

IN THIS CHAPTER

- » Getting acquainted with keto
- » Pondering whether you and keto are a good match
- » Getting to ketosis
- » Staying positive

Chapter **1**

Brushing Up on the Basics

Keto has become quite popular over the past several years, but what do you really know about this seemingly trendy dietary lifestyle? Is keto truly worth the hype, and is it really a healthy way to lose weight? We're here to help you figure out if keto is right for you and the basic steps of following a keto lifestyle safely and effectively. In this chapter, we cover the nuts and bolts of the keto lifestyle and get you ready to go, with a clear sense of the benefits of making a keto choice.

Understanding What the Keto Diet Is

The ketogenic diet (or keto diet for short) is an exceptionally well-researched and proven method to start working *with* your body, rather than against it, to improve your health. Following the basic rules of the keto lifestyle can help you

- » Feel more energized.
- » Lose weight faster.
- » Improve the health of your heart.
- » Sharpen your mental focus.

In addition to these benefits, there are a host of other long-term benefits that will leave you jumping for joy. Though it's become popular recently, the keto diet has been used for almost a hundred years to heal and prevent disease — that's a long track record of benefits.

In a nutshell, the keto diet is

- » High fat
- » Moderate protein
- » Very low carbohydrate

Having grains and carbohydrates form the basis of every meal may seem like contemporary wisdom, but for most of human history, this wasn't the case. Processed and easily digested carbohydrates fuel weight gain and unhealthy spikes in blood sugar with each bite; over the course of a lifetime, this destroys your health.

The keto diet puts your body into *ketosis*, a process where you use fats, rather than sugars from carbohydrates, to fuel your body. On the keto diet, you learn to turn nutritional powerhouses — fats — into the basis of your meals.

In this chapter, and again in Chapter 3, we allay the fears that are commonly encountered when we talk about eating fat. The truth is that fat really isn't to blame for the increasingly common problems of obesity and being overweight that you always hear about. Fat is actually very good for you, keeps you feeling fuller longer, helps you lose weight, and improves your health over the long term.

There are a lot of misconceptions about nutrition in general, and the keto diet in particular. In this book, we wade through the incessant chatter about what you should and shouldn't eat to get to the meat of it all (pun intended). The keto lifestyle is much more than the “bacon wrapped in cheese” memes will have you believe — although you can eat cheese and bacon. It won't wreak havoc on your heart or blood vessels, nor will it increase your cholesterol levels if you follow a whole-food-based keto lifestyle.

Despite what many of us have been told for decades, we don't need to eat many carbohydrates as part of a healthy lifestyle. Instead, eating a range of whole keto foods can be the key to healthy living. Keto is a flexible and adventurous lifestyle that isn't a one-size-fits-all plan; there are several different varieties to fit with your lifestyle and goals.

In the following sections, we look at the various options available, how they're different, and what each has to offer.

THE HISTORY OF KETO

The ketogenic diet has been around in one form or another for thousands of years; in fact, the first mention of this way of eating was found in Greek medical texts from 400 B.C. The diet was formally created and named a century ago by medical doctors who were seeking an innovative way to treat epilepsy in children. It was very successful, although the medical community didn't completely understand *how* it worked — they simply knew that consuming a high-fat, low-carbohydrate diet drastically reduced, and occasionally even eliminated, the number of seizures epileptic patients experienced.

The diet became less popular in the 1930s and 1940s as antiseizure drugs were invented. The primary selling point for these medications was their convenience, not necessarily their effectiveness. Keto is still so effective that it's nearly always what doctors turn to in cases of *intractable epilepsy*, a version of the condition that is unaffected by medication. In these cases, keto nearly always works. The primary objection to the diet, and why it fell out of favor in the 1930s and 1940s, is that it requires quite a bit of dedication and discipline to cook in a way that's completely different from the way the rest of society approaches food. The benefits are undeniable, but it does take effort — and if you can treat epilepsy by simply popping a pill, that's a much more convenient approach than totally revamping your diet. For the approximately 30 percent of epileptic patients for whom medication has no effect, however, keto offers much-needed relief.

