

How To Start Eating and Living on a Ketogenic Diet ADAM BLYTH

THE ULIMATE KETO Handbook

HOW TO START EATING AND LIVING ON A KETOGENIC DIET



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WHAT IS THE KETO DIET?

he Keto Diet (ketogenic diet) is a low-carb, high-fat diet. As a diet plan, it shares many of the same foods and drinks as the Atkins diet and other lowcarb diets.

What makes a Keto diet different is that it focuses on drastically reducing carbohydrate intake and replacing those carbohydrates with fat. This drastic reduction in carbohydrates puts your body into a metabolic state that is called *ketosis*.

The point of going into ketosis is to help your body become efficient at burning fat for energy. While this is happening, your body turns the fat into ketones in the liver, supplying energy to the brain. A cautionary note: ketogenic diets can cause massive reductions in blood sugar and insulin levels. So while this can be a good thing for some people, it can cause problems for other people.

WHY GO KETO?

There are a number of reasons why people go on a ketogenic diet. In most cases, it is to lose weight. In some cases, they are medically supervised and use the ketogenic diet as part of a treatment plan.

1. Weight Loss. Due to lowered insulin levels and the body's ability to burn stored fat, those who adhere to the diet find that they lose weight more quickly than with conventional diets.



- Reduce Medical and Health Problems. Ketogenics is being studied and used now as a part of the treatment of many different diseases. Studies have shown that this diet can have benefits for a wide variety of health conditions. Ailments such as:
- Heart Disease: In addition to weight loss, the risk factors of body fat, HDL levels, blood pressure, and blood sugar are improved.
- Cancer: There are medical studies such as those conducted by the Department of Radiation Oncology at the Holden Comprehensive Cancer Center at the University of Iowa and the National Institutes of Health's National Institute of Neurological Disorders and Stroke that are showing good results with the ketogenic diet being an effective treatment for several types of cancer and slow tumor growth.
- Alzheimer's disease: Ketogenic diets are being used to help treat Alzheimer's symptoms. Those patients on the diet have shown a reduction in those symptoms and improved cognitive function.
- **Epilepsy**: The Ketogenic diet is one treatment option for children with epilepsy whose seizures are not controlled by anti-epileptic drugs. It can help reduce the number of severity of seizures and can often have positive effects on behavior.
- Acne: Lower insulin levels and eating less sugar and processed foods help improve acne. In addition, an increase in water intake will occur due to the lack of carbohydrates, offering good hydration of the skin.



 Lower Cholesterol. A modified ketogenic diet, what might be called a moderately low-carb diet, is beneficial for healthy adults who are at risk for metabolic syndrome, those struggling with losing weight or controlling levels of blood sugar.

As you can see, the ketogenic diet is more than just a low-carb/high-fat diet to lose weight, the potential of Ketogenics to maximize all aspects of your life is astounding!





HOW TO CALCULATE NET CARBS

n any low-carb diet, you will be reducing your *net carb* gram intake. It is important that you understand how to actually count net carbs. First, net carbs are simply the grams of total carbohydrates in a portion of food minus its grams of fiber. Because fiber is a carbohydrate that your body cannot digest, it does not raise your blood sugar levels or trigger an insulin response.

Foods that are low in net carbs, which include nutrient-dense vegetables and fruits, are less likely to interfere with weight loss and do not have a significant impact on blood sugar.

You can calculate, for yourself, the approximate number of net carb grams in a low-carb product. First look at the information on the food label:

Total Carbohydrates minus Dietary Fiber minus Sugar alcohol = Net Carbs

For a comprehensive list of Ketogenic food items, please refer to the website below:

https://www.ketogenic-diet-resource.com/low-carb-food-list.html

Often, the food label will break down carbohydrates into total carbohydrates, fiber, and sugars.

Total carbohydrates combine all of the carbs and include fiber, sugars, starches, sugar alcohols, and glycerin. The label will show the amount found per serving and is measured in grams. They are found in starches, vegetables, fruits, sweets, and milk.

Dietary fiber is the amount of indigestible or partially digestible bulk from plant foods like fruits, vegetables, whole grains, oats, nuts, and seeds and is measured in grams.

Sugar alcohols are found most often in foods labeled "sugar-free," including candy, cookies, chewing gums, and soda, but have recently become popular in packaged health foods. Sugar alcohol gets its name from its molecular structure, which is a hybrid between a sugar molecule and an alcohol molecule. Biochemically speaking, sugar alcohols are structurally similar to sugar but are either poorly digested or poorly metabolized.

