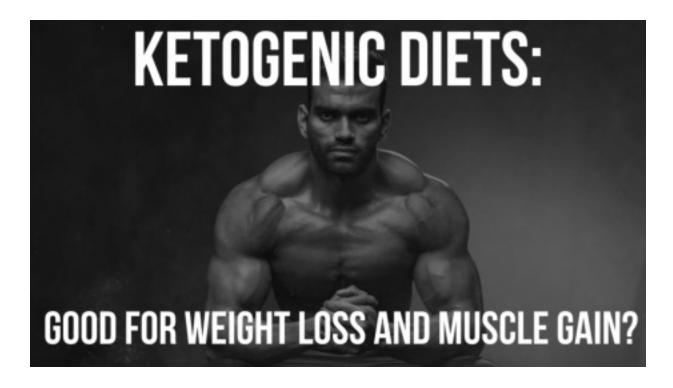


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If you plan to use the ketogenic diet for weight loss or muscle gain...then read on to learn all about how keto works, and if it can help you look your best.

If you're reading this, then odds are you've heard about the ketogenic diet. And if you're like most people, you've been told that keto is a great tool for weight loss.

I mean really, if you search the web, you can find tons of people who've lost weight on keto. Thus, we know that the ketogenic diet *can* work well. But after all, the real question is this:

Does the keto diet work *better* than all the other diets?

So, this article tells you exactly how keto works. And shows just how the ketogenic diet changes your metabolism. Better yet though, you'll find out if the ketogenic diet can help with weight loss and muscle gain. Which are *the* two main factors that make for a good, lean physique.

But before we dive into all that, you may be thinking:

What is keto, really?

KETO 101: WHAT IS A KETOGENIC DIET?

Most often, when people think of a ketogenic diet, they think of a low-carb, high-fat diet. And in general, that's right [2, 3,4,5,6]. But truly, going keto has more to do with whether or not your liver is burning fat. So:

In brief, a ketogenic diet is any diet that gets your liver to start burning fats for fuel [2, 3,4, 5]. Which happens when your body is low on carbs [2]. Even if your diet is low in fats.

You see, when your liver burns fat, it creates ketone bodies as well. And when your body begins to make lots of ketones, you go into "ketosis." Or, to be exact, you have officially "gone keto" once your blood ketone levels get up over 0.5 mmol/L [2,3, 4].

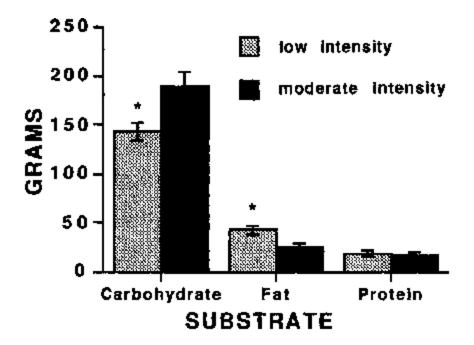
So all told, if a diet gets your body to enter ketosis, then we call it a ketogenic diet. And you can get your blood ketone levels tested if you want to make sure that you've gone keto [1, 2,3].

Now, to find out *exactly* how many carbs you can eat on keto, you should read this article. Where we go over the "keto carb limit," and then show you how to set up your very own ketogenic diet.

KETO DIET BASICS

In general, your brain relies on glucose (i.e. sugar) for fuel. That is, under "normal" diet conditions.

When you need "fast" energy, your liver mostly burns carbs to get it [2,3]. Since for example, during cardio or intense physical activity, your body will tend to burn carbs.



As shown above, we mostly burn carbohydrates for energy during exercise. And the more taxing the exercise, the more we burn carbs for fuel. But this is under normal conditions, and keto changes your metabolism to rely more on fats. Source

But if you cut carbs from your diet, things look much different. Since when you don't give your body enough carbs, it has to burn fats for energy instead [2, 3,4,5] – as is natural in times of starvation [1, 2,3,4,5, 6].

Hence why you may have heard that keto turns you into a "fat-burning machine." Your liver starts to burn fats for fuel. And your brain runs on ketones instead of carbs, once you get into ketosis.

So that's how keto works; it makes your body use fat for energy, rather than glucose (i.e. carbs). Which gets your body to make ketones. Thus, raising your blood ketone levels and putting you into ketosis.

And that covers all the basics of keto for you. But now, you may be thinking:

The ketogenic diet makes you burn more fat. Shouldn't keto help you lose more weight over time too?

Well, that's a great question. So let's see if keto is *truly* the best diet for weight loss...

SUMMARY:

- A ketogenic diet forces your body to burn fat for fuel. And to make your body burn fats for energy, you have to cut your carb intake. So, more often than not, keto is a very low-carbohydrate diet.
- You see, under normal conditions, your body burns carbs for energy. But when you don't give your body enough carbs, then it has to burn fats for fuel instead. And this gets your liver to start making ketones.
- So that's how keto works. Your body starts to use fat for energy. Which gets your liver to make ketones as is a natural response to starvation. And this means that you've entered ketosis.
- Then, if you want to make sure that you've gone keto, you can test your ketone levels. As you're officially in ketosis when your blood ketone levels get above 0.5 mmol/L.

KETOGENIC DIETS AND WEIGHT LOSS

Many people have claimed that low-carb and ketogenic diets are better for weight loss. And that would make sense. Since when you go keto, you burn more fat for energy. Hence, in theory, you should lose more weight. Right?

Let's dive in:

KETO: THE BEST DIET FOR WEIGHT LOSS?

If you've ever tried the ketogenic diet, then odds are you've seen the weight loss benefits.