Between the 1940s and the 1990s, the ketogenic diet fell into some level of obscurity. It was still used in the medical community, but sparingly, and it didn't generate a tremendous amount of discussion. That changed in the mid-1990s when Hollywood director Jim Abrahams discovered the diet as he desperately searched for treatments that would help his epileptic son. The Abrahams found keto to be so effective that Jim created the Charlie Foundation, named after his child, to bring the eating approach back as a mainstream treatment. Abrahams's efforts marked a resurgence of interest in ketosis, and over the next several decades, thousands of studies were conducted on the ketogenic diet by the medical and scientific community.

As the diet's resurgence continued, people began to notice that it had uses beyond preventing seizures. In the early 1900s, the prevalence of diabetes was roughly 3 in 100,000; a hundred years later, however, nearly 1 in 10 Americans are diabetic or prediabetic. Those who began trying ketosis were shocked by the results: Not only did it help more than 90 percent of type 2 diabetics reduce their medication, but more than half of type 2 diabetics who stuck with the low-carb, high-fat lifestyle experienced such an incredible reduction in their HbA1C levels (the primary marker of diabetes) that their condition was effectively reversed!

(continued)

(continued)

The diabetic community reacted with understandable excitement, and people began to notice other effects. Individuals who stayed on the ketogenic diet watched excess pounds melt away, and they naturally assumed a healthy body weight, regardless of age, gender, race, or ethnicity — it didn't even seem to matter if someone exercised or not. Keto was conducive to maintaining ideal body fat percentages.

Weight loss is a multibillion-dollar industry, so this discovery spurred a tremendous amount of interest. New research began to discover that this way of eating lowered low-density lipoprotein (LDL) cholesterol (the bad kind) and raised high-density lipoprotein (HDL) cholesterol (the good kind), which completely shocked the diet community of the 1990s. Women who suffered from polycystic ovary syndrome (PCOS) experienced a reduction in symptoms, and studies confirmed that aspiring mothers who struggled with fertility issues had statistically significant improved rates of conception while eating low-carb.

Stories of people beating cancer with keto began to surface, and, as you can imagine, this generated quite the buzz in the medical community. Studies found that keto wasn't a cure for cancer, but it did have several remarkable effects. The first was that many cancerous tumors feed almost exclusively on glucose but can't be fueled by ketones; when patients transitioned to a different way of eating, even some aggressive forms of cancer stopped growing, giving traditional medical treatments more time to work. Studies also confirmed that a ketogenic lifestyle made tumors more sensitive to radiation and chemotherapy — not only did the diet give the medical community more time to work, but it actually assisted their efforts.

Standard ketogenic diet

The standard ketogenic diet is the basic version of the keto diet. It's been around the longest and has the most evidence and research behind it. If you're thinking about keto, you need to be very familiar with the standard ketogenic diet. It clearly breaks down the sources of your daily calorie intake, as follows:

- » **Fat:** 70 percent
- » **Protein:** 25 percent
- » **Carbohydrates:** 5 percent

Historically, on this diet, you'll generally eat about 25 grams of carbohydrates per day. However, we live in more flexible times, and some people eat as much as 50 grams per day. That's okay, because most people stay in ketosis on 50 grams of carbs a day, so they don't need to limit their carbs anymore. Over time, you'll figure out what works best for you.

The amount of daily carbs is, at most, only a fifth of what many Americans eat. On the standard American diet, you get about 30 percent of calories from fat, 20 percent from protein, and 50 percent (or more) from carbohydrates. That means most Americans are eating about 250 grams of carbs or more per day. As you can imagine, making such a radical change from a carb-based diet to a fat-based one will have a massive impact on your health and energy levels.



REMEMBER

On the standard ketogenic diet, the ratio is 70:25:5 in terms of calories coming from fat, protein, and carbs. You should aim for 30 grams of carbs or fewer in a day.

Targeted ketogenic diet

The targeted ketogenic diet is geared toward athletes. It's a slightly more flexible version of the keto diet because it allows you to eat more carbs around the time of your intense workouts. When you're burning a lot of calories, the carbs you eat are consumed as fuel immediately, so your body doesn't get "kicked out" of ketosis in the long term. As soon as you use up all the carbs during your workout, your body goes back to fat burning because there aren't carbs left around when you're more sedentary.