Sugar alcohol has grown in popularity as a sugar replacement in foods because they contain few calories, have a minimal impact on insulin levels, and are safe for those with diabetes.



Here's a list of some popular sugar alcohols so you can identify them when you look at a nutrition label:

- Erythritol
- Maltitol
- Hydrogenated starch hydrolysates
- Isomalt
- Lactitol
- Mannitol
- Sorbitol
- Xylitol



HOW THE KETO DIET WORKS

t's all about ketosis.

Attaining it and maintaining it.

First, the Keto Diet is similar to many low-carb, high-fat diets. But, there is a difference. That difference is the intentional reduction of carbohydrates to the point of putting your body into *ketosis*. No other low-carb, high-fat diet does this.

Ketosis is a normal process that the body does every day, regardless of the number of carbs you eat. Your body processes different types of nutrients into the fuels that it needs. Proteins, fats, and carbs are all processed for use. The ketogenic diet, which is a low-carb, high-fat diet, ramps up this process.

When in ketosis, your body is in a metabolic state where most of the body's energy comes from ketone bodies in the blood. Ketones are molecules that occur when your body burns fat as an energy source.

This is in contrast to a glycolysis state where blood glucose provides most of the energy. So this means your body is burning fat for energy instead of carbohydrates.

Why does this happen? Our bodies normally run on glucose for energy. We can't create glucose and only store 24 hours' worth in our muscles and liver. Once this glucose is no longer available, we begin to burn stored fat. The ketogenic diet, therefore, eliminates glucose and causes the body to burn stored fat.

THE KETO DIET

The Keto Diet is low carb, high fat, and high protein and these elements are eaten daily in these amounts: at least 65% of your food intake is from



fat. This leaves you with about 30% protein and the last 5% can be an additional 5% of fat or 5% of dark green low-carb vegetables like dandelion leaves, kale, spinach, Swiss chard, etc.

Understanding what can and cannot be eaten is vital to making the keto diet work as a weight loss diet. Understanding and tracking macronutrient intake becomes part of the process of attaining and maintaining ketosis.

Macronutrients are the largest class of nutrients the body requires for energy. They include protein, carbohydrates, and fats. When we refer to "macros," we are referring to these major nutrients. Since "macros" means large, macronutrients are those nutrients we need in large amounts.

There are three major macronutrients important to health and energy:

- Carbohydrates
- Healthy Fats
- Protein

Remember, the Keto Diet is low carb, not no carb. So there will be carbohydrates in the daily food that is eaten, just a much lower number than the average person eats. And to replace the lost carbs, there is an increase in protein and fat intake. This is why monitoring and tracking macronutrients each day helps to achieve success while on the keto diet.





WHAT CAN YOU EAT ON A KETO DIET

The key to a keto diet is to build ketones. And the key to building ketones is a mixture of fasting and a diet with at least 65% of your food intake being from fat. This leaves you with about 30% protein and the last 5% can be an additional 5% of fat or 5% of dark green low-carb vegetables like dandelion leaves, kale, spinach, Swiss chard, etc.

The diet has a strict 5% carbohydrate allowance. In general, you can eat from the following food groups: Fats and Oils, Protein, Vegetables and Fruits, Dairy products, Nuts and Seeds, Water and Beverages.

Starting a new diet isn't easy, especially when you need to eat specific foods and stay away from other types of foods. This ketogenic diet food list should help you be able to make decisions about what you are eating and shopping for.

- Fats and Oils. Try to get your fat from natural sources like meat and nuts.
 Supplement with saturated and monounsaturated fats like coconut oil, butter, and olive oil. Here are some to choose from:
 - ➤ Fatty Fish
 - Animal Fat (non-hydrogenated)
 - > Lard
 - ➤ Tallow



- Avocados
- Egg Yolks
- Macadamia/Brazil Nuts
- Butter/Ghee
- Coconut Butter
- Cocoa Butter
- Olive Oil
- Coconut Oil
- Avocado Oil
- Macadamia Oil
- MCT Oil
- Protein. Remember that too much protein on a ketogenic diet is not a good thing. Choose from the following:
 - Fish. Anything that is caught wild such as catfish, cod, flounder, halibut, mackerel, mahi-mahi, salmon, snapper, trout, and tuna. Fattier fish is better.
 - Shellfish. Clams, oysters, lobster, crab, scallops, mussels, and squid.
 - Whole Eggs. You can prepare them in many different ways like fried, deviled, boiled, poached, and scrambled.
 - Beef. Ground beef, steak, roasts, and stew meat. Stick with fattier cuts where possible.
 - Pork. Ground pork, pork loin, pork chops, tenderloin, and ham. Watch out for added sugars and try to stick with fattier cuts.
 - Poultry. Chicken, duck, quail, pheasant, and other wild game.



