Keto-Diet is Not Safe in the Long Term

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What is keto-diet?

There has been much debate about the Keto diet for some time now. Among the issues surrounding the subject is its safety as well as implications towards weight management. Precisely, its relationship with weight loss. First, let me begin by defining what a Keto diet is. Keto diet refers to a diet that is low in carbohydrate while rich in fat. While the diet has come to limelight lately, it has been in existence for centuries where it has been applied in both the management and treatment of particular medical conditions. The most common previous application is its use to control diabetes in the 19th Century. Besides, according to data received from Harvard University, Open Nutrition Source library, the diet was introduced in 1920 as an effective treatment for epilepsy in children whose contemporary medication proved ineffective. Further, the diet has been not just tested but also applied in closely monitored environments for cancer, diabetes, polycystic ovary syndrome, and Alzheimer’s disease.

Amidst the increasing prevalence of diabetes among other Non-communicable diseases associated with overweight and obesity, the diet has lately received significant focus as a noumenon weight-loss strategy as its low-carbohydrate diet.

How it works

The diet is based on the idea that when you deprive the body of its primary source of energy, that is the glucose (primarily got from carbohydrate consumption), the body uses an alternative source of energy, the ketones (which the body get from the stored fats). Since the brain does not store glucose, it needs a steady daily supply of about 120g. However, minimal amounts of carbohydrate are eaten during fasting. Thus, the body retrieves stored glucose from the liver while it temporarily used muscle to produce glucose. When this happens for about 3-4 days, the glucose stored is depleted. As a consequence, insulin levels decrease, and the body starts to use fat as the primary source of energy. This process causes the liver to produce ketone bodies from fat, which is used when the body does not have glucose.

The problem

Ketones accumulate in the blood in a process called ketosis. Ideally, healthy persons have mild ketosis when fasting, for instance, when sleeping at night and during extremely strenuous activities. While proposing the diet, the proponents note that the diet ought to be carefully followed to ensure that the presence of the ketone in the blood level should not get to dangerous levels, a state is known as ketoacidosis. While preventing ketoacidosis is possible, it is difficult since the ketosis process is individualized and rely on other factors like an individual’s body-fat composition as well as their resting metabolic rate.

A keto diet is indeed effective for weight management in the short term, but what are its effects in the long term? It is not healthy. The diet emphasizes on a high intake of fats (an idea that I do not agree with) as the implications of excessive fat consumption, especially if the fats are selected from unhealthy types. The diet thus, in the long run, predisposes one to fatal health risks, including some types of cancers and cardiovascular diseases.