This choice is good for very active people who are exercising at high levels regularly (for hours, not minutes) or training for an intense athletic challenge that requires a lot of energy, like a marathon. Regardless, this is not a free pass to eat as many carbohydrates as you would on a high-carb diet. You should consume about 20 or 25 grams of easily digestible carbs approximately 30 to 45 minutes before you exercise. After exercising, you'll go back to the regular keto diet. Keep in mind the total number of calories (including your pre-workout carbs) when coming up with your daily energy intake.



REMEMBER

It's critical that you only eat enough carbs to fuel your workout, so your body goes back to burning fats when you're done exercising. Generally, you should be well adjusted to the standard ketogenic diet for a couple months at least before you switch to this targeted version.

Cyclical ketogenic diet

The cyclical ketogenic diet is another more flexible keto option for highly trained athletes. We're upping the playing field here — this is the ultramarathon runner or the professional athlete, not the weekend warrior. These athletes may increase their carb intake for a short time to "fuel" themselves for the high level of performance they're about to commit to. The increase may be for a couple of days before a major training event — and the amount of carbs they consume is in line with the amount of physical activity they're facing. Then they go back to the standard

ketogenic diet after the major event is over. Although they may be out of ketosis during these “cheat days,” their high level of performance ensures that they’re still in the low-carb range because they’re burning so many more calories than usual.

Another group of people who follow the cyclical ketogenic diet are those who have a hard time sticking to the standard ketogenic diet and choose to have cheat days once in a while. This may involve going keto five days a week, with the weekends reserved for “cheat days.” For those who eat carbs on the weekend, or can’t stick to the standard ketogenic diet because of social pressures, it’s important not to go on carb-binging cycles. It’s quite a shift for the body to go from ketosis to high-carb so rapidly. Instead, increase your carbs to a “low-carb diet,” in the range of 150 to 200 grams on your cheat days. You won’t be in ketosis on those days — and it may take a while for your body to go back to ketosis even on your regular standard ketogenic diet days — but at least you’ll still have the benefits of cutting back on carbs.



TIP

The cyclical ketogenic diet may be helpful for athletes and those who find it difficult to commit to the keto lifestyle. Keto is very flexible and can work with any lifestyle, as long as you make a commitment to health.

High-protein ketogenic diet

In the high-protein ketogenic diet, you increase the percent of calories from protein. Commonly, this breaks down as follows:

- » **Fat:** 60 percent
- » **Protein:** 35 percent
- » **Carbohydrate:** 5 percent

This option is best for people who are concerned about losing muscle or even want to bulk up, like bodybuilders or individuals who have very low lean body muscle mass. Generally, keto is a muscle neutral diet (you don’t gain or lose it), so adding protein is a great choice for those who want to gain muscle. In this diet, you’re still in ketosis, but you don’t necessarily have as high a level of ketones as someone on the standard ketogenic diet. It’s hard, but possible, to get kicked out of ketosis if you go higher than the recommended 35 percent of calories from protein. It’s also important on this type of keto diet to remember to eat a range of protein foods that are healthy and nutritious.

Deciding Whether the Keto Diet Is Right for You

Still unsure if the keto diet is right for you? In addition to the four options we just looked at, the keto lifestyle can be adapted to fit almost everyone's needs — from the person seeking to jump-start weight loss to the person concerned about risk of diabetes. It does take a can-do attitude and commitment because you'll encounter some bumps in the road, but for those who press on, the keto lifestyle is well worth the effort. We dive more into the many benefits — and few side effects — of the keto lifestyle in Chapter 2, but in this section we give you a little taste of why the keto diet may be right for you.

You want to lose weight fast and keep it off

If you've tried multiple diets and feel discouraged because you can't keep the weight off, the keto diet is for you. Keto turns your body into a fat-burning machine. With the right blend of exercise and a well-balanced keto diet, you can reach your weight-loss goals. The keto diet has been shown to help people lose weight faster than low-fat diets; if you stay committed, it's a healthy and satisfying way to maintain your weight over the long term.