Since really, when you go keto, you may very well think you've found the best diet for weight loss. If not for fat loss as well.

I mean, when you switch to the ketogenic diet, you drop a *ton* of weight very fast. So, in your first week on keto, you might drop \sim 2-3 kg (4.4-6.6 lbs) on the scale. Which can feel very good, no doubt.

Then, you learn that unlike other diets, keto helps your body burn fat. And of course, that makes it very easy to think:

"I've dropped so much weight on keto. Surely this is *because* the keto diet makes you burn more fat. Right?"

And truly, the weight loss that you see with keto is no fluke. As in fact, the ketogenic diet is the best diet for weight loss. That is, at least for any fixed calorie intake [2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17].

But the thing is, all that extra weight you lose on keto, is not body fat [2,3]...

So, it makes sense to ask:

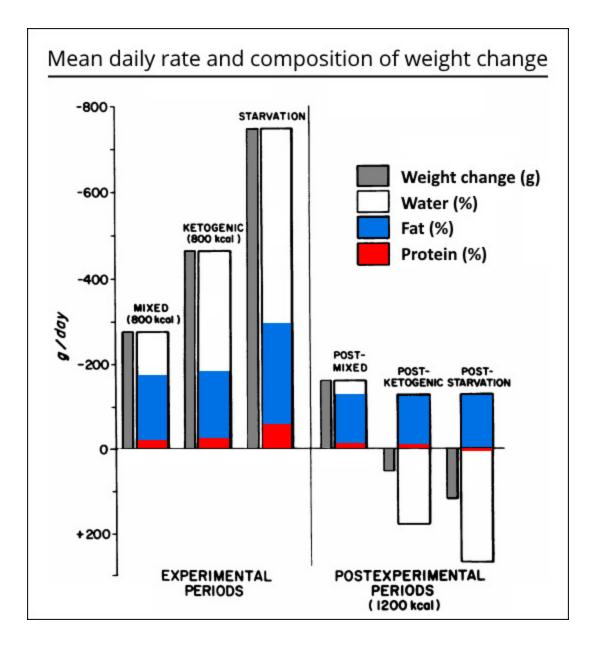
Why do you lose more weight on keto? If that weight isn't all just body fat.

THE KETOGENIC DIET MIGHT NOT HELP WITH FAT LOSS

At the end of the day, keto is *not* any better than a standard diet. At least, not for *fat loss*. Which is what most people care about.

You see, unless you're an athlete, you don't really care how much you *weigh*. Rather, you care about how you *look*.

And as such, that extra weight you lose on the ketogenic diet won't help you out. Because all of this extra weight loss is in fact, just *water* loss [2,3,4,5]. That is, when you eat a set amount of calories.



As shown above, you do in fact lose more weight on a ketogenic diet. But, ketogenic diets don't help you lose any more body fat. Or at least, not when calorie intake is matched between diet groups. Instead, keto makes you lose more body water. Credit to Antonis Damianou of Myolean Fitness. Source

Truly, keto only helps you lose more weight because it depletes your body's glycogen stores. Or put in simple terms, when you go keto, your muscles lose lots of glycogen [2,3] and water [2,3].

So, ketogenic diets will help you lose more weight. But this extra weight loss is all from body fluid – *not* from body fat [2,3,4,5,6,7,8]. And this can actually make your muscles look smaller...

That's right. The ketogenic diet often makes your muscles look *smaller*. Since when they release glycogen and water, your muscles shrink. So, if you go keto, then you can expect to lose some size and fullness [2,3,4,5,6,7,8,9].

Hence, you will lose more weight with keto. But this weight loss won't make you *look* any better. At least, not unless keto helps you eat less too...

KETO AND WEIGHT LOSS: WILL IT HELP?

All told, the ketogenic diet helps your body burn more fat for fuel. And it helps you lose more weight. But, it won't always help you lose more *body fat*.

You see, the body isn't so quick to burn through its own fat stores. Rather, it will first burn through all of the fat that you get from your diet. So while you will *burn* more fat on keto, you won't always *lose* more body fat.

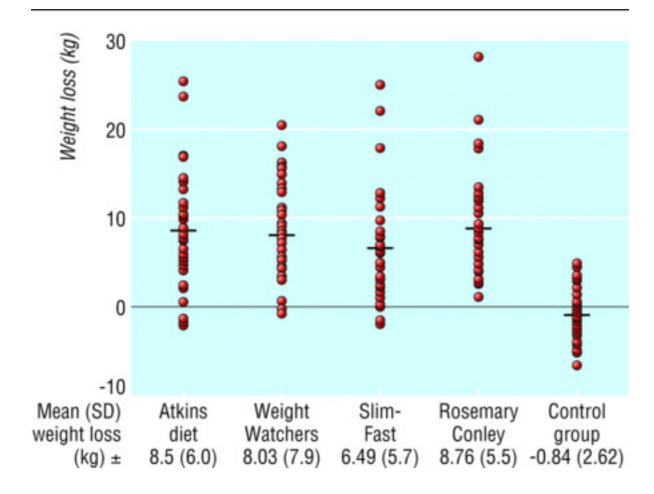
Or in other words, unless it helps you eat less, keto won't help you drop more fat. The ketogenic diet will help you shed fat *only* if it puts you in a calorie deficit. Which is the real key for fat loss.

So here's the bottom line for keto and weight loss:

The ketogenic diet *will* help you lose more *weight*. But with that said, it won't always help you lose more body *fat*. Since in many cases, when you drop more weight on keto, you just lose more body water.

In the end, fat loss is all about how many calories you eat. That is, even if you're on the keto diet.

