



The Ketogenic Quickstart Guide

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This is a quick start guide to understanding ketosis and the ketogenic diet. For more thorough information, check out our Navigating the Ketogenic Diet manual and for research citations look at DrJockers.com.

What is Nutritional Ketosis?

Most people in society are in a state of sugar or glucose metabolism. Nutritional ketosis is a physiological state when the body switches from burning sugar as its primary fuel to burning fatty acids as its primary fuel. Ketones are produced by the liver from both dietary as well as body fat when blood sugar levels drop to a certain point.

Unlike diabetic ketoacidosis which is a very rare medical condition that only takes place in individuals who cannot produce insulin, nutritional ketosis is a desireable physiological state because it helps the body to run more efficiently.

What Are Ketones?

Ketones are water soluble compounds formed from fatty acids that easily cross into the cellular mitochondria where they are metabolized for energy. Ketones create 14 times more cellular energy than glucose. In addition, the metabolism of ketones produces close to 50% less metabolic waste and oxidative stress.

Think of a vehicle that gets more 14x more gas mileage, significantly better overall driving performance by all standards and produces 50% less exhaust and pollution. We would all want that vehicle and that is what the state of nutritional ketosis does for our body!

What is the Ketogenic Diet?

The ketogenic diet is a specific nutrition plan that helps the body produce ketones and utilize these ketones as an energy source. This nutrition plan is composed of a low level of carbohydrates, moderate protein levels and high in fats.

The general breakdown is 60-80% fats, 10-30% protein and 5-10% carbohydrates. The variance in the ranges depends upon how active the individual is and how carbohydrate and protein sensitive they are.

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Clinical Use of the Ketogenic Diet:

The ketogenic diet has been used since the 1920's to treat epilepsy and other seizure disorders. It has gained in popularity recently due to the wide range of health benefits it offers and health conditions that improve with it's use.



Biggest Challenges With Keto-Adaptation:

When someone switches from burning sugar to burning ketones as their primary fuel it is called Keto-adapted. This process will take anywhere from a few days to 4-6 weeks after following a ketogenic diet and lifestyle depending upon the individual's metabolism and state of insulin resistance

The biggest challenges people face during the process of Keto-adaption include the following:

Hypoglycemia (Low blood sugar)

HPA Axis Dysfunction (Brain-Adrenal Fatigue)

Electrolyte Imbalances

We go over all the detailed strategies to address these issues in the Navigating the Ketogenic Diet Manual (see chapter on Critical Ketogenic Tips and Strategies to Overcome the Keto Flu)

WHAT IS KETO FLU?

AND HOW TO PREVENT IT



Keto Flu does not impact everyone, and those who are impacted will experience it differently. Often it lasts a week, but for some it can be longer.



- Back Off Carbs Slowly
- Increase Your Fat Intake
- Increase Your Salt and Mineral Intake
- Hydrate Well
- Get Some Exercise
- Reduce Stress
- If All Else Fails...
 Increase Your Carb Intake

SYMPTOMS

- FATIGUE
- HEADACHES
- NAUSEA
- INSOMNIA
- IRRITABILITY
- UPSET STOMACH







HYDRATION IS IMPORTANT

During the keto adapation phase, we lose more hydration and electrolytes. It is key to drink lots of water and be sure to use extra salts to replace the electrolytes.

I recommend drinking a minimum of half your body weight in ounces of water at a minimum. The best time to drink a lot of water is first thing in the morning and then in between meals.



SALTS AND TRACE MINERAL RICH FOODS

You should aim to add 2 tsps of high quality salt into your food each day and a pinch to the water when you drink it to help your body replace the electrolytes you are losing as you keto adapt.

You should also look to consume a lot of trace mineral rich foods such as bone broth, celery, cucumbers, wild-caught seafood, sea vegetables, pickles, olives, leafy and cruciferous veggies, sauerkraut and olives.

Top 5 Mistakes Made On the Ketogenic Journey

Eating Too Little Fat and Calories: Many people are fat phobic because our society fosters the belief that fat is bad for us so they try to follow a low-carb, low-moderate fat diet. This will not work and will cause a lot of unwanted symptoms. You need to continually eat healthy fats to your satiety point.

I also recommend consuming 30-40 grams of protein and healthy fats in each meal. Avoid snacking and consume just 2-3 meals daily with this amount of protein and fat. You should be getting at least 100 grams of protein and 100 grams of fat in your diet each day and if you do that you will be very satiated and this will help you optimize your hormone levels.

If you have a larger amount of muscle mass, are fairly lean with a big appetite and are very active (lifting weights) you may need 150+ grams of protein and fat daily.