You're not afraid of a little commitment

Keto is great for those who can commit to it. There is some built-in flexibility to keto, but changing your mind-set to a “fat is healthy, and carbs aren't as necessary as we thought” mentality requires some nutritional know-how (reading this book is a great start) and a commitment to choosing keto-friendly options in a sea of high-carb treats. You need to make some thoughtful choices about what you put into your body as fuel — looking at your long-term goals, rather than what is readily available.

You may find this challenging, especially in the first few days and weeks, if you notice some telltale signs of the *keto flu* (the muscle cramping and general feeling of being run down as your body adjusts to ketosis). We share some tips to decrease or avoid the symptoms in Chapter 3, but going through the keto flu may make you doubt your commitment to the keto lifestyle. If you're serious about your health and you aren't easily swayed by a few bumps along the way, keto offers lasting benefits.

You want to decrease your risk of diabetes

If you're concerned about your risk of getting diabetes, keto is an excellent option for you. Eating a keto diet stops the wild up and down sugar spikes associated with the standard American diet, which is loaded with carbohydrates. Keto can help reduce your risk of getting type 2 diabetes — a widespread problem that leads to heart disease and other major medical issues. Alarmingly, up to one-third of Americans are prediabetic and don't even know it.



WARNING

Be cautious, however, if you are diabetic. Research is showing that the keto diet may actually help cure diabetes and get people off medications, but diabetes can be a severe medical condition that requires a doctor's care. It's best to have the support of a doctor or nutritionist if you're already diagnosed with diabetes and you want to try the keto diet. It can lower your blood sugar levels too much if you're already taking certain medications.

You're tired of feeling run down and sluggish

Most people on the keto diet realize they have more energy and mental focus. We've almost forgotten what it feels like to have the “hangry” feeling we used to get around 4 p.m. — when we'd feel justified for biting off a coworker's head if we couldn't eat something, anything, right that minute.

These symptoms are practically universal when your body relies on the wild swings in blood sugar level that happen when you eat carbohydrates but haven't had a meal in several hours. The keto diet allows you to break free from these symptoms because your blood glucose levels stay stable, whether you're in the middle of a meal or you haven't had a bite to eat in over six hours. With stable blood sugar levels, you're energized and don't feel sluggish at the end of the day — or at any other time.

You want to get healthy and stay that way for a long time

The keto diet is not just good for weight loss and sugar control; it's also an anti-inflammatory diet that can improve your health in many other areas as well. The diet was initially developed for children with incurable seizures who weren't getting better, despite having access to the newest and best medicines.

The keto diet was able to decrease, and often completely stop, their seizures. Subsequent research suggests that the keto diet helps reduce the risk of

neurodegenerative diseases like Alzheimer's disease, can work to improve your cholesterol levels, and may prevent heart disease. A bonus for teenagers is that it may even be a treatment if you're acne prone. We get into the details of the many health benefits of the keto diet in later chapters, but we can let you know now, there are quite a few.



REMEMBER

The keto diet may be for you if you're ready to make the commitment to changing your health for the better.

Flipping the Switch on Your Metabolism

Getting into ketosis requires a commitment to drastically cutting your carbohydrate intake. Your body is geared to using carbohydrates as fuel if they're available, so you won't go into ketosis until you drop to 50 grams or fewer of carbohydrates a day and maintain that level of carb intake for at least several days. If you go back to eating more carbs, you'll be kicked out of ketosis. Learning how to get into ketosis is vital to enjoying a keto lifestyle. We're here to help you figure it all out.

Consuming the right ratio of macronutrients: Fat, protein, and carbs

When you start a keto diet, you'll need to be very clear on the number of calories you're getting from the three primary *macronutrients* (the main groups of food that provide fuel for your body): fats, protein, and carbs. The key to keto is that you're getting only a small amount of your nutrition from carbs. Even if you eat a high-fat and moderate-protein diet, if you go over your carb limit, you'll be kicked out of ketosis. You'll have to monitor your carb intake closely until you get used to being on a very low-carb diet and have a good sense of the amount of carbs in different foods. This will mean understanding the ratio of macros in a serving size when you eat fresh foods and always, always checking the nutrition labels when you eat anything from a package.