Now granted, keto *can* still help you lose more fat over time. And heck, it can even help you gain more muscle. It just won't work well for all of us...



The above graph shows how we all respond very differently to each diet. As for instance, some people in this study lost ~25-30 kg (55-66 lbs). But in the meantime, other people gained weight on the very same diet. So all told, the diet that works best for most people, might not work well for you. You'll just have to try and see for yourself. Since the best diet is the one you can stick to. Source

WHY KETOGENIC DIETS CAN HELP WITH FAT LOSS

After all, when you eat a fixed number of calories, keto won't help you lose more fat [2, 3,4,5, 6]. Even though it helps you lose more weight [2, 3,4].

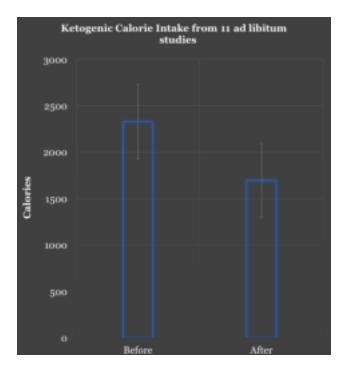
But in practice, keto might help you lose *a lot more* fat. And that's because the keto diet has been shown to blunt your appetite.

KETO AND APPETITE

You see, in controlled studies, keto is no better for fat loss [2, 3,4,5, 6]. Since both groups eat the same number of calories. Which is the most important thing for fat loss.

Yet, in the real world, the ketogenic diet can kill your drive to eat [2,3]. Which of course, can help you eat less calories [2].

Hence, on the keto diet, most people will eat less *without* even trying to [2]. As ketone bodies seem to curb your appetite [2,3, 4,5,6, 7].



As you can see, people tend to eat less when they go keto. And on average, you eat ~500 calories less per day on the keto diet. That is, ~27% less calories than you would eat on your normal diet. Credit to Adam Tzur at sci-fit.net for the image. Source

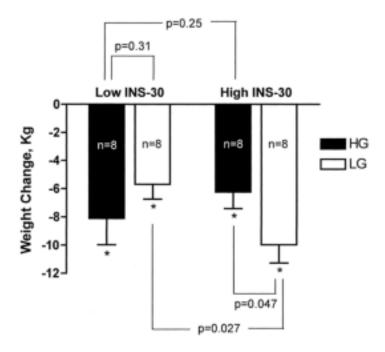
So in most cases, the keto diet tends to help you eat less. And of course, when you eat less, you lose more fat. Thus, ketogenic diets can make fat loss feel *easy*.

Which helps explain how keto works so well for weight loss in many cases. Especially if you don't respond well to carbs:

KETO AND INSULIN RESISTANCE

First off, insulin resistance means that you respond poorly to carbohydrates. As when you eat carbs, your body has to release more insulin to control your blood sugar. Hence, you are less "sensitive" to insulin. For you need to put out tons of insulin to manage your blood sugar levels.

And if you're less sensitive to insulin, then you may want to try out a low-carb diet. As those with insulin resistance tend to lose more fat when they cut out carbs [2, 3,4].



In this study, researchers tested every subject's insulin response to a meal. After 6 months, they found that if you let out more insulin when you ate carbs, then you would also lose more weight on a low-carb diet. And at the same time, those who made less insulin did better on a high-carb diet. So, it seems like your insulin responses can help inform how many carbs you should eat.

Plus, some studies show that low-carb diets can help prevent weight gain among the insulin-resistant. Maybe because a low-carb diet can lead to better adherence in these people. Which is a main factor for fat loss or muscle gain [2,3]. Hence, those with poor insulin sensitivity may lose more fat on the keto diet.

And likewise, insulin-sensitive people seem to lose more fat on high-carb diets [2]. Thus, if you have good insulin sensitivity (e.g. you're lean, healthy, and active), then you may be able to handle carbs better.

Note: not all studies back up this finding [2,3, 4,5,6, 7]. And at the end of the day, you need to test how *you* respond to more or less carbs. Since that's what makes all the difference for *your* diet progress.

What matters much more than your insulin sensitivity though, is your protein intake:

KETO AND PROTEIN INTAKE

To be clear, the ketogenic diet often leads you to eat more protein [2,3, 4,5, 6,7, 8,9,10,11]. Which makes sense, as many of the best keto diet foods are high in protein. (As you'll learn in the next email.)

But what's really cool: eating more protein *alone* has been shown to blunt your appetite [2, 3,4,5, 6]. So it comes as no shock that the keto diet could help you eat fewer calories each day.

Hence, keto may allow you to eat more protein. And that can help you lose more fat [2, 3,4,5, 6,7,8, 9,10,11]. In part because it curbs your drive to eat. But further, since protein can help you build more muscle as well [2, 3,4,5].

Thus, in many cases, keto can make fat loss or muscle gain come a bit faster. Which in time, will make you look bigger and/or leaner [2].

So you see, if you eat fewer calories and more protein on keto, then it helps you lose more fat. But if you don't eat more protein or less energy, then keto might not work so well for you...

