFOODS**
(CHLORELLA, SPIRULINA, MACA ROOT)



CHAPTER 7:

Three Big Mistakes To Avoid

Now that you're thriving on a ketogenic diet, there are still a few issues to watch out for in order to get the most out of your diet.

#1 Not Getting Enough Salts (sodium, potassium, and magnesium)

While we typically get lots of sodium on a regular diet (because most processed foods contain high amounts of added sodium), most people find that when they go keto and cut out processed foods, they are actually low on sodium.

You might not think of low sodium as a problem, but it usually results in fatigue and cravings, so make sure you get sufficient amounts.

Potassium (like sodium) is often excreted more when you're on a ketogenic diet, so it's also important to make sure you replenish your potassium — especially if you're active. You can add more potassium to your diet by eating spinach and avocados.

Finally, magnesium is a mineral that many of us are deficient in to begin with. (Many people point to soil depletion as the potential reason for our widespread deficiency.) Since magnesium is so important for sleep and mood, as well as our muscles and general well-being, it's also good to make sure you are getting enough.

One good way to add in more of these minerals to your ketogenic diet is to drink some bone broth – it contains sodium, potassium, and magnesium.

#2 Not Eating Enough Greens

One of the keys of a ketogenic diet is to eat fewer carbohydrates. Many people interpret this to also mean avoiding all vegetables. Please don't do that.

It's true that some vegetables, like onions or mushrooms, contain a fair amount of carbs, and you might want to generally limit them.

However, for good gut health and to ensure you get plenty of vitamins and minerals, it's important to keep eating a lot of vegetables. There are many ways to get more veggies into your diet. Salads, sautes, and green smoothies are all easy and quick to make.

#3 Not Exercising

Exercise is one of the components of a healthy lifestyle that many of us skip when we're trying a new diet. It can be mentally hard to stick to keto during the first few weeks, and that makes going to the gym seem awful.

However, it's good to try to do some exercise if you can manage it. It'll often help you get adapted to keto faster and help you lose fat (rather than muscle).

Walking is one of the simplest options, but you can also do body weight exercises like pushups, situps, and squats at home.

Who **Should Not** Follow The Keto Diet

A word of caution: if you're starting a new dietary plan, especially if it's for a condition or disease, you need a professional to help you weigh your options.

Pregnancy and breastfeeding are notable times of extreme physical vulnerability, and unless medically prescribed by a doctor, the ketogenic diet could do more harm than good. Likewise, certain conditions respond better to higher-carb and lower-protein diets (like certain hormone imbalances or autoimmune diseases), so there's still the matter of considering your individual circumstances above all else.

Ketosis Vs. Ketoacidosis

Ketosis is sometimes mixed up with the term ketoacidosis, which is a dangerous health condition that can turn your blood too acidic and lead to serious health problems, including death (27).

Ketoacidosis happens when your body fails to produce enough insulin (which is more commonly seen in those with type 1 diabetes), however it can also occur in those with type 2 diabetes if their diet and insulin levels aren't being properly monitored (28).

When done properly, nutritional ketosis can improve insulin function, and people who don't have blood sugar imbalances aren't typically at risk for ketoacidosis (29).

KETOSIS vs **KETOACIDOSIS**

THEY ARE NOT THE SAME!

KETOSIS	KETOACIDOSIS
<input checked="" type="checkbox"/> Low level of ketones in the blood	<input checked="" type="checkbox"/> Extremely high level of ketones in blood
<input checked="" type="checkbox"/> Normal process of the body	<input checked="" type="checkbox"/> Can turn the blood acidic , deadly if untreated
<input checked="" type="checkbox"/> Safe function of a low-carb, ketogenic diet	<input checked="" type="checkbox"/> Occurs in diabetics who don't take enough insulin or aren't well, people who are starving, or alcoholics

PERFECT KETO PERFECTKETO.COM

Image courtesy: [Perfect Keto](#)

CHAPTER 8:

How to Test if You Are in Ketosis



In order for the keto diet to work, you'll need to know if you're in ketosis or not. There are several ways to measure ketones in your body, including through the blood, urine, and breath. Here are the most common methods:

1. Urine Testing Strips

Elevated levels of ketones (the acetoacetate group, to be specific) can be instantly detected in your urine using strips, such as [Perfect Keto](#) and KetoStrips (only two of many brands). After dipping one of these strips into your urine stream, you'll be able to find out which stage of ketosis you're in based on the color guide provided.

You can find keto strips at nearly any drugstore, online through Amazon, or from Perfect Keto.

2. Acetone Breath Analyzer

Ketone breath analyzers allow you to measure the state of ketosis in your breath by detecting [acetoacetates](#). A popular brand is Ketonix, which is a rechargeable ketone monitor that can be used over and over again.

(Also, a sign of ketosis is bad breath or "fruity" smelling breath, which you can detect on your own!)

3. Blood Monitor

According to Authority Nutrition and many other online sources, the ketone blood monitor is the most accurate ketosis testing method. A blood monitor measures your state of ketosis by detecting the amount of beta-hydroxybutyrate (BHB) in your blood, which is one of the primary ketones.

It is a little more invasive than the other keto testing methods, as it requires a prick of blood from your finger.

Test kits are around \$40, and blood ketone test strips go for roughly \$5 each (which you'll need every time you test).





CHAPTER 9:

Potential Keto Side Effects

While a Keto diet is safe for most people in most situations, there are a couple of unfavorable side effects that could happen when you start a keto diet. They include the keto flu and the keto rash.

The Keto Flu

The keto flu can happen when you drastically and suddenly remove carbs from your diet. Also known as the “carb flu,” the keto flu is a natural reaction (almost like a feeling of withdrawal) your body undergoes when switching from burning glucose (sugar) as energy to burning fat instead. In fact, some people say the keto flu symptoms can actually feel similar to withdrawing from an addictive substance.

If you decide to make the switch to the keto diet and you're feeling drowsy, achy, nauseous, dizzy, and irritable, don't worry. These symptoms are your body's natural reaction to removing carbs from your diet. And while it may have you second guessing your keto diet decision, we promise you these keto flu symptoms will pass. Stick with it, and soon you'll be reaping the energizing, fat-burning rewards that come with ketosis.

In the meantime, there are many things you can do to reduce the symptoms of the keto flu. We'll tell you exactly which remedies you can start using today. But first, let's take a quick look at why the keto flu happens when you go low carb.

Why The Keto Flu Happens

By default, your body burns glucose (carbs) as its primary energy source, but when you switch to an extremely low-carb diet, your body will begin to burn fatty acids for energy instead. Fat is your body's secondary or "backup" fuel source, which can only be tapped when there's not enough glucose in your diet. Symptoms of the Keto Flu are:

- Sugar cravings
- Dizziness
- Brain fog
- Irritability
- Poor focus and concentration
- Stomach pains
- Nausea
- Cramping
- Confusion
- Muscle soreness
- Difficulty falling asleep

How Long Does The Keto Flu Last?

For the average person, the keto flu lasts a week or less, and symptoms usually begin within the first day or two of removing carbs. In extreme cases, the keto flu can last up to a month, but that's not as common.

If you're used to eating a diet high in refined sugar and processed foods, you're more likely to experience the withdrawal symptoms of removing carbs. In fact, studies show that sugar is more addictive than certain drugs (30).

If your diet is relatively low in processed sugars and starches, you may only encounter mild keto flu symptoms, or none at all.

Not everyone experiences the keto flu, even when switching from diets high in carbs and sugar. Whether or not you experience the keto flu can depend on your genetics. Some people are naturally metabolically flexible, which means they can shift metabolic states easily without experiencing health symptoms.

However, if you are experiencing the effects of the keto flu, here's what you can do to reduce your symptoms (and how to prevent symptoms if you're currently considering going low carb).

How to Manage Keto Flu Symptoms

1. Take an Electrolyte Supplement

When you switch to an extremely low-carb ketogenic diet, you end up cutting out some of the richest natural sources of electrolytes, such as starchy fruit and vegetables.

Not getting enough electrolytes in your diet can lead to fatigue, irritability, dizziness, muscle cramping, and cognitive symptoms, such as confusion (31)(32). In other words, low electrolytes play a big role in the onset of keto flu symptoms.

One way to get more electrolytes in your diet without kicking your body out of ketosis is to take an electrolyte supplement at least once per day. If you're active, you'll also want to make sure you're taking electrolytes after you workout to prevent muscle cramps and dehydration.

Of course, if you're following the keto diet, you'll want to make sure your electrolyte supplement is keto-friendly, meaning it has no sugar or artificial sweeteners added (zero calorie sweeteners like stevia and xylitol are fine). Look for an electrolyte supplement that contains sodium, potassium, calcium, and magnesium.

As for electrolyte sports drinks, they typically contain processed sugar in some form, like glucose syrup or high fructose corn syrup. Avoid these by making your own keto-friendly sports drink at home using 1 cup of water, 1 teaspoons mineral sea salt, and freshly squeezed lemon or lime juice.

2. Hydrate

When you have the flu, it's not only important to make sure you're getting plenty of electrolytes, but fluids in general.