As you start looking more closely at nutrition labels, you'll be surprised at how many foods have hidden carbs, from condiments like ketchup and salad dressing to meats and other proteins that have flour or breading added. You'll also have to keep this inquisitive nature up when you go out to eat, even if it's at a friend's house. Being aware of what goes into your food is your number-one priority.

Upping your consumption of healthy fats

As you know, you'll need to increase your fat intake — and by a lot. If you've ever been on a diet, it can be quite alarming to have to raise your fat intake, especially if you think eating fat will automatically make you fat. Even if you're not looking to lose any weight, fat has received a reputation for being unhealthy, bad for your heart, and something that should always be limited. This couldn't be further from the truth. Of course, you'll want to make sure you get fat from healthy sources and choose a range of nutritious fats, but fats themselves aren't inherently bad. We talk more about this in Chapter 4, but it's important that you're getting your fats from both plant and animal foods and eating a mix of nuts and seeds, avocados, healthy oils, dairy, and animal fat.

Calculating your protein target

The amount of protein you get in a keto diet isn't that far off from what you'd eat on a high-carb diet, so there shouldn't be too much confusion here. Some people wrongly think that the keto diet is a high-protein diet and that all people on the diet eat is meat, meat, and more meat. This isn't true, and the keto diet isn't an excuse to only eat beef jerky and hamburger patties. You'll need to be aware of how much protein you should be consuming in a day based on your body weight and activity level. You'll also need to get familiar with the appropriate serving sizes of your protein sources, as well as the best sources of protein that work with your lifestyle. A moderate amount of protein is about 0.36 gram for every pound of body weight if you're usually sedentary, or about 54 grams if you weigh 150 pounds.

Slashing your carb intake

Your carb intake will make or break your keto journey, so be vigilant! We should mention that whenever we talk about “carbs” in this book, we're referring to digestible carbs. These are complex and simple carbohydrates — from whole grains and oatmeal to candy and sugar-sweetened anything — that your body uses as fuel. You don't have to limit indigestible carbohydrates like fiber; your body can't digest them, which means carbs from fiber won't kick you out of ketosis. In the keto diet, you exchange high-carb foods for low-carb vegetables that are also good sources of fiber. You can eat a small amount of low-sugar fruits like berries. Don't worry, there are lots of great-tasting low-carb options that will keep you full.



TIP

To succeed on the keto diet, get used to looking at nutrition labels. It's important for you to know how many carbs you're eating so you don't get kicked out of ketosis. Over time, you'll learn how to avoid “hidden” carbs and thrive on low-carb options instead.

Knowing when you've entered a state of ketosis

It takes between a few days to a week of a very low-carb diet before most people enter ketosis. That's because our bodies store an "emergency" amount of carbs just in case we suddenly run out of bread and pasta. If it's your first time entering ketosis, you may be unsure of what to expect. Some people have symptoms that suggest ketosis, while others won't notice any changes at all. The most common signs of ketosis for first-timers are headaches, fatigue, and muscle cramps (symptoms of the keto flu that we cover in Chapter 2). Although unpleasant, this is a sign that you're achieving your goal.

So, how will you know you're in ketosis if you don't have any symptoms? One common way to tell if you're in ketosis is to use a ketosis urine test — it's the same concept as the urine test women use to check if they're pregnant, but instead you'll find out if you've succeeded into getting into ketosis. When you're in ketosis, your urine will have a certain level of *ketones* (the products of fatty acids breaking down) that high-carb dieters won't. This lets you know that you've reached your goal. These urine sticks are available online or at most quality nutrition stores. You can also take a blood test to measure the same thing. We show you exactly how to test for ketosis in Chapter 3.

Knowing when to stop

When you're clearly in ketosis and you've gotten over any initial roadblocks, you should be feeling on top of the world. Occasionally, though, some people in ketosis don't feel this way even after weeks or months of commitment. Here are some signs that you need to reevaluate your approach to keto:

- » You're constantly tired.
- » It's difficult to get a good night's sleep.
- » Your bathroom habits have slowed way down.
- » You're not as strong as you used to be and you've lost muscle definition.
- » You're experiencing skin rashes or hair loss.