WHY THE KETOGENIC DIET WORKS FOR WEIGHT LOSS

All told, if you respond well, then keto may be the key for fat loss:

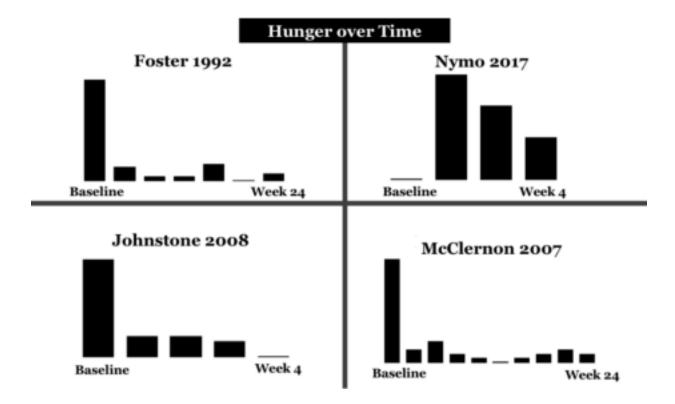
The diet helps keep you full, or kills your cravings. And as such, keto makes it easy to eat less. Further though, the diet can help you eat more protein. Which, *on its own*, can make you look better.

Yet, if you don't respond well, then keto can make you look way worse...

WHY KETOGENIC DIETS MAY NOT HELP WITH FAT LOSS

KETO CAN BOOST APPETITE

In general, for most people, keto will help curb appetite. But, we all respond a bit differently to keto. And as such, some of us might actually be hungrier when we go keto. Since this is just how averages work.



As you can see, most studies show that hunger drops on keto. Notice, hunger is usually high to start each study, and then it goes down at all other time-points. Yet in fact, Nymo 2017 showed that hunger could go up on keto. Which differs quite a bit from the other studies. So, keto tends to blunt hunger for most of us. But, if you don't respond well, then you might feel more hungry on keto. Source

KETO AND CRAVINGS

Sadly, your cravings may go up on keto as well. Since when you restrict an entire food group (e.g. carbs), you might have a harder time sticking to your diet [2, 3,4,5]. Especially during holiday events with many high-carb foods. And heck, this is true even if you *only* cut out bread. Let alone *all* carbs.

Hence why in studies, most of us can't stick to keto for more than ~ 14 weeks [2]. It can be hard to cut out all carbs for *very* long time periods. At least, in most cases.

So in brief, trying to stay in ketosis might make you feel restricted. Which could wind up boosting your cravings for high-carb foods. And of course, that might lead you to overeat on carbs every so often [2]. If not quit keto for good [2,3].

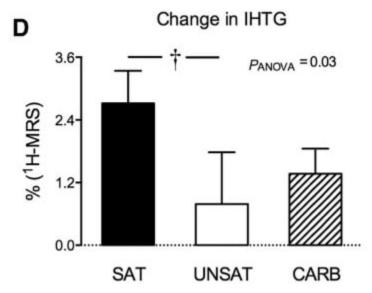
KETO AND SATURATED FAT

But worse, if you *can* stick to keto, you might *still* face issues. Since if you set your diet up poorly, then you could wind up gaining body fat on keto.

You see, on a high-fat diet, you could actually eat a lot of *saturated fat* (e.g. via fatty meats and/or oils). And believe it or not, this alone could lead you to store more fat [2,3,4,5, 6,7]. Because eating saturated fat seems to make you fatter [2, 3,4]. Even when compared to eating sugar, for instance.

Further though, when you replace *saturated* fat with other types of dietary fat, you can lose more body fat [2] or build more muscle [2,3,4,5]. That is, even when you eat *the same* amount of calories.

So, if you go keto, you might want to limit your saturated fat intake. As to avoid excess fat gain when you bulk. Or, as to stave off muscle loss when you cut.



As shown above, saturated fat is the most fattening macronutrient. At least, when compared to fructose (carb) and unsaturated fat (unsat). Source

THE BOTTOM LINE

All told, the ketogenic diet could work much better than your current diet. But just as well, it could work much worse.

So, if all other diets have failed you, then you may want to give keto a shot. As it may help you lose more fat.

Yet, before you go keto, it's best to just log your calories and body weight over time. For watching these 2 variables *alone* can help with weight loss [2,3,4,5]. And because the keto diet has many side effects that you might want to avoid. Which you'll learn about later on...

But, to this point, we've only looked at ketogenic diets for weight loss. Now, what about keto and weight gain?

SUMMARY:

- At the end of the day, the ketogenic diet is the best diet for weight loss. Because for any given amount of calories, you'll lose more weight on keto.
- Yet, keto is *just as good* as any other diet for *fat* loss. Since when you eat the same number of calories, you don't lose any more fat on keto.
- You see, keto helps you lose quite a bit more weight. But this
 extra weight loss comes from body water. As when you cut
 carbs, your muscles release lots of their glycogen and water
 contents.
- But with all that said, keto *may* work much better than the diet you're on now. Since keto could help you eat more protein, and less calories. Thus, when you go keto, you can lose fat *without* trying to.
- So, that's how keto works very well, for so many people. The diet gets them to eat more protein. And less calories too. Which allows them to shed fat, while keeping all of their muscle mass.
- Although, we each respond a bit differently to keto. So in reality, some of us will get hungrier and eat *more* on the keto diet.
 Hence, while keto works well for many people, it may not work so well for *you*.

Now, as stated, keto can be great for weight loss. And extra protein may help you keep your muscle on keto. But you may still want to know:

Are ketogenic diets good for muscle and weight gain?

KETOGENIC DIETS FOR MUSCLE GAIN

While most people use keto for weight loss benefits, some of us instead try keto for muscle gain. And just like for fat loss, keto can work very well for muscle gain. Even when you're on a cut [2]. But really, we want to know if keto-gaining will work *any better* than high-carb bulking.

Like we told you above, keto can make your muscles look smaller. Since your muscles lose water and glycogen when you cut out carbs.