Staying hydrated will help relieve headaches and boost your energy levels when you're feeling sluggish. If you forget to drink enough water during the day, setting a "hydration alarm" on your phone can help you remember, as well as keeping a full glass or bottle of water within reach at all times.

Not sure how much water you need? Follow this simple equation:

Take your current body weight and divide it by two to determine the minimum ounces of water you need (plus extra if you're active). For example, if you weigh 150 pounds, you need at least 75 ounces of water each day.

3. Drink Bone Broth

Speaking of hydration, meet the ultimate keto flu recovery remedy: bone broth.

Rather than going for the carb-loaded chicken noodle soup (or store bought chicken broth, which can be high in MSG and other additives), give bone broth a try to help alleviate your symptoms. Bone broth is an easy way to sneak more water into your diet, and it also provides electrolytes, such as sodium and potassium.

All varieties of Kettle and Fire Bone Broth fit into the keto diet macros nicely.

Kettle and Fire Chicken Bone Broth contains: 10 grams of protein, 1 gram of fat, and 0 carbs per serving.

Kettle and Fire Beef Bone Broth contains: 6 grams of protein, 0 grams of fat, and 2 grams of carbs per serving.

Kettle and Fire Mushroom Chicken Bone Broth contains 10 grams of protein, 1 gram of fat, and 0 carbs per serving.

Note: These nutritional values of bone broth are specific to Kettle and Fire. Based on ingredients, the macros can vary for other store-bought brands or homemade broth.



Beef Bone Broth



Chicken Bone Broth



Mushroom Chicken Bone Broth

4. Eat More Fat

If your carb cravings are so intense that you've begun to dream of buttered rolls, donuts, and pasta, do the opposite of what your body is asking for and eat more fat instead.

Yes, ramping up your fat consumption can help speed up the transition of burning fat for fuel instead of glucose. Have another tablespoon of coconut oil in your coffee or tea, snack on half of an avocado and some bacon, and load up on egg yolks at dinner before you reach for the carbs. And remember: the keto flu too shall pass (and the benefits that follow ketosis will be totally worth it in the end).

5. Take an Exogenous Ketone Supplement

Taking an [exogenous ketone supplement](#) can also help reduce keto flu symptoms. Exogenous ketones help fight fatigue and boost energy levels by raising the ketone levels in your blood. To be clear, ketone supplements aren't a replacement for the keto diet, but they can help you stay in ketosis when you're meeting your macros, and provide all day energy.

6. Check Your Carb Consumption (You May Need a Few More)

We've just told you to eat more fat, but now we're telling you to eat more carbs? How does that work?

There are two scenarios when you may need to increase your carb intake on the keto diet.

Scenario one: if you're extremely active and have keto flu symptoms, adding a few more "clean" carbs to your meals (such as ½ cup of sweet potatoes, ½ a banana in your protein shake, etc.) can help relieve symptoms in the transition phase.

Scenario two: if the keto flu is hitting you hard and you had a carb-rich diet before going keto (especially with processed carbs and sugar), you may need to take a few steps back and eliminate carbs gradually rather than all at once.

Before you add extra carbs to your diet, we recommend going back to step 4 and increasing fat first. If you experience no relief, do a mini transition phase between your normal diet and going low carb. This gradual transition phase will look different for everyone depending on how many carbs you were consuming on a daily basis.

The best starting point for a transition phase is to eliminate all processed carbs and grains, and focus on getting your carbs only from starchy fruit and vegetables. You can slowly phase out carbs each day by reducing the amount you're eating at each meal until, eventually, carbs will only be 5% of your daily diet, which is when your body can enter ketosis.

7. Gentle Exercise

We get it: the last thing you're thinking of when you have aching muscles and nausea is going for a brisk jog in the park. But gentle exercise, such as a restorative yoga class, can actually help relieve muscle pain and tension, and release endorphins to help boost your mood and motivation.

8. Get Plenty of Restful Sleep

The keto flu affects everyone differently. If you have difficulty falling asleep or getting restful sleep, try these tips to sleep soundly:

Take an epsom salt bath: soaking in a warm epsom salt bath can help soothe and relax your muscles and improve electrolyte absorption. Magnesium (epsom) salts can be found at any grocery store or health food store.

Drink sleepytime tea: a keto-friendly herbal tea with a blend of herbs that promote restful sleep (such as valerian root and chamomile) have a calming effect on your nervous system, and can help promote deeper sleep.

Have an electronics curfew: according to Harvard University, the blue light from tablets, laptops, and smartphones can seriously interfere with your circadian rhythm, and make it difficult for you to fall asleep (33). Having an electronics curfew (ideally at least 2 hours before you go to bed) is an excellent way to improve your sleep quality. Why not replace the nightly Instagram, Facebook, and email checking time with a bedtime ritual that helps you relax and unwind?

A guided meditation for relaxation and a few soothing yoga poses (our favourite is legs up the wall) can also help.

The keto flu may be a downside to starting a keto diet, but it's only temporary. Once your body is used to ketosis, you'll be amazed at the limitless energy, fat loss, and how well you feel on a daily basis.

Keto Rash: The Low Carb Diet Itch



There's a scientific term for the keto rash: prurigo pigmentosa. One study describes prurigo pigmentosa as a rare inflammatory skin disease with an unknown cause, but notes that ketosis and prolonged periods of fasting seem to be the common denominators. Eight out of the 16 patients observed in this study who had the rash were either fasting or in ketosis (34).

The keto rash is characterized by itching and discomfort, and typically appears on the chest, torso, back, and neck. It's unclear exactly what causes the keto rash, and there's a lack of scientific research done on prurigo pigmentosa, which can make it harder to pinpoint the cause and solutions.

There is good reason to believe that the itching that some people experience in ketosis is caused by ketones in sweat, perhaps as this dries on the body.

Dr. Andreas Eenfeldt, a keto expert, explains that the keto rash tends to appear only in areas where sweat accumulates and usually occurs in the early stages of ketosis, which may cause irritation in some people when the ketones come in contact with the skin.

Online keto-diet forums and keto dieters have listed other potential causes of the keto rash:

- Candida die off and fungal infections
- Allergies or histamine intolerance
- Nutrient deficiencies
- Detoxification during ketosis

Founder of the keto-friendly [Bulletproof Coffee](#), Dave Asprey, believes the keto rash is caused by aggravated gut bacteria, and cells releasing heavy metals, pesticides, DDT, and other toxins during ketosis.

Asprey believes that the rash could come from having certain bacteria and yeast in your body, which are normally quiet because they feast off carbs. Removing carbs from your diet can aggravate symptoms of fungal infections, which includes rashes..

Adding carbs back into your diet can quiet down the yeast and bacteria again, which explains why increasing carbs helps the rash disappear. However, Asprey's solution in this case is to kill off yeast and bacteria altogether with natural antifungals, such as grapefruit seed extract and garlic.

Some studies also suggest insulin resistance and type 2 diabetes are linked to the keto rash ([35](#)).

Although information about the keto rash is sparse, it's not uncommon for people on the keto diet to experience this mysterious rash, so here's a rundown of symptoms, whether or not you should be concerned, and how to clear it up.

Symptoms of The Keto Rash

- Itchy, elevated red skin lesions on the neck, back, torso, chest or armpits. These lesions may appear or become aggravated from heat exposure, elevated body temperature or exercise.
- A reticulate pattern that is symmetrical on both sides of the body.
- Bumps that can be red, pale pink or a brownish color.

Should You Be Concerned?

There's no doubt the keto rash can be alarming, especially if it becomes severe enough to interrupt your sleep or limit you to only loose fitting clothing. But how do you know when you should get a doctor to check it out?

While we're not discouraging paying a trip to your doctor, the good news is that prurigo pigmentosa is non-life threatening, and is a natural reaction some people have when entering ketosis. There are natural solutions to clearing up the keto rash that you can try right away. If the rash doesn't show any signs of improvement or relief within a few days, you may want to pay a trip to your doc at that time to see if he or she has any other solutions.

How to Clear Up The Keto Rash Naturally

1. Increase Clean Carb Intake

If the rash has occurred while you're in ketosis, try increasing your carb consumption by up to 50 grams by adding more fruit and starchy vegetables to your diet. Increasing your carb intake may throw you out of ketosis, but if the rash was triggered while you were in ketosis, this may be the most effective way to find relief.

In fact, some people report the keto rash clears up within two to three days once they add more carbs to their diet. However, they notice the keto rash reappears as soon as they enter ketosis again. If this is you, it may be worth getting your heavy metals checked by a naturopathic doctor to see if detoxification could be the underlying cause of your keto rash. You also could take steps to improve your healthy gut bacteria (such as following a candida or leaky gut diet). Since the keto rash is associated with diabetes, it also may be helpful to get your blood sugar levels checked (35).

2. Drink Bone Broth

Bone broth is one of the best foods you can eat on the keto diet, not only because it fits in with the keto diet plan, but because of all the natural anti-inflammatory nutrients it contains, such as glycine and proline (36)(37). As an inflammatory skin condition, one of the first places to begin healing the keto rash is to eat plenty of foods that reduce inflammation and can help you heal from the inside out.