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Eating Too Many Carbohydrates: You want to aim for less than 40 grams of net carbs per day. In the beginning stage, you may need less than this...somewhere around 10-20 grams for some individuals. The more active you are, typically the more net carbs you can handle.

Net carbs = Total Carbs - Fiber

If a food has **10 grams** of total carbs and **5 grams** of fiber, it has **5 Net** Carbs

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Not Consuming Enough Salts or Water: On a high carb diet, your body retains sodium due to higher insulin levels. On a keto diet, your insulin drops and you excrete more sodium. You need a lot of good salts on this diet. You also need a lot of water...good hydration habits are key, at least half your body weight (lbs) in ounces of water.

I recommend using a high quality pink salt or Celtic Sea salt and using it generously on your food. Consuming mineral rich foods such as sea vegetable, celery, cucumbers, wild-caught fish, organic chicken broth, etc. is also very helpful.

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Poor Bowel Motility and Fat Digestion: Many people have liver and gallbladder problems that don't allow them to release enough stomach acid and bile to digest proteins, emulsify fats and improve bowel habits.

If you notice you are not having good quality bowel movements every day (at least 1-2) and/or are noticing pain in your upper right abdominal region after eating or seeing your stools looking greasy and floating then you need to work on improving this. I discuss many key strategies for improving poop quality, stomach acid and bile flow in our keto program and on Drjockers.com

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Poor Sleep Habits: If you sleeping poorly, you will cause issues with your stress hormones and trigger higher amounts of cortisol and insulin. This will cause major blood sugar imbalances and an inability to get into ketosis.

Ideally, going to bed before midnight each night (ideally by 10pm) and getting 7-8 quality hours of sleep is best for keto-adaptation.

In addition, chronically high mental and emotional stress is also a big factor in increasing blood sugar levels and blocking our ability to produce and utilize ketones.

Gentle Keto Adaption

Going from a moderate to high carb diet and all of sudden going keto can be stressful on the body. For many individuals, I recommend taking it in stages.

This is especially important if you consider a keto diet a major lifestyle change from what you have been currently eating. Try this 6-week keto adaptation cycle and remember, it is very important to focus on good sleep, hydration, keeping stress under control and getting regular movement in your life.

First 3-7 Days: -

Eat like you always have and use this time to get rid of the food in your pantry and refrigerator that isn't healthy or keto.

Look at all the nutrition labels or find the nutrition info online and count up your total carbohydrates, fiber, net carbs, protein and fats each day and take an average of these over the 3-7 days. Remember that total carbs-fiber = net carbs.

1 gram of net carbs = 4 calories 1 gram of protein = 4 calories 1 gram of fiber = 0 calories 1 gram of fat = 9 calories

2nd Week: —

Reduce the amount of net carbs in half and add in those extra calories from healthy fats. So, if you averaged 200 grams of net carbs in the first 3-7 day period than drop this down to 100 grams of net carbs.

To make up these 400 calories (4 calories per net carb x 100 grams = 400 calories) than add in the equivalent of fat. 400 calories of fat = 44 grams.

3rd Week: —

Now drop your net carbs in half again and make up those calories with healthy fats.

4th - 6th Week:

Drop your carbs in half again (until they are around 20-30 grams) and replace those with healthy fats and protein. By the end of this week you should be producing ketones.

Be sure to consume enough protein. I recommend getting 20-30% of your calories from protein. So, if you consume 2000 calories daily, your protein should be 400-600 calories (4 calories per gram of protein) which is 100-150 grams. This will make you more satiated and help with getting you into ketosis.

Your Next Steps

Between these 3 weeks you should be seeing the benefits of ketosis and if so, then after week 6, you can implement a feast meal or feast day once per week where you cycle out of ketosis and then 6 days of keto to get back into that state of ketosis.

**If after 6 weeks you are still struggling to get into ketosis, then you must look closer at lifestyle factors such as sleep, movement and stress. Another kickstart can be to implement the carb phasing strategies in the next section.