Now, that's already enough to make it seem like keto sucks for muscle gain. But of course, the "full picture" is a bit more complex than that. So, let's see if keto is really any worse for muscle gain:

KETOGENIC DIETS AND MUSCLE: DOES KETO CAUSE MUSCLE LOSS?

As you now know, your muscles release water and glycogen when you go keto. Which means that your muscles will look smaller when you drop your carb intake. But on the bright side, that means you can easily get this size back if you just eat more carbs again [2,3, 4].

So, the ketogenic diet won't really make your muscles smaller. It will just make them look smaller. Or in other words, while you might lose size on keto [2,3, 4, 5,6,7, 8], you shouldn't lose any muscle protein. (At least, not if you have a solid keto meal plan; see next email.)

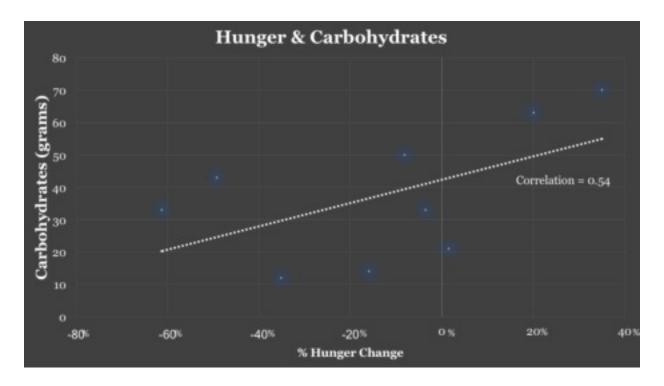
And in fact, keto can help you avoid "true" muscle loss. Since as said above, going keto may force you to eat more protein [2, 3]. Which itself might help you build more muscle mass [2, 3, 4,5].

But here's the thing:

While muscle loss shouldn't be an issue on keto, that doesn't mean you should use keto to bulk up. So, let's dive in to the pros and cons of keto-gaining...

KETOGENIC DIETS AND WEIGHT GAIN: CAN YOU BULK UP ON KETO?

Truly, keto won't make you lose muscle. But with that said, keto could make it hard to gain weight. As your hunger levels tend to drop when you cut carbs out from your diet.



Note: the correlation isn't perfect, as many factors play a role in hunger. But in general, the more carbs you eat, the higher your hunger levels are. Bear in mind though, this doesn't mean that eating more carbs will always make you hungrier. It just shows that people tend to feel more hungry when they eat more carbs. Source

As graphed above, going keto will often blunt hunger and make you eat less [2]. At least, on average. So for most of us, it will be very hard to eat in a calorie surplus on keto.

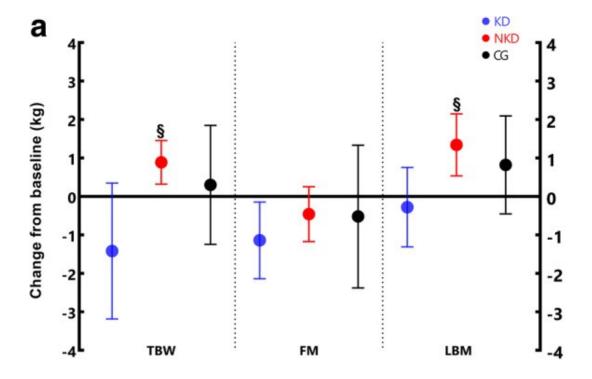
And this was shown to be the case when Vargas et al. (2018) compared bulking on keto vs. a high-carb diet...

VARGAS ET AL, 2018

Or, to be clear, that's what Vargas *tried* to do. Since really, after 8 weeks of "bulking," the keto group *lost* weight in this study.

That is, even though these subjects were told to eat in a calorie surplus, they couldn't. As most people in the keto diet group *lost* weight. And in the meantime, the high-carb diet group *gained* both weight and muscle mass.

Or in other words, the keto group tried to bulk, but wound up cutting instead. And as such, they put on less muscle than the non-keto diet subjects.



Over the course of an 8-week study, keto dieters ate less carbs. Which led them to lose both weight and lean body mass. Yet, at the same time, the non-keto diet groups each gained both weight and lean mass. So, keto might not be a great idea when you want to bulk up. Source

So, here's the bottom line:

If you find that keto blunts your appetite, then keto may not be the best diet for bulking. As when you bulk, the goal is to gain weight. And in general, having a bigger appetite will help you do that.

Yet at the same time, if you tend to gain weight too quickly when you bulk, then keto might help you bulk up at a slower rate. Which would help with muscle gain over time (e.g. as outlined here).

But with all that said, there's more to bulking than just weight gain. As when you bulk up the right way, you'll gain lots of strength *as well*. And that's where keto may lead to issues. Because keto has been shown to mess with weight lifting performance...

KETO AND WEIGHT LIFTING PERFORMANCE

Over the years, there have been many studies on keto and exercise. But sadly, not all studies look great for keto and weight lifting performance [2,3, 4,5, 6, 7, 8, 9].

To be clear, when studies look at weight lifting in keto vs. non-keto subjects, the keto diet subjects tend to perform worse [2]. Plus, that's *in spite of* the fact that keto dieters often eat more protein [2, 3,4, 5]. Which alone has been shown to help you gain *more* strength.

And when you think about it, we can see why keto might hurt your performance in the gym. As when you cut carbs [2, 3], you lose glycogen. Which, to be blunt, could harm lifting performance [2,3, 4]. What's more though, eating carbs has been shown to restore glycogen [2,3], or help you lift more [2, 3]. If not boost muscle growth as well [2, 3,4,5].