3. Take a Fish Oil Supplement (And Eat More Wild Fatty Fish)

Due to their high omega-3 content, wild fish, such as salmon, sardines, or mackerel, also have strong anti-inflammatory benefits for the skin. One of the recommended foods on the keto diet are wild fatty fish, but we recommend also taking a fish oil supplement if you have the keto rash for a more concentrated dose of anti-inflammatory nutrients. (Additionally, as a fatty acid supplement, it helps you meet your daily fat macros for staying in ketosis — a win-win.)

4. Take Anti-Inflammatory Superfood Supplements

For an in-depth list of the keto-approved superfoods, see our Keto Approved Supplements List on Chapter 10. The top anti-inflammatory keto superfoods we recommend taking to help alleviate symptoms of the keto rash are chlorella and spirulina.

Chlorella is a single-celled green algae and spirulina is a blue-green algae, and both contain omega-3s and GLA, which is an anti-inflammatory omega-6 essential fatty acid (38) (39). Other vitamins, minerals, and antioxidants, such as beta-carotene, can also help fight inflammation naturally.

You can take chlorella or spirulina in tablet, capsule, or powdered form by adding to green keto smoothies and veggie juices. One word of caution when choosing an algae supplement: always be sure they're batch tested for heavy metals, such as mercury. Since an underlying cause of the keto rash may be heavy metal accumulation in cells, the last thing you want to be putting in your body is more heavy metals.

Spirulina and chlorella are at a greater risk for contamination than most supplements because they grow abundantly in regions that are exposed to high amounts of pollution and radiation, such as Japan and China. Most supplement companies will have information about testing on their websites, or will provide this information to you over the phone.

5. Avoid Sweat

Since it's suggested that increasing your body temperature can aggravate or worsen the keto rash, try changing up your exercise routine to light cardio in the early stages of ketosis. Also, avoid wearing tight fitting clothes or being in direct sunlight for a few days.

Now, the keto rash doesn't mean you won't be able to enter ketosis again. In fact, some people have reported the rash clearing up on its own within a few days without leaving ketosis or trying any other treatment. In any case, you know your body best, so give these natural remedies for the keto rash a try and speak to a doctor or other healthcare professional for any other concerns.



CHAPTER 10:

Top 8 Keto Supplements and 5 Functional Foods

So you've decided to go keto and you've done all of your research on which foods you'll be eating on the keto diet. But before you do your next big grocery run, you may want to consider these keto supplements, too.

While supplements aren't 100 percent necessary on the keto diet, certain keto supplements can maximize your results by accelerating weight and fat loss, as well as boosting your energy levels. Some keto supplements also are helpful for reducing symptoms of the keto flu and can help make the transition to a high-fat/low-carb diet much easier — especially in the early stages when you may want to give up.

In addition to keto supplements, we'll also let you know which superfoods — or “functional foods,” as we call them — can also be helpful on the keto diet. These foods are concentrated in essential nutrients and can further improve how you feel on the keto diet.

Top 8 Keto Supplements

1. Perfect Keto

Perfect Keto is a powdered drink mix and keto supplement that provides your body with exogenous ketones (whereas your body produces endogenous ketones). Taking exogenous ketones provides ketone bodies for you to burn as fuel right away, whether or not you're in ketosis. This is why some people who aren't following a keto diet will still take ketone supplements for energy.

Made from exogenous ketones, Perfect Keto provides the same benefits that endogenous ketones naturally offer your body: long-lasting energy, improved cognitive function, athletic performance and mental focus, fat burning, and accelerated weight loss.

To be clear, exogenous ketones aren't a replacement for the keto diet. While exogenous ketone supplements will raise the ketone bodies in your blood, they're simply providing your body with a fuel source, rather than putting you in the metabolic state of ketosis where the fat burning magic takes place. That being said, Perfect Keto can still be helpful for getting you back into ketosis when you've been following the keto diet and have exceeded your carb limit.

Key Benefits of Taking Perfect Keto on the Keto Diet:

Energy, focus, concentration, cognitive function, improved athletic performance, accelerated weight loss, and can help you stay in ketosis.

2. 7 Keto DHEA

With a name like 7 Keto DHEA, you'd automatically think it's a keto diet supplement. And it is. But it's also produced by your body naturally.

7 Keto DHEA is a metabolite of DHEA (dehydroepiandrosterone), which is produced by your brain and adrenal glands (40). It acts as a growth hormone and can help stimulate the production of other hormones that play a role in burning fat and increasing lean muscle mass, such as the thyroid hormone (41).

Some studies also suggest 7 Keto DHEA can help increase the activity of thermogenic liver enzymes, which means your liver cells are burning fatty acids more efficiently (42). This suggests 7 Keto DHEA may help increase weight and fat loss on the keto diet.

Main Benefits of Taking Keto 7 DHEA on the Keto Diet:

Natural metabolism booster, weight and fat loss.

Where to Buy: Many different brands make 7 DHEA, and most health food stores will have it on their supplement aisle shelves. You can also order Keto 7 DHEA through online retailers like Amazon.

3. Fish Oil

Not only are fatty fish one of the best foods to eat to stay in ketosis, but they're rich in omega-3 essential fatty acids, which are one of nature's best anti-inflammatories.

One of the cautions when following the keto diet is that some fatty foods (especially dairy) are rich in omega-6s, which we need in small amounts, but can become inflammatory when eaten in excess (43). When we consume too many omega-6s and not enough omega-3s, this can promote systemic inflammation, which may play a role in the onset of many chronic illnesses and diseases, such as cardiovascular disease and arthritis (44).

Not all omega-6s are pro-inflammatory (for example, GLA is an omega-6 fatty acid found in evening primrose oil and has been shown to reduce inflammation)(43).

The pro-inflammatory omega-6s are primarily found in high oleic vegetable oils (soybean, corn, safflower, sunflower), and dairy products, such as butter, cream, milk, ghee, and non-organic meat and poultry.

Now, we do recommend avoiding highly processed vegetable oils and dairy products whenever possible. If you do eat dairy, opt for small amounts of full-fat organic or grassfed dairy.

Taking a fish oil supplement on the keto diet is an easy way to maintain a healthy omega-3:6 ratio.

Main Benefits of Taking Fish Oil on the Keto Diet:

Natural anti-inflammatory, and contributes to keto diet high fat intake requirements.

Where to Buy:

Any health food store will carry fish oil in capsules or liquid form.

4. Creatine

Creatine is an amino acid that plays an important role in energy production and muscle contractions (45). It's favoured by athletes, bodybuilders and keto-dieters who are looking to increase endurance during high intensity activity and build lean muscle mass (46).

Our bodies naturally produce creatine, but as we age our creatine production declines. Taking a creatine supplement can provide you with a concentrated dose of this amino acid so you can keep crushing your workouts on (and off of) the keto diet.

Main Benefits of Taking Creatine on the Keto Diet:

Weight loss, building lean muscle mass, strength, and athletic performance.

Where to Buy:

Most health food stores carry creatine supplements in powdered form, and you can order creatine from online retailers such as Amazon.

5. MCT Oil

MCTs, or medium chain triglycerides, are a type of fat molecule found in coconut oil, palm oil, cheese, butter, and yogurt. The cool thing about MCTs that sets them apart from other fatty acids is that your body can use them for energy right away.

With a shorter chain length than fatty acids, they take a much quicker pathway (think of it as a shortcut) when they're metabolized, which allows them to be converted to ketones and used for fuel, rather than being stored as fat (47).

In other words, MCTs are extremely beneficial on the keto diet for energy and staying in a fat-burning state.

Coconut oil is by far the richest natural source of MCTs. However, taking a fractionated MCT supplement, such as Bulletproof's Brain Octane oil (a blend of coconut and palm oil), or Perfect Keto's MCT oil powder without any additives or fillers.

The benefit of taking an MCT oil supplement, such as Bulletproof Brain Octane Oil or XCT Oil over plain coconut oil, is that the fatty acids have been separated from the rest of the nutrients in coconut and/or palm oil. This means your body has far less work to do when it comes to digestion, and results in an even quicker conversion of energy.

As a fatty acid supplement, MCT oil can also help you meet your daily fat requirements for staying in ketosis. You can add MCT oil to your favourite shakes and smoothies, and your keto beverages, such as coffee and herbal tea.

Main Benefits of Taking MCT Oil on the Keto Diet:

Long lasting energy and high fat content.

Where to Buy:

MCT Oil or Brain Octane Oil can be found on [Bulletproof.com](https://bulletproof.com).

Perfect Keto's MCT Oil Powder can be found on [PerfectKeto.com](https://perfectketo.com).

Note: Some people may experience digestive symptoms from MCT oil. If this happens to you, you can try an MCT powder which is easier to digest, such as Perfect Keto's MCT Powder.

6. Electrolytes: Sodium, Potassium, Calcium, Magnesium

One of the biggest concerns with drastically reducing your carb consumption is not getting enough electrolytes. This is because you're cutting out the best natural sources of electrolytes, which are starchy fruits and vegetables.