- Offal/Organ. Heart, liver, kidney, and tongue. Offal is one of the best sources of vitamins/nutrients.
- Other Meat. Veal, Goat, Lamb, Turkey, and other wild game. Stick with fattier cuts where possible.
- Bacon and Sausage. Check labels for anything cured in sugar, or if it contains extra fillers. Don't be overly concerned with nitrates.
- > Nut Butter. Go for natural, unsweetened nuts.
- Vegetables and Fruits
 - > Nightshades. This includes tomato, eggplant, and peppers.
 - Root Vegetables. This includes onion, parsnip, garlic, mushrooms, and squash.
 - Berries. This includes raspberries, blackberries, and blueberries.
 - Citrus. This includes lemon, lime, and orange juice (or zest) in water and in recipes.
 - Completely avoid starchy vegetables and large fruits like potatoes and bananas.

Dairy products

- ➢ Greek yogurt
- Heavy whipping cream
- Mayonnaise (preferably homemade)
- Spreadable items, including cottage cheese, cream cheese, sour cream, mascarpone, crème fraiche, etc.



- Soft Cheese, including mozzarella, brie, blue, Colby, Monterey Jack, etc.
- > Hard Cheese, including aged cheddar, parmesan, feta, Swiss, etc.

Nuts and Seeds

- Fatty, low carbohydrate nuts. Macadamia nuts, brazil nuts, and pecans can be consumed with meals to supplement fat.
- Fatty, moderate carbohydrate nuts. Walnuts, almonds, hazelnuts, peanuts, and pine nuts can be used in moderation to supplement for texture or flavor.
- Higher carbohydrate nuts. Pistachios and cashews should rarely be eaten or avoided as they're very high in carbohydrates.

• Water and Beverages

- Water. This will be your staple, go-to source for hydration. You can drink tap, bottled or sparkling water.
- Broth. Loaded with vitamins and nutrients. More importantly, it will kick-start your energy by replenishing your electrolytes.
- Coffee. Improves mental focus and has some added weight loss benefits.
- Tea. Has the same effect as coffee. Try to stick with black or green.
- > Coconut/Almond milk. You can use the unsweetened



versions in the carton from the store to replace your favorite dairy beverage.

- Diet soda. Try to severely reduce or completely stop drinking this. It can lead to sugar cravings and sometimes insulin spikes in the long run.
- Flavoring. The small packets that are flavored with sucralose or stevia are fine. You can alternatively add a squeeze of lemon, lime, or orange to your water bottle.
- Alcohol. Choose hard liquor. More beer and wine will be too high carb to consume. Frequent consumption of alcohol will slow weight loss down.

Foods to Avoid



If you are uncertain about any products or food items that might not be keto-friendly, here is a list of things that you should always be on the lookout for and avoid:

- Sugar. It's typically found in soda, juice, sports drinks, candy, chocolate, and ice cream. Avoid sugar at all costs.
- Grains. Any wheat products, pasta, cereal, cakes, pastries, rice, corn, and beer should be avoided. This includes whole grains like wheat, rye, barley, buckwheat, and quinoa.
- > Starch. Avoid vegetables like potatoes and yams and other things like oats, muesli, etc. Some root vegetables are okay in moderation - be sure to read the section on vegetables.
- > Trans Fats. Margarine or any other spreadable replacement butter should be avoided as they contain hydrogenated fats.



- Fruit. Avoid any large fruits such as apples, oranges, bananas as they're extremely high in sugar. Some berries can be consumed in moderation – be sure to read the section on fruits.
- Low-fat foods. These tend to be much higher in carbs and sugar than full-fat versions. Make sure you read the package.

A typical meal plan for a day could look like this:

- Breakfast: 3 eggs cooked any way with yolks. Sausage containing no carbs or sugar. 3 strips of bacon.
- Lunch: Chicken leg and thigh with as much skin and oily gooey bits as possible. Steamed spinach or broccoli with crumbled feta.
- Supper: 250g Steak with cheese. Fried mushrooms. Leafy green salad.
- Before bed: 1 glass of wine with a slice of cheese.

