

Ketogenic Diet: A Beginner's Ultimate Guide to Keto

Analysis by Dr. Joseph Mercola



STORY AT-A-GLANCE

- A ketogenic diet is a dietary approach that focuses on minimal carbohydrates, moderate amounts of protein and high healthy fat consumption — the three keys to achieving nutritional ketosis
- > The ketogenic eating plan is slowly gaining traction as an effective method of helping to promote weight management, reduce inflammation and even lessen your risk of cancer
- > This guide will tell you what you need to know about a ketogenic diet how you can apply it to your lifestyle and what positives you can reap from it

This article was previously published May 26, 2018, and has been updated with new information.

Increasing numbers of people around the world are suffering from chronic diseases such as diabetes and obesity, and the main culprit is usually the food they eat. The standard American diet, for example, consists of excessive amounts of protein, processed grains and carbohydrates — particularly in the form of refined, added sugars — none of which is good for your health.

If you continue on a diet like this, eventually you will develop insulin and leptin resistance and, as a result, you not only will gain excess weight, but will develop chronic inflammation and will become prone to mitochondrial and cellular damage.

To get back on the road to health and stay there, significant changes in your diet are necessary. These changes begin with first understanding what mitochondria are, and then learning their importance to your overall health.

Next, you need to know how inducing your body into a state of nutritional ketosis, a condition in which your body burns fat as its primary fuel, can regenerate your mitochondria. But, in order to reach nutritional ketosis, you must follow a ketogenic diet. So, what exactly is a ketogenic diet?

This guide will tell you everything you need to know about a ketogenic diet — how you can apply it to your lifestyle and what positives you can reap from it.

Benefits of a Ketogenic Diet

A ketogenic diet is a dietary approach that focuses on minimal carbohydrates, moderate amounts of protein and high healthy fat consumption — the three keys to achieving nutritional ketosis. In fact, it's what I recommend for most people who would like to optimize their health.

There are many reasons why you should try a ketogenic diet. It can be very beneficial for people suffering from chronic conditions, or for those who would simply like to be healthier. You'll be excited to know that a ketogenic diet can help with the following:

Weight loss — If you're trying to lose weight, then a ketogenic diet is one of the best
ways to do it, because it helps access your body fat so that it can be shed. Obese
people in particular can benefit from this method.

In one study, obese test subjects were given a low-carb ketogenic diet and a low-fat diet. After 24 weeks, researchers noted that the low-carb group lost more weight (9.4 kilograms or 20.7 pounds) compared to the low-fat group (4.8 kilograms or 10.5 pounds).

Even my own body was able to feel the benefits of following a ketogenic diet. I was able to drop my weight from 180 to 164 pounds, despite eating 2,500 to 3,000

calories per day. Since then, I have increased my consumption to 3,500 to 4,000 calories just to maintain my ideal weight.

- Fighting inflammation The human body can use both sugar and fat as fuel sources. However, fat is preferred because it is a cleaner, healthier fuel that releases far fewer reactive oxygen species (ROS) and secondary free radicals. By eliminating sugar from your daily food consumption, you're decreasing your risk of developing chronic inflammation throughout your body.
- Increasing muscle mass Jeff Volek, Ph.D., is a registered dietitian specializing in how a high-fat, low-carb diet can affect health and athletic performance.
 - He's written many scientific articles on this topic, as well as two books, and he explains that ketones have a similar structure to branched-chain amino acids that can be useful for building muscle mass. Ketones spare these amino acids, leaving higher levels of them around, which can help promote muscle mass.
- Reducing appetite Constant hunger can cause you to consume more calories
 than you can burn, which can eventually lead to weight gain. A ketogenic diet can
 help you avoid this problem because reducing carbohydrate consumption can
 reduce hunger symptoms. In one study, participants who were given a lowcarbohydrate diet had reduced appetites, helping them lose weight easier.²
- Lowering insulin levels When you consume carbs, they are broken down into sugars in your body. In turn, this causes your blood sugar levels to rise and leads to a spike in your insulin. Over time, you may develop insulin resistance, which can progress to Type 2 diabetes.

By altering your diet to a ketogenic approach, you can reduce your risk of developing Type 2 diabetes. In a study published in Nutrition & Metabolism, researchers noted that diabetics who ate low-carbohydrate ketogenic diets were able to significantly reduce their dependency on diabetes medication, and may even reverse it eventually.³

Keto May Help Lower Your Risk of Cancer

Cancer is a devastating disease and is one of the leading causes of death all over the world. To make things worse, the medical profession has practically ignored evidence that indicates cancer as a metabolic and mitochondrial problem, causing conventional cancer treatment methods to fall short on their promises.

I believe (as well as the numerous experts I have interviewed) that over 90% of cancer cases are either preventable or treatable. The key here is to view cancer as a metabolic dysfunction, allowing you to gain control over this dreadful disease. Simply put, the right foods and strategies may help suppress cancer growth while simultaneously pushing it into remission.

What most people don't know is that cancer cells are mainly fueled by glucose. In this regard, the ketogenic diet may be the best answer. By depriving them of their primary source of fuel, as well as protein restriction, cancer cells will literally starve to death.

In addition, research regarding the ketogenic diet in relation to fighting cancer has grown over the years, and the data indicate that aside from being a form of cancer prevention, the ketogenic diet may help complement common cancer treatments, such as radiation therapy and chemotherapy.⁴

Different Types of Ketogenic Diets You Can Try

There are several variations of the ketogenic diet based on specific needs:

 Standard Ketogenic Diet (SKD) — SKD is the type I typically recommend for most people, because it is very effective.

It focuses on high consumption of healthy fats: As I explain in my book, "Fat for Fuel," you should aim for having 70% to 85% of your total daily calories to come from healthy fats. For your protein intake, the general rule of thumb is to follow the formula of 1 gram of protein for every kilogram of your lean body mass. Your net carbohydrates should be no more than 4% to 10% of your daily calories.

Keep in mind that there's no set limit to the fat, because energy requirements vary from person to person, depending on their daily physical activities. However, the majority of your calories still need to come from fats, and you still need to limit your consumption of carbohydrates and protein for it to become a standard ketogenic diet.⁵

Targeted Ketogenic Diet (TKD) — TKD is generally geared toward fitness
enthusiasts. In this approach, you eat the entirety of your allocated carbs for the
day before and after exercising. The idea here is to use the energy provided by the
carbs effectively before it disrupts ketosis.⁶

If you're following this approach, I recommend that you eat carbs that are easily digestible with a high glycemic index to avoid upsetting your stomach. Then, when you're done exercising, increase your intake of protein to help with muscle recovery, then continue consuming your fats afterward.