Low electrolytes are a primary cause of the keto flu, which some people experience when transitioning to a low carb diet. Symptoms of the keto flu linked to low electrolytes include fatigue, dizziness, muscle cramping, headaches and nausea. Since these symptoms will make you want to throw in the keto towel altogether, an easy way to stay on track is to take electrolytes daily, especially if you're active.

It's also worth mentioning that calcium and magnesium are known as the "calming electrolytes," since they can help reduce stress and anxiety (48). If the low-carb transition is stressing you out, it couldn't hurt to add a few extra naturally calming nutrients to your diet.

Key Benefits of Electrolyte Supplements on the Keto Diet:

Avoid symptoms of the keto flu and healthy muscle function.

Where to Buy:

Any health food store or grocery store will carry electrolyte supplements. Try to find a blend that contains calcium, sodium, magnesium and potassium.

To stay in ketosis, it's important to make sure your electrolyte supplement doesn't contain added sweeteners. (This means most electrolyte sports drinks are out of the question). Since most sports drinks contain high fructose corn syrup or sucrose, even a few sips could throw you out of a fat burning state.

We recommend [Ultima Replenisher](#), which contains no sugar or artificial ingredients, and zero calories.

And let's not forget: you can also get electrolytes from bone broth, as well as mineral salts, such as himalayan rock salt.

7. L-Glutamine

L-glutamine is an amino acid that acts as an antioxidant. It's recommended on the keto diet for those who are extremely active because intense exercise has been shown to deplete your natural stores of glutamine and can produce free radicals (toxins) (49)(50). Cutting carbs means you may not be eating as many antioxidant-rich fruits and vegetables, so supplementing with a powerful antioxidant like glutamine may help prevent cellular damage (51).

Glutamine also helps boost immunity and muscle recovery time between workouts (52).

Main Benefits of Taking Electrolyte Supplements on the Keto Diet:

Prevents free radical damage from intense physical activity, boosts immunity, and reduces recovery time between workouts.

Where to Buy:

Glutamine can be found in the supplements aisle of any health food store, or purchased through online retailers, such as Amazon.

8. Vitamin D

Vitamin D doesn't play a role in whether or not you're in ketosis, but it does have a huge impact on your overall health — from immunity to electrolyte absorption — so it's worth mentioning here.

It's estimated that over one billion people worldwide are deficient in vitamin D, which is why this vitamin is not only recommended as a keto supplement, but a supplement for most people to take — especially those who live in colder climates or don't spend much time outdoors (53).

You need vitamin D for calcium absorption, muscle function and immunity. It's found in a few keto food sources — such as egg yolks, fatty fish (including fish oil), and mushrooms — but the most powerful way to get vitamin D is to allow your body to produce it from the sun.

If you don't spend much time outdoors, taking a vitamin D3 supplement each day will help you meet your daily vitamin D requirements.

Main Benefits of Taking Vitamin D on the Keto Diet:

Electrolyte absorption (calcium) and immune system support.

Where to Buy:

You can buy liquid vitamin D3 (the form that's best absorbed by your body) at any health food store in liquid or capsule form.

Functional Foods



1. Bone Broth

We consider bone broth a functional food because it's concentrated in so many beneficial nutrients, such as collagen, gelatin, glycine, and potassium. Since the bones used to make bone broth have such a long simmer time (24 to 48 hours), the nutrients become highly bioavailable, and easy for your body to use and absorb straight away.

Best of all, both varieties of Kettle and Fire Bone Broth fit into the keto diet macros nicely. We will get into more details in the next chapter.

2. Chlorella

Chlorella is a single-celled green algae that many people take for energy. It can help increase your energy levels if you become fatigued in the early stages of going keto.

This is because chlorella contains a nutrient called Chlorella Growth Factor, which has the nucleic acids RNA and DNA. These nucleic acids help with cellular repair and regeneration, which allows for more efficient energy transport between your cells (54). Read: healthy cells = more energy.

Chlorella can be found in supplement form (tablets, powders, capsules or granules) at most health food stores. A high quality chlorella supplement will be made from pulverized chlorella and batch tested for heavy metal contamination.

3. Green Tea

Studies suggest green tea helps boost fat metabolism (55). Green tea also contains the antioxidant epigallocatechin gallate (EGCG), which helps prevent cellular damage (56).

Green tea is keto-friendly, especially when you add a spoonful of MCT oil to it.

4. Turmeric

Ah, turmeric — the famous anti-inflammatory spice, and one of the biggest food trends as of late. Turmeric's active ingredient, curcumin, is said to be the reason for turmeric's health benefits, which include improved digestion and antioxidation (57). The main benefit of adding turmeric to your keto recipes is its role as an anti-inflammatory, which can help counteract the effects of inflammatory foods on the keto diet, such as dairy and non-organic animal products.

You can make a keto curry using turmeric or try Golden Milk, a keto-friendly turmeric drink recipe. To make Golden Milk, all you need is full fat coconut milk, ginger, coconut oil, cinnamon, turmeric and a zero calorie natural sweetener, such as stevia. A sprinkle of black pepper is also said to help with turmeric absorption.

Check out [Wellness Mama's Golden Milk](#) recipe. Just be sure to substitute the honey for stevia if you do use a sweetener.

5. Dandelion Root

Dandelion has properties which stimulate the gallbladder to produce more bile, which helps you digest and absorb fatty acids (58). If you experience digestive symptoms after eating fats, having a mug of dandelion root tea first thing in the morning can help you digest your meals better throughout the day.

Roasted dandelion isn't the most delicious tasting herb on the planet, but adding a squeeze of lemon can help neutralize the bitter taste and further promote digestion.

You can find dandelion tea at any natural health food store in bulk or in tea bags.

As you can see, keto supplements aren't 100% necessary, but they can add a nice boost of energy, antioxidants and anti-inflammatory health benefits if you do choose to add them to your routine.

If we had to choose only 3 keto supplements and functional foods, we'd go for exogenous ketones (such as Perfect Keto), MCT oil, and of course, Kettle and Fire Bone Broth.





CHAPTER 11:

Benefits of Bone Broth on Keto

Bone broth is an established superfood. Many therapeutic diets have embraced its healing properties, including the ketogenic diet. Bone broth is recognized as a healing food because of its high concentration of minerals and anti-inflammatory amino acids, as well as its place as one of the only food sources for the gut-healing proteins collagen and gelatin.

We'll explain how bone broth is particularly beneficial for anyone following a keto diet. But first, let's look closer at how bone broth fits in, since very specific macronutrient ratios are required to achieve desired results.

How Does Bone Broth Fit Into Keto?

The idea behind the keto diet is to train your body to burn fat for energy rather than glucose, which allows you to enter the fat-burning state: ketosis. The [keto calculator](#) is an easy way to see how many grams of each macronutrient you need on the keto diet based on your current weight, height and activity levels.

So, what would keto bone broth need to look like in order to fit your macronutrient requirements? When you take a look at the nutrient profile of Kettle and Fire Bone Broth, you'll see how both chicken bone broth and beef bone broth fit in:

Kettle and Fire Chicken Bone Broth contains: 10 grams of protein, 1 gram of fat, and 0 carbs per serving.

Kettle and Fire Beef Bone Broth contains: 6 grams of protein, 0 grams of fat, and 2 grams of carbs per serving.

Kettle and Fire Mushroom Chicken Bone Broth contains 10 grams of protein, 1 gram of fat, and 0 carbs per serving.



Beef Bone Broth



Chicken Bone Broth



Mushroom Chicken Bone Broth

As you can see, all of our three bone broths fit nicely into the macronutrient range required to stay in ketosis, so both can be considered keto bone broth.

If you had to choose among these three, chicken bone broth and mushroom chicken bone broth would be the preferable option for the keto diet plan because it contains 0 carbs and 1 gram of fat, which is what you're aiming for (fewer carbs and more fat). The 10 grams of protein in both also fits well into the keto diet plan macronutrient requirements, and offers an easy way to meet your daily protein intake if you get tired of protein shakes and chicken breasts.

Note: These bone broth nutrient profiles are specific to Kettle and Fire Bone Broths. If you purchase another brand, or make your own at home, the nutrient content will vary depending on the type of bones used (for example, chicken feet yield more protein), and other ingredients added (such as olive oil, etc.).

Let's take a more specific look at a person's keto diet macronutrient breakdown based on their lifestyle. Imagine a 5'3" 115 lb low-active woman, for example, who does yoga a few times each week. According to the ketogenic calculator, she'd be aiming for 120 grams of fat, 70 grams of protein and less than 30 grams of carbs each day to stay in ketosis. As you can see, bone broth fits easily into that ratio, accounting for 2 grams of carbs and 6 grams of protein.

Now, let's take a look at the many ways bone broth can support your health when you're following a keto diet plan.

Bone Broth Helps With Natural Body Detoxification



When switching to the keto diet, chances are you'll be eating more animal fats and proteins than you're used to. While it's true that you'll be receiving plenty of nutrients from these sources, one of the concerns with eating a diet rich in animal protein is over-consuming an amino acid called methionine.

Methionine is found in egg whites, fish, chicken and beef. It acts as an antioxidant and helps us metabolize the food we eat. But you know the saying: "too much of a good thing is a bad thing."

