

The Ketogenic Diet: A Detailed Beginner's Guide to Keto

What Is a Ketogenic Diet?

The ketogenic diet is a very low-carb, high-fat diet that shares many similarities with the Atkins and low-carb diets. It involves drastically reducing carbohydrate intake and replacing it with fat. This reduction in carbs puts your body into a metabolic state called ketosis. When this happens, your body becomes incredibly efficient at burning fat for energy. It also turns fat into ketones in the liver, which can supply energy for the brain. Ketogenic diets can cause massive reductions in blood sugar and insulin levels. This, along with the increased ketones, has numerous health benefits.

Ketogenic Diets Can Help You Lose Weight

A ketogenic diet is an effective way to lose weight and lower risk factors for disease. The diet is so filling that you can lose weight without counting calories or tracking your food intake. The keto diet is also superior to low-fat diet for several reasons including the increased protein intake, which provides numerous benefits. The increased ketones, lower blood sugar levels, and improved insulin sensitivity may also play a key role.

Ketogenic Diets for Diabetes and Prediabetes

Diabetes is characterized by changes in metabolism, high blood sugar and impaired insulin function. The ketogenic diet can help you lose excess fat, which is closely linked to type 2 diabetes, prediabetes and metabolic syndrome.

Other Health Benefits of Keto.

- **Heart disease:** May improve risk factors like body fat, HDL cholesterol levels, blood pressure, and blood sugar.
- **Cancer:** The diet is currently being used to treat several types of cancer and slow tumor growth.
- **Alzheimer's disease:** The keto diet may reduce symptoms of Alzheimer's disease and slow its progression.
- **Epilepsy:** Research has shown that the ketogenic diet can cause massive reductions in seizures in epileptic children.
- **Parkinson's disease:** One study found that the diet helped improve symptoms of Parkinson's disease.
- **Polycystic ovary syndrome:** Can help reduce insulin levels, which may play a key role in polycystic ovary syndrome.
- **Brain injuries:** One animal study found that the diet can reduce concussions and aid recovery after brain injury.
- **Acne:** Lower insulin levels and eating less sugar or processed foods may help improve acne.

However, keep in mind that research into many of these areas is far from conclusive.

Foods to Avoid

- **Sugary foods:** Soda, fruit juice, smoothies, cake, ice cream, candy, etc.
- **Grains or starches:** Wheat-based products, rice, pasta, cereal, etc.
- **Fruit:** All fruit, except small portions of berries like strawberries.
- **Beans or legumes:** Peas, kidney beans, lentils, chickpeas, etc.
- **Root vegetables and tubers:** Potatoes, sweet potatoes, carrots, parsnips, etc.
- **Low-fat or diet products:** These are highly processed and often high in carbs.
- **Some condiments or sauces:** These often contain sugar and unhealthy fat.
- **Unhealthy fats:** Limit your intake of processed vegetable oils, mayonnaise, etc.
- **Alcohol:** Due to their carb content, many alcoholic beverages can throw you out of ketosis.
- **Sugar-free diet foods:** These tend to be highly processed and high in sugar alcohols, which affects ketone levels.

Foods to Eat

- **Meat:** Red meat, steak, ham, sausage, bacon, chicken and turkey.
- **Fatty fish:** Such as salmon, trout, tuna and mackerel.
- **Eggs:** Look for pastured or omega-3 whole eggs.
- **Butter and cream:** Look for grass-fed when possible.
- **Cheese:** Unprocessed cheese (cheddar, goat, cream, blue or mozzarella).
- **Nuts and seeds:** Almonds, walnuts, flax seeds, pumpkin seeds, chia seeds, etc.
- **Healthy oils:** Primarily extra virgin olive oil, coconut oil and avocado oil.
- **Avocados:** Whole avocados or freshly made guacamole.
- **Low-carb veggies:** Most green veggies, tomatoes, onions, peppers, etc.
- **Condiments:** You can use salt, pepper and various healthy herbs and spices.

Healthy Keto Snacks

- Fatty meat or fish
- Cheese and/or olives
- A handful of nuts or seeds
- 1–2 hard-boiled eggs
- 90% dark chocolate
- A low-carb milkshake with almond milk, cocoa powder and nut butter
- Full-fat yogurt mixed with nut butter and cocoa powder
- Strawberries and cream
- Smaller portions of leftover meals

A Sample Keto Meal Plan For 1 Week

Monday

- **Breakfast:** Bacon, eggs and tomatoes.
- **Lunch:** Chicken salad with olive oil and feta cheese.
- **Dinner:** Salmon with asparagus cooked in butter.

Tuesday

- **Breakfast:** Egg, tomato, basil and goat cheese omelet.
- **Lunch:** Almond milk, peanut butter, cocoa powder and stevia milkshake.
- **Dinner:** Meatballs, cheddar cheese and vegetables.

Wednesday

- **Breakfast:** A ketogenic milkshake
- **Lunch:** Shrimp salad with olive oil and avocado.
- **Dinner:** Pork chops with Parmesan cheese, broccoli, and salad.

Thursday

- **Breakfast:** Omelet with avocado, salsa, peppers, onion and spices.
- **Lunch:** A handful of nuts and celery sticks with guacamole and salsa.
- **Dinner:** Chicken stuffed with pesto and cream cheese, along with vegetables.