• Cyclic Ketogenic Diet (CKD) — Whereas TKD is focused on fitness enthusiasts, CKD is focused more on athletes and bodybuilders. In CKD, you cycle between a normal ketogenic diet, and a short period of high carb consumption or "re-feeds." The idea here is to take advantage of the carbohydrates to replenish the glycogen lost from your muscles during athletic activity or working out.

If you're a high-level athlete or bodybuilder, CKD may be a viable method for you. It usually consists of five days of SKD, followed by two days of carb-loading. Again, this method isn't recommended for most people who do not have a high rate of physical activity.⁹

 High-protein Ketogenic Diet — This method is a variant of the SKD. In a high-protein diet, you increase the ratio of protein consumption to 10% and reduce your healthy fat consumption by 10%.

In a study involving obese men that tried this method, researchers noted that it helped reduce their hunger and lowered their food intake significantly, resulting in weight loss.¹⁰ If you're overweight or obese, this may help you at first, then you can transition to SKD after you normalize your weight.

Restricted Ketogenic Diet — As mentioned earlier, a ketogenic diet can be an
effective weapon against cancer. To do this, you need to be on a restricted
ketogenic diet. By restricting your carbohydrate and calorie intake, your body loses
glycogen and starts producing ketones that your healthy cells can use as energy.
 Because cancer cells cannot use these ketones, they starve to death.¹¹

As of the moment, there is no industry standard as to how many calories should be consumed in a restricted ketogenic diet, but there are published studies that provide estimates.

In one example, a 65-year-old woman who was suffering from glioblastoma multiforme (GBM), an aggressive type of brain cancer, was put into a restricted ketogenic diet that started with water fasting and then proceeded to consuming 600 calories a day only.

After two months, her weight decreased and the ketones in her body elevated. Furthermore, there was no discernable brain tumor tissue detected using magnetic resonance (MRI) or fluorodeoxyglucose-positron emission tomography (FDG-PET) imaging scans.¹²

In another study that involved mice with brain tumors, administration of 65% to 75% of the recommended daily calories helped reduce tumor growth by 35% and 65% among two different test groups. Total carb consumption was restricted to 30 grams only.¹³ A different mice study strictly limited carb consumption to 0.2% only, which helped reduce the growth of glucose-fermenting tumors.¹⁴

In a pilot trial published in Nutrition & Metabolism, a 70-gram carbohydrate restriction combined with a ketogenic diet may help improve quality of life among patients affected with late-stage cancer. However, more trials will need to be conducted regarding its effectiveness against cancer progression, according to the researchers.¹⁵

At any rate, if you wish to undergo a restricted ketogenic diet for specific health reasons, consult with your doctor first. They may be able to help you figure out the optimal number of calories to consume and carbohydrates to restrict for maximum effectiveness.

Popular Low-Carb Diets Versus the Ketogenic Diet: How Do They Compare?

Of course, the ketogenic diet is not the only low-carb diet out there, and you may have heard of other popular eating strategies that may help improve your health. So how do they stack up against the ketogenic diet?

Atkins Diet Versus Ketogenic Diet — The Atkins diet is a low-carb eating program
promoted by Dr. Robert C. Atkins, who wrote about it back in 1972.¹⁶ In essence, the
diet is all about restricting carbohydrate consumption while emphasizing protein
and healthy fats as sources of fuel, as well as high-fiber vegetables to help promote
weight loss.¹⁷

Similar to the ketogenic diet, with Atkins you will have to avoid starchy and sugary sources of carbohydrates like bread, pasta and potatoes, as well as processed meats and junk foods. Instead, you will consume more grass fed meats, pasture-raised eggs, cheese and fatty fish.¹⁸

One key difference that set the early Atkins diet apart from the present ketogenic diet was that it allowed unlimited consumption of protein,¹⁹ which can cause a significant drawback to your health.²⁰ Research suggests that excessive protein consumption can stimulate your mammalian target of rapamycin (mTOR) pathway, accelerating aging and cancer growth.

Atkins has since revised its protein recommendations,²¹ however, and now instructs followers to weigh their protein servings and avoid eating "too much" protein as it not only can interfere with your weight loss, but may cause carb cravings.

Paleo Diet Versus Ketogenic Diet — The Paleo diet is another popular eating trend
based on the habits of our Paleolithic ancestors. Its foundation focuses on eating
lean meat, seafood, fresh fruits and nonstarchy vegetables. You must also remove
processed foods, drinks, grains and sugar from your eating habits for the Paleo diet
to have a positive effect on you.

While research suggests that the Paleo diet may benefit your health, one foreseeable problem with this eating regimen is that it consumes too much protein, which can negatively affect your health in the long run. Instead, I believe it is far better to moderate your protein intake and increase consumption of healthy fats.

How Many Carbs a Day Should You Get on a Ketogenic Diet?

When determining the ideal max carbs on keto, I believe that the following amounts can be effective for most people:

- · 70% healthy fats
- 25% high-quality protein
- 5% carbohydrates

Ideally, your keto carb limit should be kept to under 50 grams a day, or 4% to 10% of your daily calories. This will help you transition to burning fat for fuel. However, this number may change depending on various factors. For example, if you have Type 2 diabetes, you will have to restrict your carb intake to as little as 20 grams per day. All in all, you will have to rely on your body's feedback to help you identify the ceiling amount for your carb intake.

How to Get Started on the Ketogenic Diet

Taking your first step into the ketogenic diet is an exciting phase for your health. But before coming up with an actual ketogenic diet food list, it's important to first take a

look at what you're eating now and take out anything that's unhealthy. This means that you have to remove sugars, grains, starches and packaged and processed foods from your diet. Basically, anything that won't add to your new eating regimen has to go. This is what I call a "pantry sweep."

Furthermore, avoid drinking milk because it contains the carbohydrate galactose — drinking just one glass can basically eat up your entire carb allotment for the day. In addition, avoiding milk helps lactose-intolerant people to implement the ketogenic diet. The table below provides a good overview of many other foods that are surprising sources of sugar. If you have any of the following in stock, I encourage you to take them out immediately:

Condiments	Beverages	Snacks	Meals
Salsa	Lattes	Fresh or dried fruits	Frozen dinners
Ketchup	Flavored kefir	Flavored yogurt	Many Thai and Vietnamese dishes, such as Pad Thai
Packaged salad dressings	Commercially prepared smoothies	Peanut butter	Premade soups

Hydrogenated fats, such as canola and sunflower oil, must also be avoided, as they're typically high in omega-6 fats, which can easily throw off your omega-6 to omega-3 ratio.

