

The Low Down on Low Carb and Keto Diets - Is It For You?

What is a low carb diet?

It is a short term approach to calorie deficit, by eliminating or reducing the daily intake of a macronutrient, carbohydrates in your diet. This means eating less of not only grains (rice, wheat, quinoa, oatmeal), but also dairy, vegetables and fruits, and of course, sugar. *In a low carb diet, the golden standard is usually eating less than 100 g of carbs per day* (this is also dependent on an individual's body weight, metabolism, health conditions, etc...). *In a ketogenic diet, it is even more extreme and is usually less than 30 - 50 g of carbohydrates per day.* Sounds easy? Think again. 30 g of carbs roughly translates to 1 cup of whole milk, 1 cup of cooked green beans and 1 slice of whole wheat toast (~25 g), in an entire day. That's it!

Why does this work?

Two words - calorie deficit. We are a culture that overeats carbohydrates. Be it in the form of sugar, or just being on a calorie surplus, without adequate inclusion of protein and fresh produce. Given this, when we remove most of the foods that we usually tend to binge on, and add a layer of calorie deficit to it, the process results in weight loss.

To add to this point, a review by ISSN (International Society of Sports Nutrition) in 2017 comparing various diets (macronutrients) and their effect on body composition found that a wide range of dietary approaches (low-fat to low-carbohydrate/ketogenic, and all points between) can be similarly effective for improving body composition. In fact, the long-term success of any diet depends upon compliance, more than some random parameters (grams of carbs consumed per day).

Why all the fuss then, one may wonder.

To quote James Fell,

“Eat less” doesn't sell diet books, but “Eat bacon” does.

Is low carb diet answer to all our problems?

Notice the word “diet” at the end of the phrase? Well, that's exactly what this is. In the initial phase, due to severe calorie restriction and near elimination of an entire food group - you will lose weight. Do note that most of this, is water weight - not eating carbs results in depletion of muscle glycogen, and that in turn results in water being lost from the body.

However, we are a sly bunch, with creative shortcuts and loophole identification right at our

disposal. We find ways to start eating what we crave and enjoy, but with a “keto” label slathered over it. Did you know that keto desserts are a thing? It is an oxymoron, but apparently not enough to prevent its existence in the first place. A single serving size of one of the popular brands of “keto cookies” available in the market contained 7 g of carbs per 20 g product (And we know, you never stop with one). The ingredients listed were peanut butter, oat and almond flour, fiber, emulsifiers and seven different types of sweeteners. Explain to us, how this is low carb again. Given all these options and hacks, the steady inclusion of “low carb desserts” to satisfy your cravings, and dollops of butter in your coffee, results in you putting back on whatever weight you lost in the first place.

Who does it work for?

- For folks who prefer (and are accustomed to) eating a high fat diet
- When carbs usually tend to make you feel sluggish
- If you are someone who is experienced in mindful eating and portion control.
- Ketogenic diets have been prescribed for people with epilepsy before to reduce seizure frequency.

As with any program, an individual's adherence and preference is key to success. Keto/ Low carb diet has also been shown to improve satiety (low to moderate benefit) in certain people while dieting.

What happens to your body when you are on poorly designed low carb diet?

Irrespective of what the #instabros claim, you may have to pay a price for a drastic and ‘poorly thought out’ carb reduction. A lot of us tend to overeat carbohydrates, and when we jump over to the keto bandwagon, here are some of the commonly observed side effects that you may experience -

- Lowered T3 (thyroid) hormone levels
- Increased stress
- Decreased testosterone levels
- Changes in mood and cognitive function
- A decrease in athletic performance

It is crucial to note that the symptoms listed above will vary person to person. There are several variables at play here, and we recommend close monitoring during execution of the programme, particularly if you experience any of the above side effects.