Or like this:

- Breakfast: 3 egg omelet with fried mushrooms, cheese, and chopped parsley.
- Lunch: A whole duck breast if you can get it or chicken again with as much fatty skin as possible. Leafy green salad.
- Dinner: Hamburger made with high-fat mince without the bun.
 The mince can contain the usual paprika, chopped onions, and garlic if you like, but absolutely no syrup or sugar. Add cheese, tomatoes, lettuce and any other leafy low-carb greens you like.
- Before bed 1 glass of wine with a slice of cheese.



It will be difficult to change your eating habits at first, but with meals like those listed above it won't be long before you enjoy eating a ketogenic diet.





TRACKING YOUR MACROS TO STAY IN Ketosis

What is Ketosis?

etosis is a process that the body does every day, regardless of the number of carbs you eat. Your body processes different types of nutrients into the fuels that it needs. Proteins, fats, and carbs are all processed for use. The ketogenic diet ramps up this process.

This process, ketosis, is a metabolic state where most of the body's energy comes from.

How to Track Macros

On a low-carb diet, it is important to track the net carbs with a limit of 20 net carbs per day as a maximum number. It is also important to track the healthy fats, protein, and fiber because the goal on the keto diet is to maintain ketosis, the state of burning fat as energy. To do this, the fat is to be 65% of the daily intake and protein is to be 30% and the net carb intake is to be 5%.

An excellent free Macro Calculator is <u>MyFitnessPal</u>. It is a fun app that gives you free access to the world's largest nutrition and calorie database with over 5



million foods listed. It is a great way to keep up with your progress. It also allows you to track exercise and calories burned, water intake, and determine accurate nutrition facts for your recipes.

How easy is it to track? Simply download the app, enter the food group you will be eating from, the serving size, and how it will be prepared. Not only will it save that information, but it will also give you information about calories and a space to track your exercise. By the end of the first day of meals, you will see how well you were able to stay on track with your keto diet plan. And, you will see at a glance if you were able to maintain ketosis by eating the right amounts of fat, protein, and carbs.



Please see the link below for more information on food tracking apps:

https://www.ruled.me/carb-tracking-for-keto-diet/



ISN'T KETOSIS DANGEROUS?

o, not at all. Many people confuse ketosis with ketoacidosis, and they are not the same at all. In addition, your body fluctuates throughout the day and can be in and out of ketosis. With the ketogenic diet, the purpose is to achieve and maintain a state of ketosis, and that is not dangerous.

Ketosis and Ketoacidosis

Despite the similarity in name, **ketosis** and **ketoacidosis** are two different things. And because of the similarity in the name, it can be easy to confuse the two.

What is Ketoacidosis?

Ketoacidosis refers to <u>diabetic ketoacidosis</u> (DKA) and is a complication of type 1 diabetes mellitus, where an individual with uncontrolled diabetes is starving due to the lack of insulin. Insulin brings glucose into the cells, and without it, the body switches to ketones. The brain can function with the energy from glucose, fat, or ketones.

Ketoacidosis can be caused by not getting enough insulin, having a severe infection or other illness, becoming severely dehydrated, or some combination of these things.



Symptoms of ketoacidosis:

- Flushed, hot, dry skin.
- Blurred vision.
- Feeling thirsty and urinating a lot.
- Drowsiness or difficulty waking up. Young children may lack interest in their normal activities.
- Rapid, deep breathing.
- A strong, fruity breath odor.



- Loss of appetite, belly pain, and vomiting.
- Confusion.

The symptoms are very different and make it easy to see why achieving and maintaining ketosis is not dangerous. And because the symptoms are so different it is easy to determine when you are in ketosis. Please see a medical physician before starting your journey on a Ketogenic Diet.



WHY YOU LOSE WEIGHT ON A KETO Diet

"Regular" Diets Focus on Calories and Exercise

The 'regular' way to lose weight over a long period of time is to reduce the number of calories you take in and increase the number of calories you use as fuel in your daily activity. Science has discovered that this actually doesn't work as well as we would like it to, and that is because calorie counting does not address cravings, nor does it offer guidance on what type of food to eat for long-term weight loss. Additionally, science has taught us that carbohydrates and sugar foods are what need to be removed from our diet, or greatly reduced from our diet, for long-term weight loss.

From Burning Sugar to Burning Fat

The ketogenic diet works for weight loss because the intention is to force the body into ketosis. This is not a bad thing! It is a metabolic state where most of the body's energy comes from ketone bodies in the blood. Ketone bodies are molecules that occur when your body burns fat as an energy source. So what you are doing is setting up your body to stop using sugar (glucose) for energy and start using fat for energy.