Another thing that you should work on improving is your skill in reading product labels, particularly total carbohydrates. This will be your most important indicator to help you

compute your overall carbohydrate consumption, allowing you to create your ketogenic diet.

The Best Keto Diet Foods to Eat

When it comes to the core of an actual ketogenic diet, remember that you need to consume only moderate amounts of protein, or about one-half gram per pound (1 gram per kilogram) of lean body mass, each day. In addition, carbohydrates must be minimized and high-quality fats increased to serve as your new fuel source.

To ease yourself into a ketogenic diet meal plan, I recommend adding C8 medium-chain triglyceride (MCT) oil into your food. It's typically more expensive than other types of MCT oil, but I prefer it because it converts into ketones more effectively.

You can start with 1 teaspoon per day, then gradually increase your consumption to 2 to 3 tablespoons. If your stomach does not agree with MCT oil, you can try MCT powder, which is easier on your stomach. From there, you can start adding more healthy fats to your diet using the keto food list below:

Fats — As mentioned earlier, the bulk of your daily calorie consumption (around 70%) should come from healthy fats. This will help your body switch from burning sugar to fat for energy in the long run because you're removing the majority of carbohydrates from your system. To get you started on the right path, you can refer to the table below:

Coconut oil	Raw, grass fed butter	Grass fed meats
Raw cacao butter	Lard and/or tallow	Avocados
Ghee (clarified butter)	Organic pastured eggs	Olives and olive oil (make sure they are third-party certified because most olive oils

		are diluted with vegetable oils)
Raw nuts, such as macadamia, almonds and pecans	Animal-based omega-3 fats from healthy sources such as wild- caught Alaskan salmon, sardines, anchovies and krill	Various seeds such as pumpkin, sesame, cumin and hemp

For dairy-based healthy fats, make sure that they are made from raw, grass fed milk. This ensures that you're getting the best nutrition possible because grain-fed sources may potentially harm your health due to pesticide exposure.

To help compute your daily fat calorie requirements, you can use an app like my completely free Cronometer or MyFitnessPal, which has a large database of foods. Make sure to enter the correct food and track your servings properly.

- Protein The ideal protein intake should be one-half gram per pound (or 1 gram per kilogram) of lean body mass per day. This will help you maintain enough muscle mass without triggering your mTOR. Excess protein can stimulate this pathway, which may increase your risk of cancer. Common sources of protein include red meat (beef and pork) and poultry (chicken). To find out how much protein you're consuming, follow this handy guide:
 - Red meat, pork and poultry contain 6 to 9 grams of protein per ounce
 - · One egg contains 6 to 8 grams of protein
 - · Seeds and nuts average 4 to 8 grams of protein per quarter cup
 - Cooked beans have 7 to 8 grams of protein per cup

Whatever the source of protein you consume, make sure they are organic grass fed and antibiotic-free, as they are generally healthier and safer for your body. In one

study, researchers indicated that grass fed beef (regardless of cuts) contains more omega-3 acid and conjugated linoleic acid compared to grain-fed beef.²² As for non-meat sources of protein, try to look for organic and pesticide-free varieties.

- Vegetables Veggies play an important part in the ketogenic diet because they are low in carbohydrates and high in dietary fiber, a nutritional component that can help promote better digestion and overall gut health. Research indicates that fiber can offer various health benefits, depending on what type you consume:
 - Soluble fiber This type of fiber helps you feel full longer, which can prevent you from overeating. It also hinders the breakdown and digestion of dietary cholesterol, which may help normalize your cholesterol levels. Additionally, it helps slow the rate of carb digestion, which may control blood sugar spikes.
 - Insoluble fiber Commonly found in vegetables, this type of fiber adds bulk to your stool, which can help facilitate regular waste elimination. In addition, it may reduce the risk of bloating, pain and constipation.
 - Digestive-resistant starch This type of fiber ferments in your large intestines, nourishing your gut bacteria to support optimal health.

Leafy vegetables are great sources of fiber (as well as various nutrients and antioxidants), such as:

Broccoli	Parsley	Arugula
Spinach	Swiss chard	Beet greens
Kale	Collard greens	Brussels sprouts

You may also consider adding these other low-net carb vegetables to your regular meals:

Asparagus	Tomatoes	White mushrooms
-----------	----------	-----------------

Cucumber	Eggplant
	Cucumber

It's important that you strictly consume the vegetables recommended above, as they are low in carbohydrates. Starchy vegetables such as potatoes,²³ sweet potatoes,²⁴ corn,²⁵ white beans²⁶ and green peas are high in carbohydrates, making them unfit for the ketogenic diet.

- Nuts Real nuts, which come from trees, are great for helping you meet your fat requirements. They also make for great keto-friendly snacks if you suddenly feel the need for a quick bite. There are several healthy options to choose, such as:
 - Macadamia Out of all nuts, macadamia nuts have the highest fat, with low protein and carb content. They're also rich in other nutrients such as manganese, thiamin and magnesium.
 - Pecan This type of nut comes close to macadamia's fat content, and has high magnesium and manganese content, too.
 - Walnut Consuming this nut can help boost your omega-3 intake, as well as your copper, biotin and manganese levels.
 - Brazil nuts These nuts are known for their selenium content, which
 possesses effective antioxidant capabilities. They also have a good
 combination of healthy fats, vitamins, minerals and fiber.
- Fruits While fruits are generally healthy for you, the majority of them should be avoided in a ketogenic diet because of their high amounts of sugar. This includes healthy (but sweet) ones such as bananas, apples, mangoes and grapes.

However, certain citrus fruits and berries are safe to eat in moderate quantities, because they are rich in antioxidants that support your health.

- Limes and lemons (You can add a few slices to your drinking water)
- Grapefruit (eat a few sections in lieu of vegetables)

- Blackberry
- Blueberry
- Cranberry
- Beverages As for beverages, there are several you can choose from. The most important is high-quality filtered water, but you may also drink organic black coffee (without any sweeteners or milk), which is rich in antioxidants. Coconut milk can be consumed, as well as herbal teas because they are rich in various antioxidants and nutrients.

Make sure to stay away from sweetened drinks and carbonated sodas, as their sugar content can throw you off ketosis. Not to mention, they are simply unhealthy for your body in general. Avoid alcohol consumption as well.

 Spices — Spices are an easy way of adding more flavor, vitamins and antioxidants into your food. Furthermore, they are low in carbohydrates. Make sure that you're using fresh, organic spices for maximum flavor and nutrients.