Methionine is only good for us in the right amounts. When we consume too much of it, it can build up in our blood and lead to symptoms such as muscle weakness, liver damage, and neurological problems (59)(60).

But guess what? Bone broth balances the methionine in your body.

Bone broth is an extremely rich source of the amino acid glycine, which has a **direct relationship with methionine**. You see, glycine has been shown to help the body get rid of excess methionine and prevent methionine build-up in the blood. Regularly consuming bone broth will help to eliminate excess methionine as you increase the amount of animal fats and proteins you're eating.

Bone Broth Helps Reduce 'Keto Flu' Symptoms

The keto flu happens as a result of suddenly removing carbs from your diet. Most people experience typical flu-like symptoms, such as nausea, fatigue, headaches, dizziness. This usually isn't a cause for concern — it's a natural reaction your body has when you make drastic changes to your diet.

To help ease keto flu symptoms, it can be helpful to reintroduce a few extra carbs to make the transition period less intense. Bone broth is a good transition food that offers a few grams of carbs, but still fits within the macros of the keto diet plan. Besides, what's more comforting and nourishing than broth when you have the flu?

Drinking bone broth can also be a preventative measure against the keto flu in the early stages of the keto diet thanks to the vitamins, minerals and electrolytes it contains.

Bone Broth Helps Maintain a Healthy Electrolyte Balance

When you go low carb, you're cutting out the majority of fruit and starchy vegetables, which are two of the richest sources of electrolytes. While many foods on the keto diet food list (which you will find on page 13 -14) do contain electrolytes, if you don't plan carefully, it's possible to end up with an electrolyte imbalance.

Bone broth contains all four electrolytes, including calcium, sodium, potassium, and magnesium. Adding 1 to 2 cups of keto-friendly bone broth to your diet is a good way to keep your electrolytes in check when you're eating a smaller variety of fruit and veggies.

How Much Bone Broth Should You Drink on the Keto Diet?

As we covered above, the amount of bone broth you should drink on the keto diet will depend on your individual macronutrient requirements, as well as the other types of proteins, carbs and fats you eat in a day. Since bone broth is extremely low carb, most people should be able to safely drink a few cups of bone broth per day without the risk of being kicked out of ketosis.

Let's take three cups of Kettle and Fire Chicken Bone Broth. We know that per cup, the chicken bone broth contains 0 grams of carbs, 1 gram of fat, and 10 grams of protein. Therefore, 3 cups would net 0 carbs, 3 grams of fat, and 30 grams of protein.

If you refer back to our 5'3" low-activity female example above, 3 cups of chicken bone broth would easily fit into her requirements of 120 grams of fat, 70 grams of protein, and fewer than 30 grams of carbs needed to stay in ketosis.

Ways to Enjoy Keto Bone Broth



1. Make a Keto-Friendly Smoothie

Believe it or not, bone broth makes a great smoothie addition — and you barely know it's there. Leafy greens, berries, avocado, lemon and lime are all permitted on the keto diet plan, so why not blend them up with a cup of bone broth to sip on first thing in the morning? Refreshing and therapeutic? Bone broth smoothies are a win.

2. Trade Your Morning Coffee for Bone Broth

Forget the aroma of freshly ground coffee beans, the energizing minerals and amino acids in bone broth are what have us convinced that **bone broth is the new coffee**. Not only do these nutrients provide you with all-day energy (without the crash), but drinking bone broth first thing in the morning on a keto diet plan may also help you stay focused and alert during the initial stage of cutting carbs.

3. Sauté Your Veggies in Bone Broth

There are still plenty of veggies you can have on the keto diet plan, why not sauté 'em in ½ cup of bone broth for a boost of nutrients and flavor?

4. Fluff Up Your Scrambled Eggs with Bone Broth

The keto diet allows you to have high-fat foods, including dairy products such as milk and cream, which are often used to add a fluffier texture to scrambled eggs. The problem with dairy, however, is that it contains fatty acids called arachidonic acid, which are known to cause inflammation in the body when consumed in excess. So add bone broth to your eggs to fluff them up instead. You'll still get a fluffy texture and a delicious, savory taste — only it'll come with anti-inflammatory nutrients instead.





CHAPTER 12:

Paleo vs Keto Diet: Which One Is Right For You?

While both diets include many of the same foods and have overlapping similarities and benefits, each has a different purpose. Let's take a look at how the Paleo and Keto diets measure up against one another, which one is right for you, and why.

Similarities include:

- No grains
- No legumes
- Emphasis on healthy fats (nuts, seeds, animal fats, coconut oil)
- Encourage eating quality animal protein (grass-fed, organic)
- No refined sugar
- Encourage eating plenty of non-starchy vegetables and leafy greens

But the Paleo and Keto diets have more differences than they do similarities. Let's take a look at what those are.

Key Differences

While both the Paleo and Keto diets can be used to achieve a certain outcome, the Keto diet is more rigorous and targeted, while the Paleo diet is more of a long-term lifestyle choice that can produce certain health benefits — including weight loss — but isn't as restrictive or intense as the Keto diet. Here are the main differences between the Paleo and the Keto diet.

1. The Paleo Diet Isn't Necessarily Low-Carb, High-Fat

The Paleo diet may restrict grains, legumes, and refined sugar, but there's no real limit to the amount of carbs you can eat when it comes to fruit and starchy vegetables, such as squash, sweet potato, and pumpkin. You can also use natural sweeteners liberally on the Paleo diet, such as raw honey, coconut nectar and pure maple syrup, which are higher in carbs.

The fact that the Paleo diet has no emphasis on carb consumption means your body will almost certainly continue burning glucose as energy, unless you intentionally restrict carbs to a low enough percentage (around 5%) to enter ketosis.

The Paleo diet also encourages healthy fats like the keto diet does, but again, a person can easily consume carbs from fruit and starchy vegetables as 60% of their diet and fats as 10% of their diet and still be following a Paleo diet correctly.

2. The Keto Diet Doesn't Restrict Dairy



Full-fat dairy products are permitted on the Keto diet (although depending on who you ask, they're not always encouraged).

As we covered above, the Paleo diet removes foods that are hard for the body to break down and can wreak havoc on gut health — and dairy products are one of them. Dairy is a common food intolerance because most of us stop producing an adequate amount of lactase, which is the enzyme needed to digest the milk sugar lactose found in dairy, around age 4 (once breastfeeding has stopped)(61).

3. The Keto Diet Measures Fat, Protein, and Carb Percentage

In order for the Keto diet to work, there's a specific macronutrient percentage you must follow — otherwise your body can't enter ketosis. On the Standard Keto Diet (SKD), the percentages usually fall around 75% fat, 20% protein, and 5% carbs.

On the other hand, you don't have to abide by macronutrient percentages when it comes to following a Paleo diet.

4. The Keto Diet Requires Testing for Ketosis

Since the goal of the keto diet is to enter ketosis, how do you know you've achieved it? By testing for it, of course. The keto diet has several testing methods to detect ketone bodies in your blood, which indicate your body has successfully begun to burn fatty acids for energy.

Since the Paleo diet doesn't have a specific metabolic goal, there's no testing method for being Paleo — you just know you're Paleo if you cut out dairy, grains, legumes and refined sugar from your diet.

5. The Keto Diet Focuses on a Specific Outcome: Burning Fat instead of Carbs

The biggest difference between the Keto and Paleo diets is the desired outcome: burning fat instead of carbs.

As you now understand, following the keto diet is a way to manipulate your metabolism and accelerate fat loss. The Paleo diet can still promote weight loss, especially by cutting out refined sugar and grains (which trigger fat storage and weight gain), but your metabolism will most likely remain in the default state of burning carbs for energy. (Unless of course, you decide to drastically reduce your carbs down to 5% while eating Paleo — which would essentially be following both diets at the same time.)

How to Be Paleo and Keto at The Same Time

If you want to burn fat more efficiently, and you already follow (or are considering following) a Paleo diet, you can enter ketosis while eating Paleo, and vice versa. All you'd need to do is:

1. Eliminate all dairy products (with the exception of grassfed butter or ghee).
2. Track your macros to stay within the range that will allow your body to enter ketosis. (You can find out your specific number by using the [keto calculator](#).)
3. Choose grass-fed or pasture raised animal products whenever possible.
4. Choose no-calorie all natural sweeteners, such as green leaf stevia.

When it comes to meal-planning and grocery shopping, here's a quick glance at the similarities and differences in food groups on the Paleo vs Keto diets:

Food Groups	Paleo	Keto
Animal Protein	✓	✓
Healthy Fats & Oils	✓	✓
Grains	✗	✗
Fruits	✓	Less than 5%
Non- starchy Vegetables	✓	✓
Starchy Vegetables (pumpkins, squash, yams)	✓	Less than 5%
Beans & Legumes	✗	✗
Dairy	✗	✗
Superfoods (spirulina, chlorella, maca root)	✓	✓
Kettle & Fire Bone Broth	✓	✓

**Note: Kettle & Fire broth is 100% Paleo and Keto friendly but there are no guarantess when it comes to other store bought brands.*

So, when it comes to Paleo vs Keto — which diet is right for you?