So all told, the keto diet can lead you to eat more protein. And this is known to make you stronger in time. Yet, keto *still* tends to make your lifting performance worse. Since keto can't provide the same performance benefits as high-carb diets.

Hence, all else being equal, keto seems to hurt your strength gains in time... Or does it?

THE CATCH

With all that said, people tend to lose more weight on the keto diet as well [2,3,4,5, 6,7, 8,9, 10]. Which, can be very nice, no doubt. But just as well, that could make it harder to lift weights [2] or gain size [2].

Thus, when you want to put on muscle, weight loss is not going to help you [2].

And, to be clear, keto *may not hurt* your gains *unless* it makes you lose weight. Yet, at the same time, odds are that *keto won't help* you lift any more weight.

So, keto has been shown to help with weight *loss*. Which of course, runs counter to the goal of weight gain. But what's more, keto won't help you gain more strength either.

And in general, that's not a good combo for a bulk. Since if you want to max out muscle gain, then you should plan to gain some weight and strength too.

Hence, keto may not be great for bulking. Yet with that said, to each their own...

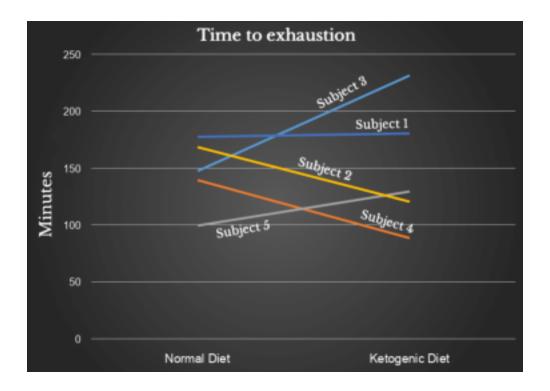
You see, the above is true for most people, most of the time. But all told, some of us will just do very well on low-carb diets. As was shown to be the case in Chatterton et al, (2017):

CHATTERTON ET AL, 2017

In this study, 5 trained olympic lifters cut their carb intake. And after 8 weeks, 2 of them saw great results with less carbs. As in fact, they gained strength just as well as they would have on higher carbs. But while they were at it, they *lost* some body weight too. Or put in lay terms, they got *stronger* and *leaner* with *less* carbs.

Yet sadly, 1 of the 5 subjects in this study *lost* some strength and size. So rather than gaining strength, they got weaker over 8 weeks of lifting on keto. And while this subject did drop some body fat, they still lost strength *relative* to their body weight. Which means that this subject got both *smaller* and *weaker* when they cut out carbs.

So all told, this study shows how keto can work much better for some than for others. As 2 subjects saw great progress with less carbs – getting stronger and leaner. But, 1 subject lost *both* strength and size when they cut out carbs.



As shown above, we all respond differently to keto. Since here, subjects 1,3, and 5 all performed better on the keto diet. Yet, subjects 2 and 4 performed worse on keto. Hence, some of us just do way better on a keto diet – and vice versa. Source

Thus, some of us will be able to perform just fine on the ketogenic diet. And heck, some of us will perform even better. Yet, many others won't do very well on the keto diet.

So in the end, it's all about testing how you respond to keto. That is, for cutting and/or bulking.

SUMMARY:

- In general, keto tends to hurt weight lifting performance. Perhaps due to changes in your glycogen levels and work capacity on low carbs.
- Next, studies show that ketogenic diets can make it hard to gain weight. As most people *lose* weight on keto. Even when they try to gain weight.
- Now, when you bulk up, the goal is to build muscle. Which
 means that you should be gaining body weight, as well as
 strength on your lifts. But as stated, keto can make it hard to
 achieve that. And so, it may not be your best bet for bulking.
- But, we all respond differently to keto. And while most of us will struggle to bulk on the keto diet, that's not always the case. At least, not for everyone.
- So all told, if you seem to respond well, then feel free to bulk up on keto...

That is, so long as the side effects won't bug you:

KETOGENIC DIET SIDE EFFECTS: WHAT IS KETO FLU?

If you look up the ketogenic diet online, then odds are you'll see posts about the "keto flu." And so, you may have thought to yourself...

IS THE KETO FLU REAL?

First off, the "keto flu" refers to the side effects seen on the keto diet. Or to be exact, the keto flu is shorthand for the slew of side effects that you see in your first few weeks on a ketogenic diet.

So yes, the "keto flu" is a real thing. As in fact, you may feel very bad for your first week or two on keto. But to be clear, this isn't *really* the flu. Rather, the "keto flu" refers to an array of side effects that you could face when you go keto.

So, that should raise the obvious question:

WHAT ARE THE KETO SIDE EFFECTS?

There are many potential keto side effects. Since many studies have shown that keto can up your risk of certain issues. And of the potential side effects, these 5 tend to be the most common:

- Hair loss
- Headaches
- Constipation
- Diarrhea
- Bad breath

So now, let's quickly go over all you need to know about these side effects:



SCIENCE AND IRON

KETO AND HAIR LOSS: WILL IT MAKE YOU GO BALD?

Keto and hair loss is a tricky topic to cover. As most of us want to keep all of our hair. And because we don't have many studies on this topic. But with that said, we can make some broad claims about keto and hair loss.

First off, studies do in fact show that keto can up your risk of hair loss [1, 2,3]. That is, when compared to a higher-carb diet. Or, even just in general, compared to a baseline diet.

So indeed, keto can make your hair fall out. What's more, though: this hair loss might persist for many months. And your hair may not come back for up to a year *after* you ditch keto.

Thus, when you go keto, you are more likely to lose your hair. But further, any hair you lose may take many months to return. That is, if this lost hair *ever* comes back at all.