Some spices sold in packets found at the local grocery should not be used, as they often contain fillers that can increase your carbohydrate consumption, thus putting you out of ketosis.²⁷ For a list of keto-friendly spices you can use in moderation, you may refer to the table below:²⁸

Sage	Black pepper	Basil
Cayenne pepper	Chili powder	Cilantro
Cinnamon	Cumin	Oregano
Parsley	Rosemary	Mustard seed
Thyme	Turmeric	Garlic powder
Ginger	Ginseng	Paprika

Dill	Coriander	Dried parsley
Peppermint	Spearmint	Cloves

Beware of Lectins When Eating Vegetables

Lectins are sugar-binding plant proteins that can attach to your cell membranes, which can cause weight gain and ill health even if you eat a nutritious diet. They're found in plenty of plant foods, including eggplants, tomatoes and squash.

However, complete avoidance of lectins is neither possible nor ideal because you would be missing out on other nutrients in vegetables. Instead, here are some effective ways you can reduce lectins from your diet:

- Peeling and deseeding your fruits and vegetables The skin, hull and seeds tend
 to contain the highest amounts of lectins.
- Sprouting Seeds, grains and beans will deactivate lectins when sprouted.
 However, there are exceptions such as alfalfa, where the inverse actually happens.
- Fermenting Fermented vegetables not only have reduced lectin content, but also an improved nutritional profile.
- Using a pressure cooker Lectins are effectively neutralized when using this
 household appliance. Avoid using slow cookers because they can actually raise the
 lectin content due to the low cooking temperature.

As you can see, the list of foods you can eat is quite extensive. But what does an actual day of following a ketogenic diet look like? To help you ease into it, here's a sample one-day eating plan that can guide you.

Sample One-Day Ketogenic Meal Plan

- As You Start Your Day Measure your glucose level when you wake up. You can have a cup of coffee or tea with 2 tablespoons of grass fed butter, coconut oil or MCT oil melted into it.
- 2. Breakfast As hunger begins to set in, start consuming mostly protein and fats together, such as two pasture-raised eggs cooked in 1 tablespoon of ghee and 1 tablespoon of coconut oil. Alternatively, you may cook one egg with two strips of organic bacon. Time-pressed individuals can make a smoothie using the following ingredients:

Organic cream	Stevia to taste	Unsweetened almond milk
Unsweetened protein powder	1 tablespoon of coconut milk or a teaspoon of MCT oil	Two strawberries or a small handful of blueberries

3. Lunch — Lunch is best taken when your glucose reading is 80 or lower, or a few hours after your first meal.

Start with 2 to 3 cups of salad greens along with half an avocado. An ideal amount of protein should also be consumed (chicken, fish or lamb), plus 2 tablespoons of extra virgin olive oil, a splash of white wine vinegar and 2 tablespoons of a hard cheese grated over the top.

4. Dinner — Ideally, dinner should be eaten three hours before bedtime. If you eat at night when your energy levels are low, you risk flooding your mitochondria with reactive oxygen species (ROS).

This last meal for the day should have a smaller portion of protein cooked in highquality fat. A serving of vegetables drizzled with olive oil or coconut oil must also be added. Keep in mind that your overall serving should be lighter than your breakfast or lunch. 5. Snacks — Fat-rich foods light on your stomach such as macadamia nuts and pecans are keto-friendly snacks. Celery, avocado and my Fat Bomb recipe below are great choices as well.

Ketogenic Recipes You Can Try

If you don't know any ketogenic meals, I encourage you to try these recipes below, which I use in my daily routine. They serve as a good introduction to the benefits and the wonderful flavors of the ketogenic diet. Aside from being delicious, they're also simple to prepare. The easiness will give you the confidence to try more complex ketogenic recipes.

Dr. Mercola's Chocolate Fat Bomb Recipe

Ingredients

- 1 tablespoon black sesame seeds
- 1 tablespoon flax seeds
- 1 tablespoon black cumin seeds
- 1 tablespoon pumpkin seeds
- · 1 tablespoon organic psyllium
- 1 tablespoon chia seeds
- · 1 scoop Dr. Mercola's Organic Greens
- 1 teaspoon calcium from ground-pastured eggshells
- 1/2 ounce cocoa butter
- 1 whole avocado

- 1 to 2 tablespoons medium-chain triglyceride (MCT) oil
- 1 drop Stevia
- Filtered water

Procedure

- 1. Let the black sesame, flax, pumpkin and black cumin seeds soak overnight (roughly 14 hours) in a mixing bowl.
- 2. Mix the remaining ingredients.
- 3. Pour water to desired consistency it can range from a liquid to pudding texture.
- 4. Using an immersion blender, blend for two to five minutes for desired consistency.

Dr. Mercola's Keto Salad Recipe

Ingredients

- · 2 ounces ground organic lamb
- 1/3 red onion
- 1 whole avocado
- · 2 to 4 ounces sunflower seed sprouts
- · 1 to 2 tablespoons Dr. Mercola's coconut oil
- · 6 pieces anchovies (packed in salt, not oil)
- A handful of oregano to your desired flavor (cut finely)

- 2 to 4 ounces fennel bulb and/or leaves
- 2 sprigs rosemary (chopped finely)
- 100 grams red pepper
- · A handful Malabar spinach
- 1 habanero pepper (chopped)
- · 1 tablespoon salmon fish roe
- · 2 to 3 ounces grass fed pastured butter
- · 3 ounces fermented vegetables
- · 4 to 7 shakes Dr. Mercola's Himalayan salt
- 10 to 20 shakes ground pepper (depending on your preference)

Procedure

- 1. Gently heat the coconut oil in a frying pan.
- 2. Add onions and ground organic lamb at very low heat for 20 to 25 minutes.
- 3. In a separate bowl, cut and mix the remaining ingredients.
- 4. After 25 minutes, add the onions to the salad and then mix it well.
- 5. Rinse salt off the anchovies and soak them for five minutes.
- 6. Split each anchovy into three pieces and add to the salad.
- 7. Add the organic lamb to the salad.

Ingredients

- 300 grams cocoa butter
- · 200 grams Dr. Mercola's coconut oil
- 200 grams raw, organic-pastured butter
- · 300 grams macadamia nuts
- 8 full droppers stevia (you can use Luo Han as a substitute)
- 1 teaspoon Dr. Mercola's organic vanilla extract

Procedure

- 1. Mix the butters and oils under low heat for three to five minutes.
- 2. Once the mixture cools, add the Stevia and the vanilla extract.
- 3. Pour the fudge into 8-ounce wide ball jars.
- 4. Spread the nuts evenly across all jars.
- 5. Refrigerate until the fudge reaches the desired consistency

This recipe makes eight servings.

Are These Other Foods Ketogenic?