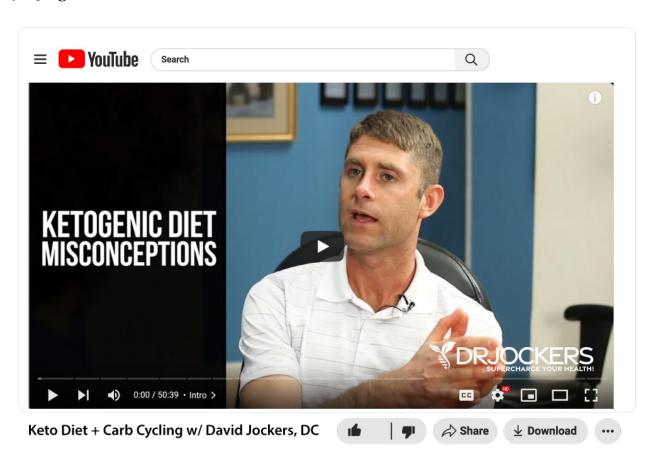


Carb Phasing For Keto Adaptation

I will often teach people to use carb phasing to get keto adapted faster. I learned this from a friend and mentor Dr Dan Pompa. Here is the carb phasing breakdown and during this period it is important to not overconsume protein as well. Keep it in the 15- 25% range unless you are fasting and then take the protein out altogether.



Be sure to measure your ketones each week. Most people are able to get into ketosis in week 1 following this plan and then stay into ketosis throughout. Some struggle with 40-50 grams of net carbs and need to back down.



Water Fasting or Fat Fasting:

Consuming nothing but water for a day or multiple days is one of the best strategies for getting into ketosis quickly. On a water fast, you can consume sea salt, water, black coffee and herbal tea. You could also put a little apple cider vinegar or lemon in your water.

If a water fast seems to extreme for you, you can do a fat or keto fast instead. On a fat or keto fast, you can consume coconut oil, MCT oil, exogenous ketones and grass-fed butter/ghee.

You can and should drink lots of water, herbal tea or organic coffee but have no carbs or protein. Be sure to use 1-2 tsps of salt each day to keep your electrolytes up.

Best Foods To Eat On a Ketogenic Diet

Good Fats: Avocados, Grass-fed Butter/Ghee, Coconut oil, Coconut Milk, Coconut Butter, Coconut Flakes, MCT oil, Pasture-Raised Eggs, Olives and Olive oil

Non-Starchy Veggies and Herbs: Celery, cucumbers, spinach, kale, collard greens, broccoli, cauliflower, mustard greens, bok choy, swiss chard, brussel sprouts, cabbage, ginger, turmeric, oregano, basil, thyme, cinnamon, rosemary, etc.

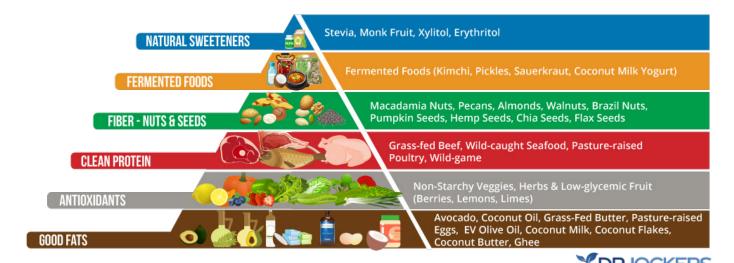
Low-Glycemic Fruit: Lemons and limes, grapefruit, granny smith apples and berries. Most fruit does contain a lot of sugar so be careful with your net carbs. The more active you are, the more fruit you are able to handle. The less active you are, the less fruit you should consume.

Clean Protein: Grass-fed beef, wild-caught fish, organic poultry, wild game such as bison, lamb, elk, deer, duck, etc.

Nuts/Seeds: Pumpkin seeds, hemp seeds, flax seeds, chia seeds, almonds, walnuts, macadamia nuts, pecans, etc. Nuts and seeds are always best when soaked and/or sprouted.

Fermented Foods: Dill pickles, sauerkraut, kimchi, apple cider vinegar, coconut milk kefir, coconut milk yogurt, coconut water kefir (1/4 cup per day max and watch total carb count).

Natural Keto Sweeteners: Monk fruit, stevia and sugar alcohols such as xylitol and erythritol. Xylitol and erythritol may cause digestive disturbances so be careful with these.



5:2 Rule

This rule helps to ensure we are getting enough fats and enough electrolytes. SCT and MCT oil turn into ketones the fastest, coconut oil is a medium riser of ketones and longchain fatty acids such as those found in grass-fed butter/ghee, avocado, olives/olive oil take the longest to raise ketones.

Olives and avocado provide fiber, micronutrients and electrolytes for the body as well. This helps provide a template so you can get enough fat in your diet and from a variety of sources. If you have a food sensitivity to butter, try ghee which is hypoallergenic. If you notice unwanted symptoms with any of these than try taking them out for a few weeks and then adding back.

With MCT oil, be careful and only use ½ tsp at a time for the first week. For some they get digestive disturbances such as diarrhea.