Now, to be frank, that sounds pretty bad. Since most of us wouldn't want to lose any hair *at all*, even if only for a few months. And as such, this next point about keto is pretty major:

While keto ups your risk of hair loss, odds are that you *won't* lose hair on keto. Since truly, only ~10-35% of people lose hair when they go keto. Which means that *most* people *never* have to worry about hair loss on the ketogenic diet.

Hence, you likely won't lose any hair when you go keto. But with that said, only ~0-16.5% of high-carb dieters seem to lose hair. So alas, keto seems to *double* your risk of hair loss.

Now in practice, to lower your odds of losing hair on keto, you'll want to eat a varied diet with many nutrients. Since nutrient deficiency *alone* can boost your risk of hair loss [1, 2,3]. And because keto can up your risk of nutrient deficiency [1, 2,3].

Lastly, to keep all of your hair in place, you should learn how to set up the ideal keto diet. As we help you do in the next email.

KETO AND HEADACHES: WILL THE DIET MAKE YOUR HEAD HURT?

Have you ever heard of a "keto headache?"

Well, if you hadn't known, headaches are one of the most common side effects seen with the "keto flu." Which means that in your first few weeks on keto, you may well suffer from headaches.

In fact, both long and short-term studies (over 13-24 weeks) find more headaches among keto diet subjects [1,2,3]. And to be exact, studies find that 22-80% of keto subjects have a headache *at some point* on the keto diet. Which, is a lot. Since only 13-46% of low-fat dieters report headaches over the same time period.

So, keto seems to up your risk of headaches. At least, over the first few weeks of the diet. Plus, most people (up to 80%) have a headache *at some point* on keto. But note, headaches seem to occur less often as you stick to the diet. So, if you face headaches in your first week of keto, things should calm down over the next few weeks.

And oddly enough, while keto boosts your risk of a headache, the diet has been shown to help fight migraines [2]. Thus, if you already suffer from migraine headaches, keto might help *ease* your pain. Even early on.

CONSTIPATION: WILL KETO MAKE IT HARD TO GO?

In brief, if you're constipated, it means that your stool is unusually hard and large or small. And in general, this can make it very hard to take a crap. As is often the case when you go keto...

To be blunt, keto seems to up your risk of constipation [2, 3,4, 5]. Since roughly ~10 to 63% of people get constipated when they go keto.

But luckily, it seems like this constipation goes away in time [2]. So, if you face constipation on keto, it might only be for a few weeks.

DIARRHEA: WILL KETO MAKE IT HARD NOT TO GO?

Diarrhea is described as a jump in stool frequency, liquidity, or volume. Which, in essence, means that diarrhea makes you crap more, but with "wet" stool.

And if keto doesn't make you constipated, it may give you diarrhea instead. As when studies compare keto to other diets, they see more diarrhea among the keto subjects [1, 2,3].

So at least early on, you might face constipation and/or diarrhea on the keto diet. But in time, these side effects should pass.

BAD BREATH: WILL KETO MAKE YOUR BREATH STINK?

If you've read up on keto, then odds are you've heard about "keto breath." And if you haven't, this just refers to an boost in your breath's acetone levels. As is often seen in your first few weeks on a ketogenic diet.

Now, overall, studies show that *most* keto subjects see bad breath on the diet [1,2, 3,4,5, 6]. Hence, many people who go keto will have bad breath at some point.

So, if you go keto, you can expect to face the infamous "keto breath." At least, for a while. But after you spend some more time in ketosis, this bad breath should fade away.

WHAT TO KNOW ABOUT KETO SIDE EFFECTS

On average, it seems like keto can boost your risk of hair loss, bad breath, diarrhea, constipation, and headaches.

But the thing is, you won't always get these side effects when you go keto. Thus, you may see a few of these side effects if you try the keto diet. But at the same time, you may *never* have any side effects on keto. It all depends on how you respond.

Now, of the above side effects, hair loss may be of the utmost concern. Since that could last for a while. If not the rest of your life. But even so, none of these side effects pose serious health risks. So at this point, you may think to ask:

Is the ketogenic diet safe? Or better yet, is it healthy?

IS KETO SAFE? KETOGENIC DIET HEALTH EFFECTS

To start off, we should note that keto is pretty safe for most people. But, things can get quite complex for some health-related questions.

For example, on the bright side, keto has been shown to help treat neurological disorders [2], type-2 diabetes [2], heart disease, epilepsy, and certain types of cancer. Yet on the other hand, we have mixed results on how keto affects liver health, glucose regulation, cholesterol, and dyslipidemia.

So for any given person, keto might be very healthy. Especially if it helps them lose weight. Since weight loss *alone* tends to boost health [2].

But we need more studies on keto and its health effects. So, you should consult with a healthcare professional before you try out the ketogenic diet.

And now, let's get into the key takeaways:

SUMMARY:

- Keto seems to up your risk of hair loss. And the hair you lose on keto may take months to return. If it ever comes back at all.
- When you go keto, odds are you'll face headaches. Since most studies show that people report more headaches when they go keto. But in time, these headaches should pass. And if you suffer from migraines, then keto may help get rid of those.
- You're more likely to see both constipation and diarrhea when you go keto. Which means that some people will need to crap too often. And others will struggle to crap at all. But most of us will face one issue or the other. At least for our first few weeks on keto.
- Alas, odds are you'll have "keto breath" at some point on keto.
 But luckily, this bad breath should go away after many weeks on the diet.
- Lastly, keto is usually quite safe. But every case is unique. And you should consult with a medical or healthcare professional before you try out a ketogenic diet.

