

## WHAT IS KETO?

Keto comes from the word Ketosis, which is defined as the state of your body burning its own body fat for fuel. Keto is not so much a diet as it is a metabolic state. It is a shift from sugar burning to fat burning. How? Through restricting the source(s) of energy that prohibit your body from burning body fat for fuel. What sources are those? Carbohydrates and Fats. What!? I know, you thought that the keto diet was a high-fat, low carb diet (HFLC), didn't you? That is what the media has purported, but I am going to dispel that myth. There is a misinterpretation of the HFLC label that says the high fat must come from the diet. You see, if you carry a lot of fat or are obese, you are ALREADY "high-fat", therefore you don't need a fuel source that is high in fat.

Do you need to consume fat to survive? Yes; it is an essential macronutrient – your body must consume it. How much fat you consume is determined by how much fat you have and your activity level, but (if you were counting) a baseline range would be 30-60 grams.

Do you need to consume carbohydrates to survive? No; it is not an essential macronutrient – your body can produce it on its own. (Hence the popularity of the Carnivore/only animal protein diet.) But what about vegetables, aren't they "healthy" carbohydrates? Yes, there is a nutritional value to certain carbohydrates. Keto limits carb consumption to above-ground, high-fiber, low-glycemic carbs – typically these will be leafy greens. If you were to count these macros, it under 50 grams is considered acceptable for keto, but my experience is that under 20 grams is optimal for weight loss. Well, aren't fiber requirements supposed to be at 30 grams? Yes, but if you are eating a high-quality animal protein that is grass-fed or pasture-raised then the fiber that they've consumed in their diet will offset the fiber that you may not be getting in your diet. If you were to count protein macros, you should aim for 0.8-1g of your desired body weight.

As for a low carb diet, under 100 grams is deemed acceptable. The most important thing to note is that carbohydrates are sugar. They convert to sugar in the bloodstream. Fruits are carbs and most are high in sugar, which typically does not fit within the carb macro constraints of a keto diet. (I know, I know, smh! But you'll like the results.)

One of the reasons Keto has become so popular is the poor state of the nutritional health of most Americans. We consume too many refined/ultra-

processed carbohydrates as a society, and as a result, diabetes and other lifestyle diseases have become some of the greatest modern killers.

By restricting carbs, keto aims to reduce your reliance on them as a fuel source and increase your ability to use existing body fat and dietary fats as your primary fuel source. This shift is called fat-adaptation. It can take approximately 90 days to make this transition.

**Exercise-induced Ketosis:** the short-term carb depletion version of ketosis that can occur during and after exercise. This occurs with an exercise regimen that is not too stressful for your current level of fitness.

**Fasting ketosis:** the most powerful and flexible form of depletion is fasting which can occur with an intentional fasting strategy (or time-restricted eating protocol).

**Dietary ketosis:** long-term reliance on fats as a fuel source due to a consistent lack of dietary carbohydrates. This usually only occurs with an intentional low carb diet strategy.

## FOOD QUALITY

This is a simple rule of healthy eating: consume more whole, nutrient dense, natural, single-ingredient foods, as close to their original source as possible foods. Being particular mind that with keto there is an increase in animal fat consumption and it is very important to eat quality proteins. Why? Well, toxins are stored in animal fat (similar to humans store toxins in their body fat), and if you're eating animal protein that is pumped up with steroids, hormones, GMO grains etc, then that will store in their fat, and when you consume that fat, you are subject to the impact of those toxins too!

## CALORIES

I do not advocate calorie-counting or tracking of macros because if you are eating clean keto and only when you're truly hungry (when your body tells you to), I have found you will naturally eat within your calorie requirements. Plus, it is not sustainable long-term, and I promote a lifestyle change – something that you can do without much effort. I realize that practically every fitness and health guru out there will tell you to count calories. What you need to know is that your body has no way of measuring calories. A calorie is simply the energy expended when a food is burned. Your body does not have a mechanism to count this. Calories are important for weight loss

# KETO EXPLAINED

because of the instructions that those calories (or food types) give your hormones. Weight loss is driven more by hormonal regulation than caloric restriction. As for calorie restriction causing muscle loss/atrophy: it is unlikely to reduce your muscle mass because you are still consuming protein, which spares muscle loss. Keto actually has even been linked to the possibility of increasing muscle when resistance training.

## INSULIN & BLOOD SUGAR CONTROL

We've mentioned earlier that weight loss is hormonal, and the main hormone driving weight loss and blood sugar control is insulin. Insulin is the fat storage hormone. It is released in response to consuming carbs/sugar, and if those are refined/highly processed carbs it will spike your insulin, which causes you to stay in "storage mode" longer. If you are in storage mode, you are not burning fat. If you have fewer and lower releases in insulin, you will be in "burning mode" quicker and longer, helping you lose weight and stabilize blood sugar. High amounts of sugar in the blood over time can contribute to diabetes risk. Keto is a good way to do this. However, you can still gain weight on the keto diet; its effectiveness is not a license to overeat, as you can exceed your capacity limits.

## CHOLESTEROL

On the standard American diet, high "bad" LDL cholesterol was a marker for an elevated risk of heart attack. However, there is no good and bad cholesterol – they are simply carriers. LDL transports cholesterol from liver to the blood for use by your tissues. HDL takes excess cholesterol, cleans it up, and puts it back into the liver. When you are on keto, your LDL will be higher because you are transporting more fats, a functional use for fuel. Remember this when speaking to a conventional doctor – most are untrained with health markers for a keto lifestyle. Talk to a functional medicine practitioner or naturopath to help you better understand your health for this alternative lifestyle.

## EXERCISE

For your weight loss efforts, exercise is a great complement to a keto diet and fasting. During extended bouts of endurance exercise, you'll become severely carb-depleted. While some who lift weights often try to fight this by consuming carbs around their workouts, it's actually not a problem if you're sufficiently fat-adapted. Glycogen depletion is only a real concern for performance if you're not good at metabolizing fat or if you're a bodybuilder (which most aren't). Fat-adaptation is a great way to

improve body fat mobilization for energy with endurance-related forms of exercise.

## BENEFITS FOR WOMEN

Females are built for LCHF diets, as they're typically less effective at metabolizing carbs, more effective at burning fat for energy, and more effective during endurance exercise. This indicates that females will benefit massively from a diet that capitalizes on the effective use of fat. Although the keto diet is not necessarily beneficial for boosting strength or power, women in endurance sports or who train primarily with cardio will be perfectly suited to a keto diet. The more endurance you do during ketosis, the more body fat you'll be able to liberate and mobilize for fuel. This is how it indirectly improves weight and fat loss.

## KETO SIDE EFFECTS (FIRST 2 WEEKS)

- Dehydration
- Dry mouth
- Electrolyte deficiency
- Increased urination
- Keto flu
- Low-grade headaches
- Low-grade rash
- Reduced bowel movements
- Unpleasant breath

## KETO MISTAKES

- Eating dirty keto
- Eating fruit
- Eating too much animal protein & animal fat – aim for balance (1/4 plate of animal protein, and 3/4 plate of rest leaves/veggies)
- Not diversifying your animal & fat consumption – you can eat non-animal fats up to your personal limit
- Not drinking enough water
- Not eating enough leafy greens (fiber)
- Not getting enough rest
- Not looking out for hidden carbs
- Not consistent long enough
- Too many treat/cheat meals