You can use more than 2 tbsps of these if you feel like it will support your body. Smaller people may have trouble getting all that fat and salt down...whereas larger people or people who are highly active may need much more to hit satiety.

If you have lost your gallbladder, you may consider smaller amounts of coconut oil, grass-fed butter/ghee, avocado, olives/olive oil at each meal and eat more frequentlyin order to avoid overstraining your liver. You can also use ox bile support with your meals to help.

Feast and Famine Diet Variation:

I learned this from my friend and mentor Dr Dan Pompa as well. Our ancestors went through times of feast and famine due to food availability. Adding in more carbs or protein once per week after keto-adaptation has occurred (not when you first begin on this plan) can be very effective for stress hormone and thyroid hormone balance.

I typically follow something similar to this and thrive. It is called the 5:1:1 principle.

5 Days a Week:

Eat a low-carb, high fat ketogenic diet (you can also apply intermittent fasting strategies which are great!)

1 Day a Week:

Consume 50-150 grams of net carbs on this day and/or higher protein levels.

1 Day a Week:

Do a 22-24 hour fat fast on this day

What I Do Personally

I have found for myself doing 2 (22-24 hour) water fasts on non-workout days seems to keep me feeling at my best.

I do 2 upper body resistance training workouts and 2 lower body sprint/resistance training workouts with at least 72 hours of rest between similar muscle group workouts. For example, I do upper body on Monday and Thursday and lower body on Tuesday and Friday.

I always exercise fasting (usually around 12pm after finishing dinner at 6-7pm the night before, so that is a 17-18 hour fasting workout). I make sure I am well hydrated throughout the morning and will often drink herbal tea or black coffee in the AM.

On workout days, I have a much higher metabolic rate and so I need more calories. So I consume two meals in a 6-8 hour eating window with one of those days being a higher carb (80-150 grams) and higher protein day. The other 3 workout days, I stay lower carb but still keep my protein levels around 2 grams per kg of body weight.

Support Supplements:



Keto Brain: This is a C8 only MCT oil formula that boosts ketones quickly and effectively in the body. Simply add 1 tsp to food, smoothies, soups, coffee or tea or anything else you are consuming for immediate energy and improved mental clarity and focus. You can find <u>Keto Brain here.</u>



Super Digest HCL: This contains stomach acid (HCL), digestive enzymes and ox bile, which are important for those who need support for protein and carbohydrate digestion and fat emulsification and absorption. You can find Super Digest HCL here.



Liver Support: This is a synergistic formula designed to support healthy liver function. It consists of a blend of botanical and mushroom extracts, along with N-Acetyl-L-Cysteine (NAC), a derivative of the amino acid cysteine, which has powerful antioxidant and liver-protective actions. In addition to protecting the body from oxidative stress, NAC assists with the formation of glutathione, the predominant antioxidant found in the liver. You can find <u>Liver Support here.</u>



Keto Support Bundle: This is a bundle of 3 powerful supplements that help you get the incredible benefits of ketosis without the unwanted symptoms during the adaptation process. The support bundle provides elements that make it easier to keto-adapt and use dietary fat and your stored body fat as fuel for high performance.

MCT Fats: Easy to Digest C8 MCT fats that turn into ketones, improve blood sugar and insulin levels and get your body running off ketones. Simply add 1 tsp to each meal.

Antioxidant Powerhouse: NAC helps protect the body from oxidative stress and supports glutathione production.

Adaptogens: Powerful adaptogens such as cordyceps, reishi and more to help the body adapt to stress, stabilize blood sugar levels, improve brain and immune health.

Digestive Support: Most people have compromised levels of stomach acid, bile and pancreatic enzymes. To optimize your digestion and nutrient absorption we recommend taking in betaine HCL, ox bile and enzymes that metabolize proteins, fats and carbohydrates.

If you struggle with occasional indigestion, bloating, gas and irregular bowel movements, our Super Digest HCL will help you.



About Dr. David Jockers DNM, DC, MS

Dr. David Jockers is a doctor of natural medicine, a functional nutritionist and corrective care chiropractor. He runs one of the hottest natural health websites in DrJockers.com which has gotten over 1 million monthly visitors and his work has been seen on popular media such as the Dr Oz show and Hallmark Home and Family.

Dr Jockers is the author of the best-selling book "<u>The Keto Metabolic Breakthrough</u>" by Victory Belt publishing and is a world-renowned expert in the area of ketosis, fasting and the ketogenic diet. He is also the host of the popular Dr Jockers Functional Nutrition podcast.

Dr Jockers lives in Canton, Georgia with his wife Angel and his twin boys David & Joshua and his daughters Joyful and Shine.