Aside from the various keto-friendly foods mentioned in this article, you may be wondering if there are other options that may help support your ketogenic diet. If you find that the ketogenic diet is limiting when you start out, don't worry. There's actually a lot you can add to your diet that's "keto" as long as consumption is controlled. Here are some commonly asked questions:

Is Hummus Ketogenic? — Hummus is a spread or dip made by grinding chickpeas, tahini, garlic, lemon juice, salt and olive oil together. Other spices like red pepper may be added to alter the flavor.²⁹

Chickpeas are naturally high in carbs — a single cup contains 45 grams of carbohydrates.³⁰ However, you can modify the recipe to make it more nutritious, such as substituting the chickpeas with beetroot. Beware, though, that beets have the highest sugar content of all vegetables, so consume them in very controlled amounts.

Is Popcorn Ketogenic? — If you're just starting out with the ketogenic diet, you may be wondering if this popular snack can fit into your new eating plan. The answer: It depends on your carbohydrate consumption.³¹

According to Self Nutrition Data, 1 cup of oil-cooked popcorn contains 6.3 grams of carbohydrates.³² Since I recommend that people usually limit their net carb consumption to under 50 grams per day, a single serving of popcorn may throw you off ketosis.

If you choose to add popcorn into your ketogenic diet, I recommend making your own at home to minimize carb intake by using organic corn kernels. Using healthy fats to cook the kernels will also increase the ketogenic profile of the meal.

Is Spaghetti Squash Ketogenic? — Spaghetti squash (Cucurbita pepo) is a long, oblong-shaped yellow vegetable. When cooked, its flesh separates into thin noodles that resemble the beloved Italian dish. In this regard, the vegetable is sometimes called "squaghetti." If you want to try it, here's a recipe that you can follow.

But is this food keto-friendly? Similar to popcorn, the answer depends on your needs. A single cup of spaghetti winter squash contains 10 grams of carbohydrates, which is well within the limit of your ideal daily net carb intake — but it could still throw off your entire daily carb count if you aren't careful.³³

Is Peanut Butter Ketogenic? — Peanuts (and peanut butter) are high in omega-6 fatty acids, so consuming too much of this food can throw off your omega-6 to omega-3 ratio.³⁴ Peanuts also contain lectins, which may exacerbate symptoms in people who have autoimmune diseases.³⁵

Despite conflicting information, it is still possible to add peanut butter to your ketogenic diet, but I don't generally recommend it, even when used sparingly. If you still want to push through with eating peanut butter, make sure that it is homemade by soaking the nuts overnight before production to reduce the lectin content.

Also, calculate your servings accordingly to prevent going over your daily net carb intake to prevent throwing you off ketosis.³⁶ Lastly, avoid commercial peanut butter, because the peanuts used are heavily sprayed with pesticides.

Is Cheese Ketogenic? — Certain types of dairy are recommended as part of the ketogenic diet, and cheese is one of them. That's because it's rich in healthy fat that may help augment your health, similar to other fat-rich foods.

When choosing cheeses, make sure they're made using raw grass fed milk to get all the healthy fats. Remember, the longer a cheese has been aged, the lower the carb content.³⁷

Is Honey Ketogenic? — Raw honey is a natural sweetener with various potential health benefits, such as fighting microbes and boosting immune system function. However, it is filled with fructose that can throw you off ketosis, even when taken in small amounts. It is recommended that you avoid honey if you want the ketogenic diet to truly benefit your health.³⁸

Is Almond Milk Ketogenic? — Almond milk is a viable alternative to dairy milk for the ketogenic diet, and it's also ideal for lactose-intolerant individuals. In addition, research suggests that the fatty acids found in almond milk may help reduce the risk of heart disease.³⁹

If you want to add almond milk to your diet, do not purchase the ones made with pasteurized nuts, as they may harm your health. Instead, make your own using raw, unpasteurized almonds.

Is Butternut Squash Keto? — Butternut squash is a type of winter squash with more carbohydrates than summer squash. In light of this, adding it to your ketogenic diet isn't recommended. However, you may still consume this vegetable, but in very small, controlled amounts. Make sure you closely monitor your carb consumption to prevent going off ketosis.⁴⁰

Are Tomatoes Ketogenic? — According to the USDA, a 100-gram serving of red tomatoes has 3.9 grams of carbohydrates.⁴¹ You may add this fruit to your ketogenic diet safely and gain its beneficial nutrients, particularly lycopene. Researchers from Ohio State University suggest that this antioxidant may help protect your skin from sun damage, which may result in a lowered risk of skin cancer tumors.⁴²

Remember to always cook tomatoes to improve their nutritional value. Research shows that cooked tomatoes have increased lycopene content, as well as total antioxidant activity. In one study that heated tomatoes to just over 190 degrees Fahrenheit for two, 15 and 30 minutes, results indicated that:⁴³

- Beneficial trans-lycopene content increased by 54%, 171% and 164%, respectively
- Levels of cis-lycopene (which is a form easily absorbed by your body) rose by
 6%, 17% and 35%, respectively
- Overall antioxidant levels increased by 28%, 34% and 62%, respectively

Who Should Not Be on a Ketogenic Diet?

Based on published studies, a ketogenic diet can be beneficial for optimizing your health. However, not everyone should follow this eating plan due to certain factors. If

you fall within any of the following categories, I recommend that you do not push through with a ketogenic diet for safety reasons:44,45

You are pregnant — During pregnancy, your body undergoes many changes that require nutrients from various sources. Therefore, severely restricting yourself from healthy carb sources may negatively impact your baby's health.⁴⁶

You are breastfeeding — Breastfeeding women should avoid a ketogenic diet throughout the child's breastfeeding phase. That's because women need oxaloacetate, a compound essential for creating lactose for breastmilk, which is essential for their baby's growth.

You are an athlete who's about to start a new season — Athletes can greatly benefit from the energy produced by ketones, but it takes around four to six weeks for your body to achieve ketosis. During this time, your body has not yet adapted to using fat as an energy source, which may impede your performance in upcoming athletic events.

If you wish to take advantage of the ketogenic diet, give your body time to adapt by planning ahead during the offseason.

You've had your gallbladder removed — If you had your gallbladder removed due to previous health issues, your body will have problems metabolizing dietary fat when implementing the ketogenic diet. Fortunately, taking digestive enzymes, particularly lipase, while eating fat-rich meals can help you mitigate this obstacle.

You have a history of kidney stones — If you have developed kidney stones before, a ketogenic diet may increase your chances of getting them again. That's because ketones are naturally acidic, which increases the production of uric acid and the formation of stones.

On the other hand, kidney stones may be prevented while on a ketogenic diet if you increase your consumption of potassium from leafy greens and other high-fat foods

such as avocado. Staying hydrated throughout the day also helps lower your risk of developing stones.