With the keto diet being more restrictive, it may be difficult (but not impossible) to incorporate into a busy lifestyle, but it can produce the most dramatic results for weight and fat loss. The Paleo diet is less restrictive, and can produce gradual weight loss results, as well as benefits for [gut and digestive health](#). Or, you can try both to see which diet helps you feel your best!



CHAPTER 13:

Keto Recipes



There are a lot of resources for recipes out there and so many ways in which you can get creative in the kitchen on a **KETO DIET**.

Here are a few of our favorites to get you started...





THE BEST KETO MEATLOAF

Prep time: 10 min | Cook time: 50 min | Total time: 1hr | Servings: 6

You either loved it or hated as a kid, but we can almost guarantee this keto meatloaf recipe will become a favourite in your keto cooking repertoire. The top of this meatloaf is layered with a slightly sweet and tart tomato sauce, while a savory beef flavored with garlic, onion, and mushrooms makes up the base.

INGREDIENTS for Meatloaf:

- 1 ½ pounds ground beef
- 2 cage-free eggs
- 1 small onion, diced
- 2 garlic cloves, minced
- 2 cups mushrooms, finely chopped
- 1 teaspoon coconut aminos
- 1 tablespoon tomato paste
- ¼ cup unsweetened almond milk
- ¼ cup almond flour
- 1 tablespoon dried oregano
- 1 teaspoon Himalayan pink salt
- 1 teaspoon ground black pepper



THE BEST KETO MEATLOAF

Prep time: 10 min | Cook time: 50 min | Total time: 1hr | Servings: 6

Traditional meatloaf recipes usually call for breadcrumbs, which makes them a no go for low carb and gluten free diets. Instead, we've perfected this meatloaf with almond flour, which makes it entirely low carb, gluten free, and (best of all) keto friendly.

INGREDIENTS for Tomato Sauce:

- 1 cup tomatoes, diced
- ½ teaspoon Himalayan pink salt
- ½ teaspoon ground black pepper
- ½ teaspoon dried oregano
- ½ teaspoon dried parsley
- 1 heirloom tomato, sliced, (optional)



THE BEST KETO MEATLOAF

Prep time: 10 min | Cook time: 50 min | Total time: 1hr | Servings: 6

INSTRUCTIONS:

1. Heat oven to 350°F.
2. In a large bowl, combine all the meatloaf ingredients and knead the mixture with your hands until fully combined.
3. In a non-stick, 9x5-inch loaf pan, add the meatloaf mixture and press down to fill all the edges of the pan. Set aside.
4. In a small pot over low heat, add the tomato sauce ingredients and bring to a simmer. Cook for 2 minutes, stirring occasionally. Remove from the heat.
5. Pour the tomato sauce over the meatloaf. (If using, add slices of heirloom tomato to garnish). Place in the oven and cook until the meatloaf is cooked through and no longer pink in the middle, about 50 minutes.
6. Remove from the oven and let rest until warm, about 10 minutes. Serve.

Type: *Keto, Gluten-Free, Paleo*



KETO OVERNIGHT “OATS” WITH COCONUT AND BLUEBERRIES

Prep time: 5 min | Cook time: 4 hours | Total time: 4 hrs, 5 min | Servings: 1

Who knew you could still have oatmeal on the keto diet? Well, now you can with this oatless keto “oatmeal.” This keto oatmeal recipe is our spin on traditional overnight oats, and is so full of healthy fats, fiber, and flavor, you won’t even notice the oats are missing.

Ideally made the night before, this is the perfect recipe for the keto dieter who’s tight on time, or needs a new grab’n’go snack to stay in fat-burning mode (but don’t we all?).

INGREDIENTS:

- 3 tablespoons hemp hearts
- 1 tablespoon walnuts, roughly chopped
- 1 teaspoon chia seeds
- ½ teaspoon cinnamon, ground
- 3 tablespoons full-fat coconut milk
- ½ tablespoon sugar-free maple syrup
- 10 blueberries, for garnish



KETO OVERNIGHT “OATS” WITH COCONUT AND BLUEBERRIES

Prep time: 5 min | Cook time: 4 hours | Total time: 4 hrs, 5 min | Servings: 1

Not only will the fats from the hemp hearts, walnuts, chia, and coconut milk turn you into a fat-burning machine, they'll keep your energy levels high, your tastebuds satisfied, and your stomach full. Best of all, it only takes 5 minutes to put together, and 'cooks' while you're asleep.

INSTRUCTIONS:

1. In a 12 ounce mason jar, mix in all the ingredients (minus the blueberries) with a spoon until thoroughly combined.
2. Place in the refrigerator overnight, or for a minimum of 4 hours.
3. Garnish with blueberries and enjoy.



KETO DEVEILED EGGS

Prep time: 10 min | Cook time: 12 min | Total time: 22 min | Servings: 4

INGREDIENTS for Homemade mayonnaise:

- 1 egg yolk (cage-free egg)
- 1 teaspoon dijon mustard
- $\frac{3}{4}$ cup avocado oil
- 1 tablespoon apple cider vinegar
- 1 tablespoon lemon juice
- 1 teaspoon salt

INSTRUCTIONS:

1. Separate the egg white from the egg yolk.
2. In a medium size bowl blend the egg yolk and dijon mustard with a whisk until fully combined.
3. While mixing with the whisk slowly pour in the avocado oil. Keep pouring until mixture starts to look like a mayonnaise-like texture.
4. Once all the oil is in, add the apple cider vinegar, lemon juice and salt.
5. Mix until well combined.
6. When the mayonnaise is done, put in an airtight container and store in the refrigerator up to a week.



KETO DEVILED EGGS

Prep time: 10 min | Cook time: 12 min | Total time: 22 min | Servings: 4

A delish and healthy twist on a Southern classic, these keto deviled eggs are the perfect way to keep your body in fat-burning mode.

Traditional deviled eggs are already a great option for a high-fat, keto-friendly snack. We've just ramped up the healthy fat content in this keto recipe by combining avocado with egg yolks to make the egg filling, and to help you meet your macros easier. (Not to mention that avocado and deviled eggs are a match made in flavor heaven.)

INGREDIENTS for Deviled eggs:

- 6 cage-free eggs
- ½ large avocado
- ¼ cup homemade mayonnaise
- ½ teaspoon salt
- ½ teaspoon black pepper (plus more for garnish)
- 2 tablespoon chives, finely chopped



KETO DEVEILED EGGS

Prep time: 10 min | Cook time: 12 min | Total time: 22 min | Servings: 4

This recipe calls for mayonnaise. You can use store-bought mayo, or give our simple healthy mayonnaise recipe a try..

INSTRUCTIONS:

1. In a medium size pot over high heat, boil cups of water. Once the water is boiling carefully drop the eggs and let the eggs boil for 12 minutes.
2. Drain eggs immediately and peel under cold water for an easy peel.
3. Cut hard boiled eggs in half and spoon out the yolk into a medium size bowl. Set the egg whites aside for later.
4. Add avocado, mayonnaise, salt, and black pepper to the bowl with the egg yolk. With a fork, smash the ingredients and combine until the mixture has a smooth consistency, about 5 minutes.
5. Place the avocado filling into a ziplock bag to be used as a piping bag. Cut a small hole in the corner of the bag.
6. Squeeze the ziplock bag to push the filling into the opening of the egg whites.
7. Garnish with chopped chives and pepper.

Type: *Keto, Gluten-free*



KETO TALLOW FRIED CHICKEN

Prep time: 5 min | Cook time: 40 min | Total time: 45 min | Servings: 2

Fried in a skillet and coated with a gluten-free, Southern-spiced batter, this chicken has the crunch you've been craving. It's definitely Keto and taste tester approved!

INGREDIENTS:

- 1 cup almond flour
- ½ tablespoon cayenne pepper
- ½ tablespoon garlic powder
- ½ tablespoon dried oregano
- 1 teaspoon salt
- 1 teaspoon black pepper
- 1 egg
- 2 chicken thighs (skin on)
- 2 chicken drumsticks (skin on)
- 2 ounces tallow



KETO TALLOW FRIED CHICKEN

Prep time: 5 min | Cook time: 40 min | Total time: 45 min | Servings: 2

INSTRUCTIONS:

1. In a medium bowl, add the flour, cayenne pepper, garlic powder, dried oregano, salt and pepper. Mix with a fork until fully blended.
2. Spread the mixture on a large flat plate.
3. In another small bowl, crack the egg and beat with a fork.
4. One by one, dip the chicken in the bowl with the egg until fully coated.
5. Dredge each chicken piece in the flour and spice mixture on the plate until all sides are fully coated. Repeat with all the chicken.
6. In a large saucepan over medium heat, warm the tallow until melted. Once the tallow is melted and bubbling, add the chicken. (You should hear a sizzle as soon as it hits the pan.)
7. Fry the chicken, flipping once, until golden brown, about 10 minutes on either side.
8. Cover the pan with a lid, lower the heat, and cook until the chicken is no longer pink in the middle, about 20 minutes. (Fully cooked chicken should be 165° Find the thickest part.)
9. Transfer the chicken to a paper towel-lined plate to let the grease drip off.
10. Enjoy with a side salad or sauteed vegetables.



