

## Guest Articles

## What is KETO?

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The word keto is derived from the word ketosis. Ketosis is a normal metabolic process. When the body does not have enough glucose for energy, it burns stored fats instead which results in a build-up of acids called ketones within the body. Some people encourage ketosis by following a diet called the ketogenic or low-carb diet or keto diet.

The keto diet, with a low carbohydrate and high-fat eating plan, involves drastically reducing the carbohydrate intake and replacing it with fat. The diet results in putting the body into the metabolic state which is ketosis. When this happens, the body becomes incredibly efficient at burning fat for energy. The diet is said to result in significant weight loss, but also improves mental focus, blood pressure, strength and also reduces migraines.

One expert says “On a ketonic diet, your entire body switches its fuel supply to fat”. Insulin levels become very low and fat burning increases dramatically. It becomes easy to access fat stores and to burn them off.

Natural fats including butter and olive oil, meats, fish, seafood, eggs, cheese, and vegetables that grow above ground can be considered as keto-diet foods.

The most important thing is to keep your daily carbohydrate intake under 50 grams and ideally below 20 grams. The lower the carbohydrate intake, the more effective the keto-diet will be. That means the vegetarians can never be on a keto-diet.

Foods such as potatoes, rice, pasta, bread, chocolates, soft drinks, lollies, and doughnuts are definitely not to be included in your diet, if you want to be on a keto-diet and lose weight.

You can drink water, coffee, and tea with minimal or no milk and sugar. An occasional glass of wine is considered to be acceptable.

Shifting your body into a ketogenic state is no easy feat given that you have to subsist on a diet composed of 20 percent protein, 75 percent fat and 5 percent carbohydrate. Sports scientists say it takes the body anywhere from two weeks to six months to move into a ketogenic state.

“Once done, it’s done, and you have achieved fat-burning status that can stick with you for life,” writes a sports scientist, Greenfield, who says the ketogenic diet improved his triathlon performance, reduced hunger, improved mental clarity, reduced gas and bloating, and lowered inflammation markers. The keto lifestyle also puts you at risk of some significant side effects. “There is a risk of constipation because sometimes you are not getting as much fibre,

and there is a risk of calcium deficiency as people often cut out dairy,” Greenfield says.

Diabetes UK warns that actively trying to get your body into ketosis is potentially dangerous because high levels of ketones can make the blood acidic. In fact, ketosis sets in the case of diabetics with high blood sugar levels. In this case the body is unable to use the glucose in the blood due to lack of insulin and the body relies on body fats to produce what is often referred to as ketoacidosis. Without enough insulin, the body’s cells cannot use glucose for energy. To make up for this, the body begins to burn fat for energy instead. This leads to accumulation of ketones in the blood which also appear in the urine.

Ketoacidosis is related to hyperglycaemia and it occurs in people with type 1 diabetes, it very rarely occurs in people with type 2 diabetes.

A ketogenic diet can lead to high cholesterol, triglycerides and thyroid issues. Some people feel they have reduced energy although reports have indicated increased energy.

It’s very difficult to follow such a strict diet in today’s culture, especially anybody who wants to have a social life.

There is a place for ketosis. It is a good state to aim for if you are overweight or have insulin resistance or Type 2 diabetes. However it is not to be recommended for a person of average weight who just wants to drop a few kilos.