Your body is still growing — In one study, epileptic children experienced a reduction in symptoms and improved cognitive performance when a ketogenic diet was introduced.⁴⁷ However, this may have a negative effect on the growth of their bodies in the long run, according to a study published in the journal Developmental Medicine & Child Neurology.⁴⁸

Researchers believe that a ketogenic diet reduces the production of insulin-like growth factor 1 (IGFT-1), a hormone essential in the development of the bones and the muscles of kids and teenagers. If your child absolutely needs to be on a ketogenic diet, consult with a doctor first to discuss any potential growth issues.

You're naturally thin — Naturally thin people with a body mass index (BMI) of 20 or less should avoid a ketogenic diet because it may induce further weight loss, which can be detrimental to your overall health.

You have rare metabolic disorders — Disorders such as Gaucher disease, Tay-Sachs, Niemann-Pick and Fabry disease can interfere with fat metabolism, thus affecting energy production.⁴⁹ If you have any of the aforementioned disorders, a ketogenic diet is not recommended as it relies largely on fat for energy production.

You're struggling with anorexia — Anorexics may suffer from rapid starvation if they follow a ketogenic diet, because they already limit their calorie consumption and have an extreme fear of eating fat, which a ketogenic diet has lots of.

If they embark on a ketogenic eating plan, they may also suffer from low energy, because a ketogenic diet relies on dietary fat as the main source of fuel. However, their overall well-being may benefit from ketones through careful medical and psychiatric supervision.

You have pancreatic insufficiency — Pancreatic insufficiency is a condition where

your pancreas does not produce enough enzymes to help break down and absorb nutrients in your digestive tract. If you have an enzyme deficiency, I suggest having it treated first before embarking on a ketogenic diet, because your digestive system will have a hard time absorbing dietary fats.

The Side Effects of a Ketogenic Diet

Starting a ketogenic diet can help optimize your health tremendously in many ways. But like any major dietary changes, it can have several undesirable (but not alarming) side effects, such as:

Bad breath — Once you start on a ketogenic diet, you may notice that your breath will have an undesirable odor due to the increased acetone levels in your body. Acetone is a ketone produced during ketosis, which is expelled in your urine and partly your breath.

On a positive note, detecting acetone in your breath is a good indicator that your ketogenic diet is working.⁵⁰ You can brush your teeth and/or rinse your mouth with coconut oil to help remove the bad breath.

Short-term fatigue — You may begin to feel fatigue at the start of a ketogenic diet. It's actually one of the main reasons why many people choose not to continue with this approach long before they can enjoy the benefits.⁵¹

The reason why you get tired at the start is your body is adapting from using carbohydrates for energy to healthy fats. The transition doesn't happen overnight, and it may take you anywhere from a several days to a few weeks before your body achieves full ketosis.⁵²

Frequent urination — During the first few days of implementing a ketogenic diet, you may notice that you're using the bathroom more often. That's because your body is dumping the glycogen in your liver and muscles as urine. Furthermore, as the insulin

level in your blood begins to drop, excess sodium is expelled in the form of urine as well.⁵³

Digestive problems — A huge shift into any dieting method can increase your risk of digestive problems, and the ketogenic diet is no exception. Constipation is commonly reported among those who are starting out on a ketogenic diet, but it may disappear in a few weeks once your body gets used to the healthier food you're eating.⁵⁴

Sugar cravings — You may develop intense sugar cravings as your body switches from sugar to fat for fuel. However, I encourage you not to give in to temptation. You can practice various relaxation method such as the Emotional Freedom Techniques or yoga to take your mind away from sugary foods.⁵⁵

Hair loss — You may notice more strands of hair getting stuck on your brush during the first few days of your ketogenic diet. Don't worry because this is not a big cause of concern, since hair loss can result from any major dietary changes in general. It will stop once your body achieves ketosis.⁵⁶

Is the Ketogenic Diet Safe?

Based on published research, the benefits of the ketogenic diet are clear and defined. Weight loss, lowered insulin levels and reduced appetite are health improvements that most people will enjoy in the long run. That being said, there are some side effects that you may experience when you first start out, such as those mentioned above.

In addition, you may experience "carb flu," a condition that mimics flu-like symptoms, such as fatigue and headaches. This generally occurs during the onset of the ketogenic diet because your body will have to adjust after relying on carbohydrates for fuel for so long.⁵⁷ The symptoms typically last less than a week (or two) only. If carb flu does happen to you, here are some things you can do to feel better while you're transitioning into ketosis:⁵⁸

- Increase water intake
- Slightly increase your consumption of healthy fats and proteins
- · Avoid sugar-free foods

Once you feel better, you can regulate your intake of water, fats and proteins into a full-fledged ketogenic diet.

Aside from carb flu, be warned that staying in long-term, continuous ketosis may have drawbacks that may actually undermine your health and longevity. To stay on the safe side, I recommend undergoing a cyclic ketogenic diet. The "metabolic magic" that ketosis brings to the mitochondria actually occurs during the refeeding phase, not during the starvation phase.

What Are Keto Sticks and Strips?

Keto strips and sticks are useful tools in helping you figure out whether you're in ketosis or not. There are three common ways to achieve this objective:⁵⁹

- Blood ketone meter This is the most accurate tool, but is generally expensive
- Urine stick It will provide a Yes/No answer to whether you're in ketosis or not, but
 it will not provide a measurement of your current ketones
- Breath ketone meter This is more accurate than a urine stick, but the accuracy of results can vary⁶⁰

Blood ketone strips are considered the best testing tool, but they can be financially exhausting in the long run. To help minimize costs, you can check for ketones every few days instead of daily.

The Ketogenic Diet Can Become Even Better Through Fasting

Going into nutritional ketosis by following a ketogenic diet is one of the most radical but highly beneficial lifestyle changes you can make to improve your health. As with most dietary changes, always remember to listen to your body. If you feel any side effects other than the ones listed above, then necessary adjustments to your food intake may be needed.

In achieving optimal health, the ketogenic diet is just one piece of the puzzle. Another aspect you should incorporate is intermittent fasting. If you want to elevate your health to an even higher level, I encourage you to restrict your eating window. Combining these two techniques can help you achieve higher levels of health that you've never reached before. I call this strategy "KetoFast."

KetoFast Combines Keto and Intermittent Fasting

KetoFast is a radical approach to releasing fat-soluble toxins from your body, as well as triggering lipolysis. If you've had doubts about fasting, now is the time to throw them all away. Fasting, when done properly, can amplify the benefits of the ketogenic diet. Through KetoFasting, not only will you be able to use fat for energy, you'll also eliminate toxins, resulting in a cleaner, healthier you.