Athletic performance and keto diets

Before we get into this, let's talk about anecdotal evidence vs. controlled studies. There is a significant difference between one "athlete" (sponsored by a keto brownie brand) talking about his/her performance on Instagram, vs. multiple, scientific studies executed by researchers where they mathematically measure performance.

Saying this, if you are training for one or two marathons in a year, and decide to go on a keto diet, you may still do alright. But does this make fats a superior source of fuel for your body? Not at all. [Alan Aragon](#) has a few words on this - "When using fat for fuel, you can't access that energy as quickly. With fat, you have a bigger pool of energy, but you can only drain it with a straw. With carbs, the pool is smaller but you can drain it with a firehose."

What does this mean? In activities involving low to moderate intensity work, you may get away with lack of carbohydrates in your diet. But, if you have to ramp up the intensity at all, or go heavy on volume, your performance will be suboptimal, to put it mildly. This explains why "keto adapted" people have impaired sprint performance.

To summarize, consuming carbohydrates make energy utilization in our bodies simpler, and more efficient. Why make it harder?

It is important to note that carbohydrate depletion has a more severe impact on elite athletes vs. a predominantly sedentary population that does moderate intensity training thrice a week. The amount of carbohydrates ingested should and can be dependent on the activity level and volume. And do remember, nobody is making an argument for chugging chocolate milkshakes or wolfing down pasta here. The focus is always on whole grains, fresh produce and limiting sugar.

But, I am "fat adapted"...

What is fat adaptation? Athletes and proponents of keto diet claim that their bodies are fat adapted i.e given the duration of the program they have been on, their bodies have gotten used to burning fat as fuel, instead of glucose.

Sure, on a diet where most of your energy comes from dietary fats, you do use more fat. Aka the rate of fat oxidation for energy is higher than average. But, how is this an indication of how much better you have gotten at the process?

Additionally, burning more fat does not in any way extend to improved performance or an efficient fat loss process. There will be no difference in body fat in low carb vs. low fat diet, as long as you equate protein and total calories. So, all those ketone supplementations you see prop up on your feed, are probably not going to help you get any closer to fat adaptation.

"I am a vegetarian, but I keto hard."

Here is where “the why” matters. Ask yourself why you want to be on a program that restricts carbohydrates like lentils and legumes, which also double up as your sources of protein and come with a plethora of micronutrients. In a carb-restricted diet, your options for protein are then limited to paneer (or tofu), dairy and protein supplementation. A diet that eliminates grains, legumes, produce and is high in saturated fats is probably not the best approach to health and sustainable eating. There are several pragmatic approaches to fat loss, and this may not be one of them.

Who should be cautious with experimenting with this program?

- People with a pre-existing thyroid condition
- Insulin resistance, irregularity in menstruation and PCOS
- Folks with a predisposition to or an existing cardiovascular condition.
- Chronic fatigue
- If you suffer from anxiety, depression or other mental health issues.
- Existing digestive disorder

Factors to consider before going on a keto/ low carb diet:

The low carb or keto approach is not for the meek for more than one reason. Proteins and dietary fats are expensive. Eliminating an entire food group would require getting creative and diverse with your protein sources (aka your wallet tends to be a lot lighter). Grocery shopping (sourcing good quality fats and proteins) and meal prep (coming up with meal combinations that put you well under your carb limit) can take quite a bit of effort. You may have to invest in multivitamin/mineral supplements, based on the gaps in your eating, and add in fibre as well (to ensure optimal digestion). Eating out is harder, particularly in a country like India given the quality and range of fats, and the self imposed restriction with produce and starch options.

Conclusion:

There will no dearth of dietary fads as long as food, human beings and celebrities exist. Some of them may be rational, some them downright outrageous. Remember to exercise sensibility when you decide to experiment with any program, or diet. Does it make sense to your goal? Are there saner, more moderate options? Does the program have a proven scientific benefit, or are you paying attention to it because Gwyneth Paltrow wrote a book about it.

Think about your “why”, have checkpoints, and talk to an expert before you run with it.

Sources:

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