KETO ENERGY BITES WITH 2 DELICIOUS FLAVORS

Prep time: 5 min | Cook time: 1 hr | Total time: 1hr & 5min | Servings: 3

Whether you make the cinnamon and coconut, the matcha green tea and cacao nibs or both, these keto bites are sure to help keep your body in ketosis.

Cinnamon + Coconut INGREDIENTS:

- ½ cup coconut butter
- 1 cup coconut shreds
- ⅓ cup monk fruit sweetener
- 1 ½ tablespoons ghee
- 1 teaspoon cinnamon powder



KETO ENERGY BITES WITH 2 DELICIOUS FLAVORS

Prep time: 5 min | Cook time: 1 hr | Total time: 1hr & 5min | Servings: 3

Matcha Green Tea + Cacao Nibs

INGREDIENTS:

- ½ cup coconut butter
- ½ cup coconut shreds
- ⅓ cup monk fruit sweetener
- 1 ½ tablespoons ghee
- 1 tablespoon matcha green tea powder
- 1 tablespoon cacao nibs (add more for garnish)

Side Note: This recipe uses monk fruit sweetener, which is an all-natural, zero-calorie, zero-carb sweetener made from monk fruit extract. You can find monk fruit sweetener at most natural health food stores or online.



KETO ENERGY BITES WITH 2 DELICIOUS FLAVORS

Prep time: 5 min | Cook time: 1 hr | Total time: 1hr & 5min | Servings: 3

INSTRUCTIONS:

1. Place all ingredients in a food processor and blend on high for 1 minute, or until fully blended.
2. For garnish, place cinnamon or cacao nibs at the bottom of the silicone mold.
3. Spoon mixture into the silicone molds and refrigerate for 1 hour, or until completely solid.
4. Recipe yields 3 two-ounce keto energy bites that can be cut in half for 6 servings.



SWEET AND TANGY KETO BBQ SAUCE

Prep time: 10 minutes | Cook time: 30 minutes | Total time: 40 minutes | Servings: 8

Sweet, tangy, and velvety smooth, this keto BBQ sauce is about to become your go-to condiment for anything in need of a flavor boost.

Pair it with a game-day basket of chicken wings and grilled summer meats, or use it as a marinade for beef and pork ribs. You also might want to keep a bowl around as a dunking sauce for veggie fries and keto chips.

INGREDIENTS:

- ½ cup Kettle & Fire Chicken Bone Broth
- 1 cup reduced sugar ketchup
- ¼ cup apple cider vinegar
- 2 ½ tablespoons sugar-free maple syrup
- 2 teaspoons ground black pepper
- ½ teaspoon onion powder
- ½ teaspoon salt



SWEET AND TANGY KETO BBQ SAUCE

Prep time: 10 minutes | Cook time: 30 minutes | Total time: 40 minutes | Servings: 8

Unlike most traditional or store-bought sauces, this BBQ is packed with a boost of protein and nutrients thanks to a Kettle & Fire bone broth base. It's also lower in refined sugars, sweetened by sugar-free maple syrup and low-sugar ketchup. Apple cider vinegar adds a tangy punch, making this a guilt-free condiment that will keep you craving more.

INSTRUCTIONS:

1. In a medium to large saucepan, combine all ingredients. While stirring, bring to a boil over high heat.
2. Once boiling, lower the heat and let simmer for 30 minutes, stirring frequently.
3. When the sauce has thickened to about half the amount, remove from heat and enjoy with your preferred meat or vegetable.

Note: This BBQ sauce can be used to marinate chicken, pork or beef.



KETO CHOCOLATE CHIP COOKIES

Prep time: 5 minutes | Cook time: 18 minutes | Total time: 23 minutes | Servings: 6

These moist, chocolate chip cookies are the ultimate filling treat. We bake them in a muffin tray to give them a more fluffy texture you just can't deny!

INGREDIENTS:

- Coconut oil spray
- ¼ cup salted butter, softened
- ¼ cup stevia powder
- 1 large egg
- ½ tablespoon vanilla extract
- 1 cup almond flour
- ¼ teaspoon baking soda
- ⅓ cup sugar-free chocolate chips



KETO CHOCOLATE CHIP COOKIES

Prep time: 5 minutes | Cook time: 18 minutes | Total time: 23 minutes | Servings: 6

INSTRUCTIONS:

1. Preheat oven to 350°F and spray a 6-slot muffin pan with coconut oil. Set aside.
2. Using a hand mixer on medium to low speed, beat together butter and stevia in a medium size bowl.
3. Crack 1 egg over the bowl and mix well with a fork for one minute. Beat in vanilla extract.
4. Add almond flour and baking soda and blend with the hand mixer on slow speed until there are no longer dry clumps.
5. Fold in chocolate chips with a fork.
6. Spoon in 1 ½ tablespoons of cookie dough into each muffin pan slot and repeat with the remaining of dough, creating 6 cookies.
7. Bake cookies in oven for 18 minutes or until golden brown. Let cool in muffin tray for 10 minutes before serving



KETO TACOS FOR BREAKFAST

Prep time: 5 minutes | Cook time: 25 minutes | Total time: 30 minutes | Servings: 3

These keto breakfast tacos are a twist on the classic breakfast burrito, with scrambled eggs, avocado, tomato and bacon. Plus, while a regular breakfast burrito shell would kick you out of ketosis, we've made this keto taco recipe with crunchy, warm shells that require only 1 ingredient: mozzarella cheese. If you've never had a cheese taco shell before, you're in for a treat.

INGREDIENTS:

- 4 strips bacon
- 1 cup whole milk mozzarella cheese, shredded
- 1 tablespoon ghee
- 5 large eggs
- ½ avocado, diced
- 1 ounce cheddar cheese, shredded
- 1 campari tomato, diced
- 1 stem green onion, thinly sliced



KETO TACOS FOR BREAKFAST

Prep time: 5 minutes | Cook time: 25 minutes | Total time: 30 minutes | Servings: 3

INSTRUCTIONS:

1. Cook bacon first in a medium size skillet for 4 minutes over medium heat. Flip bacon and cook for another 4 minutes or until crispy. Using a tongs take bacon out of the skillet and place on a paper towel.
2. Wipe down the same skillet with a paper towel and place $\frac{1}{3}$ cup mozzarella cheese into pan creating a 5-inch wide circle.
3. Melt mozzarella over medium heat on the stove top until edges become golden brown, 4 minutes. Carefully flip cheese with a spatula and let cook for 1 minute.
4. Place a turkey baster (or anything 6 inches long and round) on the rim of a medium size bowl.
5. Using a spatula lift cheese out of the skillet and drape over the turkey baster resting on the bowl.



KETO TACOS FOR BREAKFAST

Prep time: 5 minutes | Cook time: 25 minutes | Total time: 30 minutes | Servings: 3

INSTRUCTIONS:

6. Repeat steps 2-5 with the remaining cheese in batches of $\frac{1}{3}$ cups to create 3 taco shells total.
7. In the same skillet, heat up 1 tablespoon of ghee over medium heat.
8. Whisk 5 large eggs in a small bowl and pour into heated skillet.
9. Scramble eggs for about 2 minutes or until fully cooked.
10. Divide the scrambled eggs into three even portions and spoon into prepared taco shells.
11. Add diced avocado, cheddar cheese and diced tomato on top of the scrambled eggs.
12. Garnish with sliced green onion.



KETO PIZZA WITH PEPPERONI

Prep time: 10 min | Cook time: 20 | Total time: 30 min | Servings: 2

Sometimes we can't believe the keto diet is called a diet, especially when you get your hands on recipes like this keto pepperoni pizza.

INGREDIENTS for the pizza crust:

- 2 tablespoons organic cream cheese
- 1 ½ mozzarella organic cheese
- ⅓ cup coconut flour
- 2 large eggs

INGREDIENTS for the toppings:

- ¼ cup sugar-free marinara sauce
- ½ cup organic mozzarella cheese
- 8 slices pepperoni



KETO PIZZA WITH PEPPERONI

Prep time: 10 min | Cook time: 20 | Total time: 30 min | Servings: 2

INSTRUCTIONS for Pizza Crust:

1. Preheat oven to 425°F. Line a baking sheet with parchment paper. (Do not substitute for tin foil as dough will stick.)
2. Add 1 ½ cups mozzarella cheese and 2 tablespoons cream cheese to a microwave safe, medium size bowl. Microwave on medium heat for 90 seconds, stirring the ingredients in the bowl halfway through to properly melt all ingredients.
3. Stir in coconut flour and 2 large eggs into the bowl and mix thoroughly with a fork. Knead with your hands until mixture becomes dough, about 2 minutes.
4. With your hands spread the dough on the baking sheet, creating a round shape giving the crust about ¼-inch thickness.
5. Using a fork, poke holes into crust all over multiple times to avoid bubbles.
6. Bake for 10 minutes.



KETO PIZZA WITH PEPPERONI

Prep time: 10 min | Cook time: 20 | Total time: 30 min | Servings: 2

We recommend choosing organic cheese if possible to avoid the hormones and antibiotics that can be found in conventional dairy products.