Friday

- **Breakfast:** Sugar-free yogurt with peanut butter, cocoa powder and stevia.
- **Lunch:** Beef stir-fry cooked in coconut oil with vegetables.
- **Dinner:** Bun-less burger with bacon, egg and cheese.

Saturday

- **Breakfast:** Ham and cheese omelet with vegetables.
- **Lunch:** Ham and cheese slices with nuts.
- **Dinner:** White fish, egg and spinach cooked in coconut oil.

Sunday

- **Breakfast:** Fried eggs with bacon and mushrooms.
- **Lunch:** Burger with salsa, cheese and guacamole.
- **Dinner:** Steak and eggs with a side salad.

Tips for Eating Out on a Ketogenic Diet

Select a meat or fish-based dish and replace any high-carb food with extra vegetables. Egg-based meals are also a great option, such as an omelet or eggs and bacon or bun-less burgers with vegetables instead of fries. For dessert, ask for a mixed cheese board or berries with cream.

The Best Low Carb Vegetables for Keto

Vegetables are an essential part of a healthy low-carb diet. However, vegetables high in sugar need to be eliminated. Be careful when eating vegetables as their carb counts do add up quickly. Remember that you should aim to limit your carbohydrates to be below 30g per day.

The best type of vegetables are high in nutrients and low in carbohydrates. Anything that resembles spinach or kale (dark and leafy) will fall into this category and will be the best vegetable to eat. If you're looking for low-carb vegetables that aren't leafy greens, think about the ones that grow above ground mostly from the cruciferous family. These include broccoli, cauliflower, zucchini, lettuce, cucumbers, and more.

Generally, the brighter and more colorful the vegetable, the less low-carb they are. There are a few exceptions like bell peppers and jalapenos, which can be used for added texture and flavor in meals. Always do your best to avoid sweet or starchy vegetables as they are high in carbohydrates. These include (but are not limited to) peas, corn, potatoes, sweet potatoes, yams, yucca, parsnips, beans, quinoa, and legumes. Generally, the sweeter the vegetable is – the more sugar it has in it. You must be very careful with the amount you consume from things such as carrots, onions, and squash. Of course, you can eat these in moderation but watch your intake.

Side Effects and How to Minimize Them

Although the ketogenic diet is safe for healthy people, there may be some initial side effects while your body adapts. This is often referred to as the keto flu and is usually over within a few days. Keto flu includes poor energy and mental function, increased hunger, sleep issues, nausea, digestive discomfort, and decreased exercise performance. To minimize this, try a regular low-carb diet for the first few weeks. This may teach your body to burn more fat before you completely eliminate carbs. A ketogenic diet can also change the water and mineral balance of your body, so adding extra salt to your meals or taking mineral supplements can help. For minerals, try taking 3,000–4,000 mg of sodium, 1,000 mg of potassium and 300 mg of magnesium per day to minimize side effects. At least in the beginning, it is important to eat until you're full and avoid restricting calories too much. Usually, a ketogenic diet causes weight loss without intentional calorie restriction.

Useful Supplements for a Ketogenic Diet

MCT oil: Added to drinks or yogurt, MCT oil provides energy and helps increase ketone levels.

Minerals: Added salt and minerals can be important when starting out due to shifts in water and mineral balance.

Caffeine: Caffeine can have benefits for energy, fat loss and performance.

Exogenous ketones: This supplement may help raise the body's ketone levels.

Creatine: Creatine provides benefits for health and performance when combining a ketogenic diet with exercise.

Whey: Use half a scoop of whey protein in shakes or yogurt to increase your daily protein intake.

A Ketogenic Diet Is Great, but Not for Everyone

A ketogenic diet can be great for people who are overweight, diabetic or looking to improve their metabolic health. It may be less suitable for elite athletes or those wishing to add large amounts of muscle or weight.

1. Can I ever eat carbs again?

Yes. However, it is important to significantly reduce your carb intake initially. After the first 2–3 months, you can eat carbs on special occasions but return to the diet immediately after.

2. Will I lose muscle?

There is a risk of losing some muscle on any diet. However, the high protein intake and high ketone levels may help minimize muscle loss, especially if you lift weights.

3. Can I build muscle on a ketogenic diet?

Yes, but it may not work as well as on a moderate-carb diet.

4. Do I need to refeed or carb load?

No. However, a few higher-calorie days may be beneficial every now and then.

5. How much protein can I eat?

Protein should be moderate, as a very high intake can spike insulin levels and lower ketones. Around 35% of total calorie intake is probably the upper limit.

6. What if I am constantly tired, weak or fatigued?

You may not be in full ketosis or be utilizing fats and ketones efficiently. Lower your carb intake and re-visit the points above. A supplement like MCT oil or ketones may also help.

7. My urine smells fruity. Why is this?

Don't be alarmed. This is simply due to the excretion of by-products created during ketosis.

8. My breath smells. What can I do?

This is a common side effect. Try drinking naturally flavored water or chewing sugar-free gum.

9. I heard ketosis was extremely dangerous. Is this true?

People often confuse ketosis with ketoacidosis. The former is natural, while the latter only occurs in uncontrolled diabetes. Ketoacidosis is dangerous, but the ketosis on a ketogenic diet is perfectly normal and healthy.

10. I have digestion issues and diarrhea. What can I do?

This common side effect usually passes after 3–4 weeks. If it persists, try eating more high-fiber veggies. Magnesium supplements can also help with constipation.