If you're determined to make a radical change in your health, I encourage you to get my latest book "KetoFast," which offers a step-by-step guide on how to do KetoFasting. This powerful tool is actually the final step of my comprehensive approach to reducing your toxic exposure and regaining your ability to burn fat for fuel.

To give you a brief on how to implement KetoFasting into your lifestyle, here's an overview of this strategy:

Step 1: Don't Eat Three Hours Before Bedtime — Don't eat or drink anything (except water) three hours before sleeping. This will give your body enough time to digest your last meal for the day, lowering the chances of mitochondrial damage. Sleep should be devoted to resting and repairing your body, not breaking down food you've just eaten.

Step 2: Compress Your Eating Window — Restrict your eating window to six to eight hours each day. This will give you a total fasting period of 16 to 18 hours per day. To give you an idea on how your day should look like, eat your meals from 11 A.M. to 7 P.M. only.

Give yourself time to adjust, as this represents a drastic change in your eating habits. It may take up to a month, but all the hard work and effort you will put in will be worth it. Even if you haven't switched to a ketogenic diet yet during this time, compressing your eating window will already help you reap some of the benefits of fasting, such as being metabolically flexible.

Step 3: Switch to the Ketogenic Diet — Once your body has adapted to fasting, you should be on the ketogenic diet four times a week. I've already outlined the best foods rich in healthy fat, so it's time for you to stock up on those. Even more important is to monitor your ketones, so you actually know if you're burning fat for energy. Here are three ways to test for ketones:

- · Blood test
- Breathalyzer
- Urine test

Step 4: Feast After Every Two Ketogenic Days — Feasting is a crucial part of KetoFasting, because during your ketogenic days, your body is in "famine" mode. During the feasting portion, you will increase your carbohydrate intake between 100 to 150 grams. Protein is increased as well, while total fat will be reduced consequently. However, calorie consumption will stay relatively the same, as consuming too much can throw you off ketosis.

Healthy carbohydrates are your best choices for feasting. Foods such as fruits, sweet potatoes, purple potatoes and quinoa are all great during these days.

Step 5: Add a KetoFast Day Once a Week — The end of the week will be devoted to one KetoFast day. You will only consume a single, low-calorie meal comprised of

65% to 85% fat, typically around 300 to 600 calories (depending on your body size). The reason for this is to help remove fat-soluble toxins from your body.

Do not eat for 24 hours after consuming your KetoFast meal. This will give you almost 48 hours of fasting to help your body facilitate detoxification without problems. I recommend consuming your meal late in the morning.

Binders and Supplements Can Help Facilitate KetoFasting

The eventual release of toxins into your system may cause damage. In order to mitigate this problem, here are some supplements I recommend you take:

Ubiquinol (100 to 150 milligrams twice a day)	Organic psyllium (one to two tablespoons)	High-quality probiotics
Phosphatidylcholine	Bitters	Gentian
Dandelion	Solidago (goldenrod)	Myrrh

It's also important to take binders during KetoFasting days. They can help improve your detox efforts by grabbing contaminants and expelling them through your feces. Only take binders on an empty stomach because they will steal the nutrients from your food instead. Here are four binders I recommend:

- Activated charcoal 5 to 6 grams
- Chitosan 2 to 3 grams
- Modified citrus pectin 5 grams, once to thrice a day
- Chlorella 5 to 15 grams

KetoFast Your Way to Better Health With the Right Recipes

KetoFasting requires careful planning of your diet, because consuming excess carbohydrates or protein will not give you the detoxifying results you're looking for. In my book "KetoFast," I explain in great detail HOW and WHY you should adopt this radical health strategy. However, you still need to know WHAT foods to eat to set yourself up for detoxification.

In this regard, I've created the "KetoFast Cookbook," which I co-wrote with Australian chef Pete Evans. Together, we've compiled more than 40 delicious, nourishing recipes that will help support optimal detoxification and minimize the side effects of fasting.

Frequently Asked Questions About the Ketogenic Diet

Q: Is the ketogenic diet healthy?

A: As numerous studies have indicated, the ketogenic diet may potentially benefit your health in numerous ways. However, long-term ketosis may have unwarranted negative effects on your health, so it's better to cycle out of ketosis once in a while for safety reasons.

Q: How do I go into nutritional ketosis?

A: To enter into a state of nutritional ketosis, take a look at what you're currently eating and remove any unhealthy items such as sugary drinks and processed foods. The next step is to consume whole, organic foods that are high in healthy fats, have moderate protein and only minimal carbohydrates.

Q: How long does it take to get into ketosis?

A: Each person reacts differently to a ketogenic diet. You may experience a few side effects in the first seven to 30 days, such as constipation, fatigue and urination. But

once your body normalizes, you will start feeling the benefits.

Q: How many carbs can I consume to be in a state of ketosis?

A: It's generally recommended that only 5% of your daily diet is allocated to carbohydrates because if you consume more than that, your body gets thrown off ketosis. However, this is only for SKD, or the standard ketogenic diet. If you're an athlete or a bodybuilder, you can consume more carbs without affecting ketosis by following a targeted ketogenic diet (TKD) or a cyclic ketogenic diet (CKD).

Q: How long does it take before ketosis shows results?

A: The results of ketosis can be felt as early as the first week when your body begins to dump water and carbohydrates, but the weight loss will only be minor.⁶¹ As time goes on, your body will begin to consistently shed excess fat, provided you stick to your ketogenic program.⁶²

Q: What is the keto flu?

A: Keto flu, or carb flu, is a possible reaction your body may experience as a result from switching to fat for fuel from carbs. Issues like muscle soreness, fatigue, headaches and general fogginess may occur.⁶³

Q: Why am I not losing weight on keto?

A: There are a few possible reasons why you're not undergoing ketosis, such as:64

• **Eating too much fruit** — Fruits contain fructose that can throw you off ketosis when consumed too much.

- You're consuming hidden carbohydrates Certain vegetables, dairy and nuts
 have high carb content, so make sure that you review the carb content of the
 food you're eating.
- You're eating too much Consuming too much healthy fat can drastically increase your daily caloric intake, preventing you from losing weight.
- You're eating too little Consuming too few calories can slow down your metabolism, making your body conserve itself in response to inadequate energy levels.

Q: What is keto coffee?

A: Keto coffee is simply coffee with MCT oil and raw, grass fed butter, which gives the drink not only energy-boosting, but also fat-burning properties.

Q: Is the ketogenic diet safe long-term?

A: Long-term ketosis may be unhealthy, so you should switch to a cyclical ketogenic diet to introduce appropriate amounts of carbohydrates into your body once in a while.