INSTRUCTIONS for the Toppings:

1. Spread $\frac{1}{4}$ cup sugar-free marinara sauce onto the crust creating an even layer.
2. Sprinkle the remaining $\frac{1}{2}$ cup of mozzarella cheese onto the pizza.
3. Place 8 slices of pepperoni evenly.
4. Return the pizza back to the oven for 10 more minutes or until the crust edges and cheese toppings are golden brown.

Type: Gluten-Free, Keto



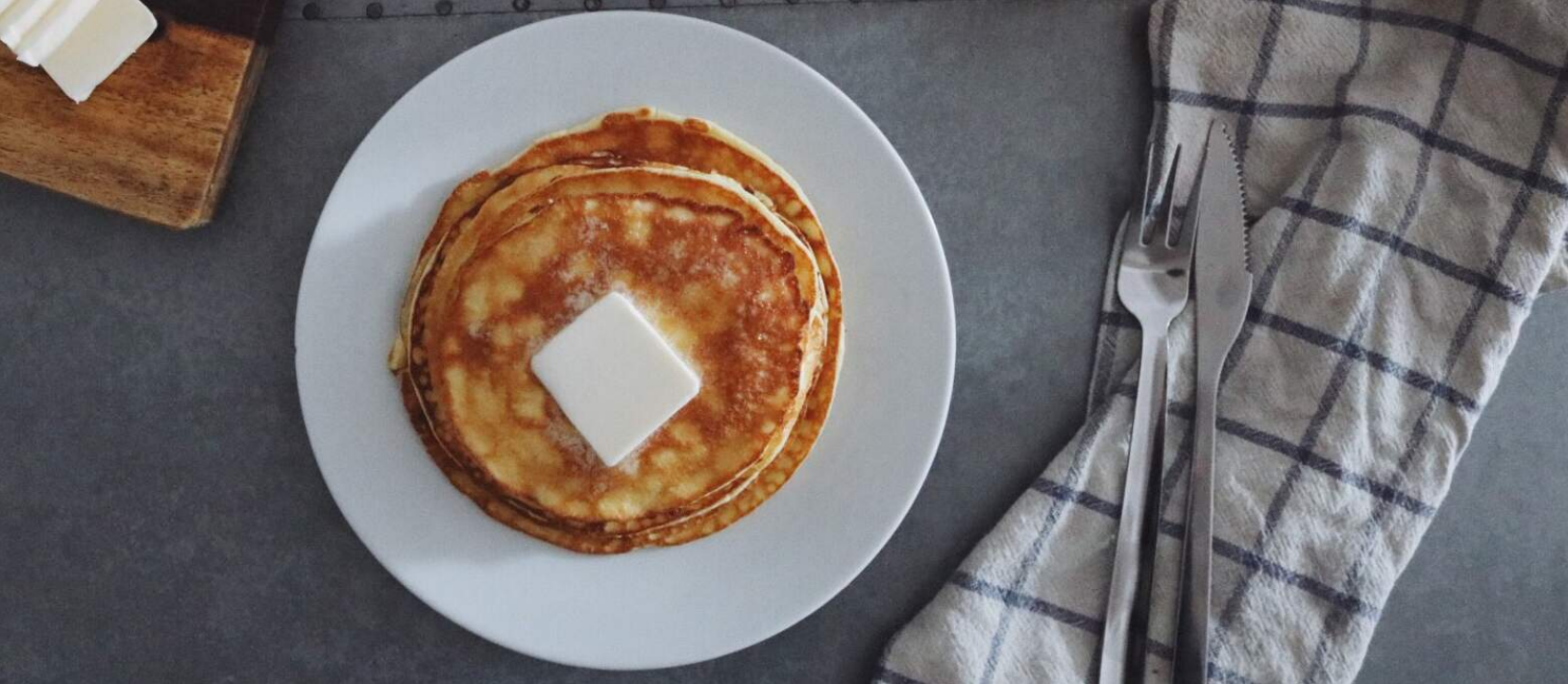
KETO PANCAKES

Prep time: 3 mins | Cook time: 10 mins | Total time: 13 mins | Servings: 1

Say hello to your newest favorite breakfast dish! Keto pancakes are a surprise everyone will want in the morning. With a crepe like batter these Keto Pancakes will give you the ultimate surprise of fluffy pancakes once it hits the warm pan. Enjoy with a warm cup of bone broth is suggested.

INGREDIENTS:

- 4 large eggs
- 4 ounces cream cheese
- 2 tablespoons butter
- ½ teaspoon vanilla extract
- 2 tablespoons Whey Protein Powder
- Coconut oil spray
- Sugar-Free Maple Syrup



KETO PANCAKES

Prep time: 3 mins | Cook time: 10 mins | Total time: 13 mins | Servings: 1

INSTRUCTIONS:

1. Place eggs, cream cheese, butter and Vanilla in a food processor or a blender, then blend until mixture is a liquid consistency.
2. Blend in whey protein powder.
3. Spray a nonstick flat-bottom pan with coconut oil and let the pan get warm over medium heat.
4. Pour about $\frac{1}{3}$ cup of batter into the pan and let it cook, untouched, for 2 minutes or until batter starts to bubble.
5. Flip the pancake and let it cook for 1 minute.
6. Repeat step 4 and 5 to finish all the batter.
7. On a serving plate, stack up all the pancakes, add a slice of butter if preferred, drizzle with some sugar-free maple syrup and enjoy with a warm cup of Kettle & Fire Chicken Bone Broth.



KETO FAT BOMB WITH CACAO AND CASHEW

Prep time: 15 | Cook time: 5 minutes | Total time: 20 minutes | Yields: 10

These little round bundles of joy are sure to curb your sweet tooth craving. With truffle like texture and added crunch with the raw cashews these Keto Fat Bombs will fill you up in no time.

INGREDIENTS:

- 1 cup Coconut Oil
- 1 cup Almond Butter
- ¼ cup Coconut Flour
- ½ cup Cacao Powder
- 1 cup Raw Cashews



KETO FAT BOMB WITH CACAO AND CASHEW

Prep time: 15 | Cook time: 5 minutes | Total time: 20 minutes | Yields: 10

INSTRUCTIONS:

1. In a non-stick medium saucepan over medium heat, heat coconut oil and almond butter until mixed evenly, stirring often.
2. Pour the oil mixture from the pan into a bowl and mix in coconut flour and cacao powder.
3. Place bowl in the freezer for about 15 minutes until mixture cools and is solid.
4. While the mixture is cooling, place the cashews in a food processor and pulse lightly for a chopped texture.
5. When the coconut mixture is solidified, take 1 tablespoon of the mixture from the bowl, roll in your hands to the shape of a ball and dip in the blended cashews. Place fat bombs on a plate. Repeat this step until you have used all of the mixture.
6. Refrigerate the fat bombs for 5 minutes.
7. Enjoy and make sure to store your leftover fat bombs in the refrigerator. Otherwise they will melt quickly.



KETO BRUSSELS SPROUTS GRATIN

Prep time: 10 mins | Cook time: 25 mins | Total time: 35 mins | Servings: 4

These creamy, cheesy, and crunchy shredded Brussels sprouts are topped with a pine nut crust, which make them the perfect alternative to traditional holiday “anti-keto” comfort foods— like mashed potatoes and gravy. Using pine nuts and finely grated parmesan cheese creates a crunchy enough crust without having to add other common ingredients, such as pork rinds or almond flour.

INGREDIENTS:

- 2 tablespoons olive oil
- 1 large shallot minced
- 2 garlic cloves minced
- ½ pound Brussels sprouts finely shredded or quartered
- 1 cup Kettle & Fire Mushroom Chicken Bone Broth
- 1 cup organic heavy cream
- 1 cup organic mozzarella cheese shredded
- Kosher salt
- 1 pinch nutmeg
- ¼ cup pine nuts finely chopped
- 4 sprigs thyme leaves finely chopped
- 2 tablespoons grated parmesan cheese



KETO BRUSSELS SPROUTS GRATIN

Prep time: 10 mins | Cook time: 25 mins | Total time: 35 mins | Servings: 4

INSTRUCTIONS:

1. In a large sauce pot over medium heat, warm the olive oil. Add the shallots and garlic and cook, stirring, until just soft, 2 to 3 minutes. Add the Brussels sprouts and stir to combine.
2. Add the bone broth to the pot and stir to combine. Cook until the Brussels sprouts are just soft, 3 to 5 minutes. Then stir in the heavy cream and cheese. Add the nutmeg and a couple generous pinches of salt. Cook until cheese is completely melted, 1 to 2 minutes.
3. Meanwhile, in a small bowl, combine the pine nuts, thyme and parmesan cheese. Add a pinch of salt and toss gently to combine.
4. Carefully divide the Brussels sprouts and cream mixture evenly between the four ramekins and top with the pine nut mixture.
5. Place ramekins on a sheet pan and transfer to the oven. Cook until the gratin is bubbly and the pine nut crust is golden brown, 10 to 12 minutes. Remove from the oven, let cool slightly and serve.

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Beef Bone Broth



Chicken Bone Broth



Mushroom Chicken Bone Broth

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