Why does weight loss happen? Our bodies normally run on glucose for energy.



We can't create glucose and only store 24 hours' worth in our muscles and liver. Once this glucose is no longer available, we begin to burn stored fat. The ketogenic diet, by eliminating glucose, causes the body to burn stored fat. And fat is what we want to lose.

Less Sugar Means Less Water Weight

There is a strong relationship between water retention and glycogen (glucose) that is stored in the body. If your body manages to store some extra glycogen, you also increase water retention. This happens literally from one day to the next. Hence, when you eliminate or reduce sugar from your diet, you reduce the likelihood of carrying extra weight that is simply extra water.

Reduced Appetite

Ketosis does not completely reduce your appetite but instead helps to reduce your cravings for food that can sometimes lead you to overeat. The heart, brain, and other muscle tissues "prefer" to burn ketones because this allows the body to conserve blood sugar. As a side effect, this is definitely one of the better ones. Your body is put in a state of not wanting to eat or overeat, making it much easier to lose weight.



THE KETO FLU EXPLAINED

he keto flu. It is a real thing. It can happen when you drastically and suddenly remove carbs from your diet. Most people will experience some of the symptoms, and some people have been known to experience most of the symptoms. Either way, you need to know about it so you can prepare yourself for it.

Also known as the 'carb flu,' the keto flu is a natural reaction your body experiences when switching from burning glucose (sugar) as energy to burning fat instead.

At the beginning of practicing the keto diet, you may feel some or all of these symptoms:

- Intense cravings for carbohydrate and sugar
- Fatigue
- Lightheadedness
- Headache
- Dizziness
- Body aches
- Dry mouth



- Nausea
- Irritableness

No need to be alarmed. These symptoms are a natural reaction to removing carbs from your diet, and if you are experiencing them, then it means you are doing the diet right. Most people do not experience all of the symptoms, only some. And, they will pass in less than a week.

Manage the Symptoms

If you know the symptoms are possible, you can prepare yourself and your kitchen cabinet and pantry to manage them.

- Take an electrolyte supplement to replace the salt that has been removed through increased water intake and reduced carbs.
- Hydrating with water, drinking when thirsty, and adding a bit of salt will help.



HOW DO I KNOW I'M IN KETOSIS?

ou are on the ketogenic diet. You are beyond the initial symptoms that come from transitioning into a new diet. You think you are in ketosis, but how do you know for sure?

There are some naturally occurring physical symptoms that you can use to tell that you are in ketosis because you will feel different. Remember, your body is depending on fat for fuel. This includes dietary fats like oils and fatty meats, but it also includes the extra fat you are carrying on your body. You will feel the loss of some of this fat, whether it is around the belly or on the thighs.

You will notice a decrease in your appetite. As ketones are created and used for energy, there is no more craving for sugary foods or foods you used to eat. No more cravings mean that you are not as hungry and that means you will not be eating as much or want to eat as much as you did before starting the diet.

Your mental clarity will improve. An unbalanced diet can lead to lack of mental clarity, and it feels like a foggy brain. You have difficulty remembering facts or struggle with staying focused on tasks. When you are in ketosis, your brain is receiving energy through the ketones using fat as energy, and you will find that you are able to think much more clearly; you will remember facts and details much better.



Urine Strips and Ketone Meter

If you want real accuracy, you can measure the ketones in your body by detecting them in your urine or in your blood.

First, the urine. The way to do this is to use ketone urine testing strips, often referred to by the brand name Ketostix. They are inexpensive and very easy to use. Simply pass one directly through your urine stream, shake off any excess fluid and wait 15 seconds. If you are in ketosis, the strip will change color from beige to varying shades of purple. There will be a color guide provided so you can measure your ketone levels accurately.

Second, the blood test. This is a truly accurate way to measure if you are in ketosis. And this is something you can do, and it can be done in your home. You will need a blood ketone meter and a kit that includes the lancet pen and ketone test strips.

Two brands that are used by many people are:

Precision Xtra: This meter from Abbott Diabetes Care can store up to 450 measurements and will display your blood glucose averages over different time periods. You need to enter a code to switch from glucose testing to ketone testing.

Nova Max Plus: This meter from Nova Biomedical is often provided free with the purchase of two boxes of test strips. You don't have to enter a code to switch it from blood glucose to ketone testing; it does that automatically when you insert a ketone test strip.