Q: How many carbs a day should you consume on a ketogenic diet?

A: Limiting your net carb intake to under 50 grams per day can help transition your body into burning fat for fuel.

Q: How much weight can you lose on a ketogenic diet?

A: There's no specific answer for this question, as it is dependent on many factors.

However, you may be able to spot improvements right away. In a study that tested

the ketogenic diet on obese people, researchers noted that after 24 weeks, the test

subjects lost around 14 kilograms (30.8 pounds) of excess weight, going from an

average 101.03 kilograms to 86.67 kilograms (222.7 pounds to 191 pounds).65

Q: Can you eat beans on keto?

A: It's possible to eat beans, but only during the initial stage of the ketogenic diet.

That's because they're high in net carbs, making them ideal only when you begin

cycling in and out of ketosis. Beans should be consumed during your carb "feasting"

days.

Q: Do calories matter on keto?

A: Counting your calories on a ketogenic diet is important as it will dictate your

weight goals. In my case, I had to increase my caloric consumption in order to

maintain my ideal weight. If you're trying to lose weight, cutting back on your

calories may work to your benefit.

Q: Can you drink alcohol on a ketogenic diet?

A: In general, I don't recommend that you drink any form of alcohol, especially when

you're trying to lead a healthy lifestyle.

Last update: April 29, 2019

Sources and References

- ² Obesity, "The Effects of a Low-Carbohydrate Ketogenic Diet and a Low-Fat Diet on Mood, Hunger, and Other Self-Reported Symptoms" January 2007
- ³ Nutrition & Metabolism, The Effect of a Low-Carbohydrate, Ketogenic Diet Versus a Low-Glycemic Index Diet on Glycemic Control in Type 2 Diabetes Mell
- ⁴ Redox Biology, 2014;2:963-970
- 5, 8 Diabetes.co.uk, "Types of Ketogenic Diet" 10
- ⁶ Bodybuilding.com, February 9, 2017
- ⁷ Muscle & Strength, "Ultimate Guide to the Keto Diet With Sample Meal Plan"
- ⁹ See reference 4Bodybuilding.com, August 03, 2017
- ¹⁰ American Journal of Clinical Nutrition, "Effects of a High-Protein Ketogenic Diet on Hunger, Appetite, and Weight Loss in Obese Men Feeding Ad Libitum
- ¹¹ The Truth About Cancer, "How the Ketogenic Diet Weakens Cancer Cells"
- ¹² Nutrition & Metabolism, "Metabolic Management of Glioblastoma Multiforme Using Standard Therapy Together With a Restricted Ketogenic Diet: Case Report
- ¹³ Nutrition and Metabolism, 2007;4:5
- 14 BMC Cancer, 2008;8:122
- ¹⁵ Nutrition Metabolism, 2011;8:54
- ¹⁶ The BMJ, 2003 May 17;326(7398):1090
- 17, 18 Atkins Low Carb 2021
- ¹⁹ Better Health USA 2014
- ²⁰ Healthfully.com, July 18, 2017
- 21 Atkins 'How to Do Atkins Right' 2021
- ²² Asia Pacific Journal of Clinical Nutrition, 2006;15(1):21-9
- ²³ Self Nutrition Data Baked Potatoes
- ²⁴ Self Nutrition Data Sweet Potato, Baked
- ²⁵ Self Nutrition Data Corn, Raw
- ²⁶ Self Nutrition Data Lima Beans
- ²⁷ Pantry to Plate
- ²⁸ Low Carbe Diem
- ²⁹ SFGATE, "Is Hummus Good for You?"
- ³⁰ SFGATE, "Chickpeas and Blood Sugar"
- 31 Eat Your Way Clean, November 8, 2017
- 32 Self Nutrition Data Popcorn
- 33 Self Nutrition Data Winter Spaghetti Squash
- 34 SFGATE, "Omega-6 Fat in Peanuts"
- 35 The Atlantic, April 24, 2017
- 36 MyProtein, "The Keto Diet | Recommended Foods for a Metabolic Meal Plan"
- 37 SFGATE, "What Kind of Cheese Is Good for a High-Protein Low-Carb Diet?"
- ³⁸ Men's Fitness, December 20, 2017
- ³⁹ Medical News Today, August 1, 2017
- ⁴⁰ The Globe and Mail, March 26, 2017

- ⁴¹ Self Nutrition Data Raw Tomatoes
- ⁴² Science Daily, July 13, 2017
- 43 Journal of Agricultural and Food Chemistry, 2002 May 8;50(10):3010-4
- 44 Mark's Daily Apple, "Is Keto for Everyone? Cautions, Caveats and Contraindications" June 21, 2017
- ⁴⁵ Diagnosis: Diet, "Is the Ketogenic Diet Safe for Everyone?"
- 46 Pregnancy, "Is Ketosis Dangerous During Pregnancy?" February 10, 2014
- 47 Canadian Family Physician, 2010 June;56(6):540-542
- 48 Developmental Medicine & Child Neurology, 2014 Sep;56(9):898-904
- ⁴⁹ MSD Manual, "Disorders of Lipid Metabolism"
- ⁵⁰ American Journal of Clinical Nutrition, "Breath Acetone Is a Reliable Indicator of Ketosis in Adults Consuming Ketogenic Meals" July 2002
- 51 Journal of the American Dietetic Association October 2007 46,56
- 52, 62 Everyday Health, "Ketogenic Diet: What to Expect if You Try This Eating Approach," January 23, 2018
- ⁵³ Livestrong.com, October 3, 2017
- ⁵⁴ The Journal of Pediatrics, "Ten-Year Single-Center Experience of the Ketogenic Diet: Factors Influencing Efficacy, Tolerability and Compliance" April
- ⁵⁵ Ketogenic Diet Resource, "Low Carb Diet Side Effects"
- ⁵⁶ Diet Doctor, "Can Low-Carb Diets Result in Hair Loss?" October 21, 2015
- 57, 63 Refinery29, August 11, 2017
- 58 Low-Carb Support, "8 Ways to Blast Through Low-Carb Flu and Dive Into Ketosis"
- ⁵⁹ Very Well Health, February 23, 2018
- ⁶⁰ Healio Endocrinology September 17, 2021
- ⁶¹ American Journal of Clinical Nutrition, "Glycogen Storage: Illusions of Easy Weight Loss, Excessive Weight Gain and Distortions..." July 1992
- ⁶⁴ Ditch the Carbs, "Top 10 Reasons You're Not Losing Weight"
- 65 Experimental & Clinical Cardiology, 2004 Fall;9(3):200-205