TAKEAWAY

Now you've reached the end of the article. So congrats. As this means that you've learned about all the pros and cons on the ketogenic diet. And now you know whether or not keto can help you lose weight or build muscle. But, that was a lot of reading. So we'll briefly re-hash the main points here:

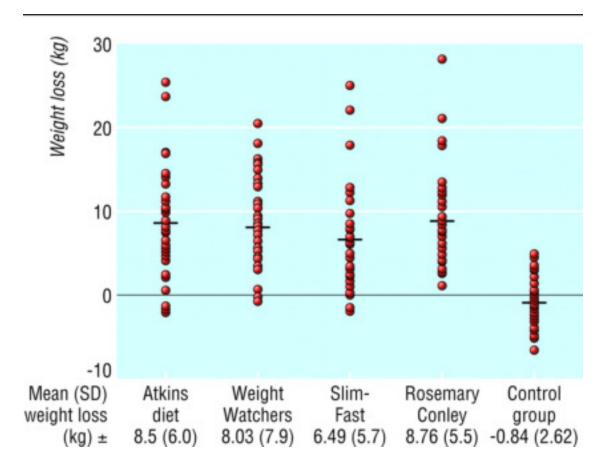
WHAT IS A KETOGENIC DIET AGAIN?

In brief, a ketogenic diet is a low-carb diet that gets your body to burn fat for fuel. And when your body starts using fats for fuel, it begins to make ketones as well. Hence, when you eat a very low-carb diet, your body goes into ketosis.

And those are the keto diet basics. But, odds are you want to know whether keto can help you look better. So let's go over how keto works for fat loss or muscle growth:

HOW KETO WORKS: WEIGHT LOSS & MUSCLE GAIN

At the end of the day, the ketogenic diet may work well for fat loss and muscle gain. Or, it may not. Since all told, we each respond differently to keto:



The above graph shows how we all respond very differently to any diet. As for instance, some people in this study lost ~25-30 kg (55-66 lbs). But at the same time, other people gained weight on the same diet. So all told, the diet that works best for most people, might not work well for you. You'll just have to try and see for yourself. Since the best diet is the one you can stick to. Source

Now, with that said, we can make some general claims about keto. In most cases, the ketogenic diet:

- Helps you lose more weight (via water loss)
- Blunts your appetite and hunger
- Helps you eat less calories
- Is hard to stick with long-term
- Makes it harder to gain strength
- Makes it easier to lose weight
- Might come with many side effects

Of course, results may vary. But, the above usually holds. So below, we give you the take-home points on keto for weight loss or muscle gain:

- 1. Truly, keto may work well for weight loss and muscle gain. Or in other words, you can both cut down and bulk up with a ketogenic diet.
- 2. But with that said, it's often hard gain strength on keto. And at the same time, most of us struggle to eat enough on the keto diet.
- 3. Hence, in most cases, keto should be seen as a tool for weight *loss*. Since cutting carbs should help blunt your appetite. As is best for a cut.

And that's keto 101 for you. So now, if you still want to try keto, then you should learn how to set up your ideal diet:

MAKING YOUR KETO MEAL PLAN: HOW TO EAT KETO?

So, now you've decided that keto would be a good choice for you. But, you might be thinking: *where to begin?*

I mean, odds are you have no idea about how to eat keto, or what a proper keto diet looks like. And before you can start, you need to learn about all the best keto diet foods. Which, could be a lot to take in, you know?

And that's why we've written up an in-depth guide to help you design your ideal keto diet. Complete with many details on making keto meal plans for both weight loss and muscle gain. As you'll see in the next email!

KEY POINTS:

- All told, the ketogenic diet is the best diet for weight loss.
 Because for any given number of calories, you'll lose more weight on keto. Yet, keto is just as good as any other diet for fat loss. Since, when you eat the same amount of calories, you don't lose any more fat on keto.
- Keto tends to blunt your appetite, making it easy to eat less. And so if keto helps you eat less, then it should help you lose more fat. Which is why keto might not be great for bulking...
- Studies show that ketogenic diets can make it hard to gain weight. As most people *lose* weight on keto, even when they try to gain weight. Plus, keto tends to hurt weight lifting performance. At least, when compared to higher-carb diets.
- Now, because keto can make it hard to gain weight and strength, it isn't the best diet for bulking. Because you need to gain weight and strength if you want to max out muscle growth.
- But note, even if you build less muscle on keto, you shouldn't see any *muscle loss*.

At least, not unless you lose weight too fast. Since it's your rate of weight change that plays a huge role in how much fat/muscle you'll gain or lose...

TAKE YOUR GAINS TO THE NEXT LEVEL

In the end, keto or not, your calorie intake will determine if you'll gain or lose weight or muscle. And as you've just learned, keto might make it harder to accomplish these goals. Which makes it that much more crucial to have your calorie intake down. Hence why we wrote this piece to help you do that.



ABOUT VINCENT

FOUNDER, AUTHOR, AND ONLINE TRAINER

Most known for his writing research, Vincent has published dozens of research articles for credible fitness websites.

When he is not writing, researching or lifting weights, he enjoys reading and exploring the outdoors.

He currently runs his own website, scienceandiron.net, where you can find many research-based articles on diet and lifting. Mostly about how to lose weight and build muscle.

Or, in other words, Vincent writes about the simple science of fitness. In an effort to help others build their dream bodies, with less effort.

If you want to read more from Vincent, you can follow him on Facebook, Instagram, Twitter, or LinkedIn. And if you have any questions, you can send him an email.

DISCLAIMER

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