If you're dealing with some of these issues, you probably need to make a change and investigate what's going wrong with your keto journey. You may notice these side effects if you aren't following a whole foods diet and are missing out on crucial nutrients, like essential vitamins and minerals. Some of us fall into this trap because we eat the same five or six keto-friendly foods and not much else. If you

feel like you're floundering in your keto diet, make sure you take stock of what you eat on a daily basis and if it's genuinely nurturing you.



WARNING

A rare side effect, but one that deserves mention, is *ketoacidosis*. This most often occurs in type 1 diabetics, but it can occasionally be experienced by others. Ketoacidosis is when the number of ketones in your bloodstream have exceeded the healthy range. This generally only occurs in people who have an underlying medical condition (like diabetes), but very rarely it can happen if you follow ketosis and restrict your calories too much or have a high energy requirement, like women who are pregnant. If you have a significant medical condition, talk with your doctor before starting a keto diet.



TIP

If you have a medical condition that you manage with a doctor, make sure to seek your doctor's advice before starting keto. Keto is a healthy lifestyle option, but some medical conditions don't mix well with it.

Clearing Common Hurdles

The keto diet can be challenging at first, so you need to focus on your commitment before beginning the journey. It's a good idea to have a sense of the common hurdles you'll likely encounter when you start the keto diet so you can be prepared to face them confidently. We get into the nuts and bolts of this in Chapter 3, but here we give you a little taste of what to expect.

Dietary restrictions

The first thing that people get concerned about are the restrictions of the keto lifestyle. Because so many of us consume half (or more!) of our calories in the form of carbohydrates, you may feel like you have nothing to eat. This couldn't be further from the truth. There is quite a range of high-fat, low-carbohydrate foods out there that you haven't explored. The keto lifestyle will open up a world of healthy whole foods that will keep you satisfied and healthy.

Carb cravings

Giving up something always leaves intense cravings until the void is filled. Carbs are no different. It's normal to have intense cravings for carbs when you first go on the keto diet, especially because your body is so used to using them as fuel. What's more, you're probably a bit addicted to carbs. Sugar triggers the same receptors in your brain as heroin, so when you give up carbs, you're literally giving up an addiction.

Luckily, there is also a range of alternative “flours” and low-carb snacks that you can have on hand as you start the keto lifestyle. With a little knowledge and some trial and error, you’ll beat the carb cravings and find foods you enjoy that keep you satisfied without intense cravings. As you get further into the keto lifestyle, however, you’ll realize that your cravings for carbs will disappear altogether. You’ll lose the urge to snack between meals as your glucose levels stabilize and you feel satisfied with your whole-food keto meals.

Unpleasant side effects

Keto can come with side effects like keto flu, *keto breath* (a fruity or musty odor), constipation, or even nutrient gaps as you learn what to eat. These are signs you’re entering ketosis (which is the goal), but they can still be tough. These side effects usually resolve with time, and this book helps you ease the transition and minimize discomfort. The rest comes down to your commitment.

Social pressures

Eating is social, and many people will have opinions about your diet. Those unfamiliar with keto may warn about heart attacks or other health risks — concerns often based on misconceptions. If you’ve done your research, don’t let their worries derail you. Thank them for their concern, stay committed, and let your results speak for themselves. You may even change their minds.

Restaurants, gatherings, and parties can be tricky as you avoid breads, desserts, and other high-carb foods. People may notice and share their opinions — don’t get hung up on whether they agree.

Even your doctor may be cautious. Keto has a long medical history, but much of it centers on epilepsy treatment, so using it for weight loss or metabolic health may raise eyebrows. Share the research you’ve reviewed and suggest a monitored approach with regular checkups and blood tests. Measurable results can build confidence for both you and your doctor.



REMEMBER



TIP

You know your body best, and if you’ve done your research, stay empowered to care for your body in the way that makes you feel at your best.

Don’t let well-meaning friends, family, or even doctors dissuade you from pursuing a healthy whole-foods keto lifestyle. Keep committed and keep doing what’s right for your lifestyle and healthy body.

