A Survey on Risk Assessment Among Populations After Following Keto Diet

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Abstract
The prevalence of obesity has been rapidly rising over the few decades globally and in India. Obesity also predisposes individuals to type 2 diabetes, hypertension and cardiovascular disease apart from osteoarthritis, sleep apnoea and even some forms of cancer. Obese individuals are also prone to psychological issues such as low self-esteem and depression. Medical intervention to manage obesity is very few, and most of them only work with a robust lifestyle intervention programme. This leads to frustration among individuals with obesity, leading them to resort to extreme dietary interventions to obtain quick weight loss. One such extreme dietary intervention which has gained popularity in recent years is the ketogenic diet. Ketogenic diets are characterized by a marked reduction in carbohydrates (usually to <50 g/day) and a relative increase in the proportions of protein and fat. Besides a positive effect on weight loss, studies have shown that low-carbohydrate ketogenic diets also reduce serum triglycerides dramatically. However, there are also several adverse effects of ketogenic diets. These include muscle cramps, bad breath, changes in bowel habits, keto-flu and loss of energy.

Keywords
Keto diet, blood sugar levels, keto flu, low carbohydrate.

INTRODUCTION
The ketogenic or “keto” diet is a low-carbohydrate, fat-rich eating plan that has been used for centuries to treat specific medical conditions. In the 19th century, the ketogenic diet was commonly used to help control diabetes. In 1920 it was introduced as an effective treatment for epilepsy in children in whom medication was ineffective. The ketogenic diet has also been tested and used in closely monitored settings for cancer, diabetes, polycystic ovary syndrome, and Alzheimer’s disease. However, this diet is gaining considerable attention as a potential weight-loss strategy due to the low-carb diet craze, which started in the 1970s with the Atkins diet (a very low-carbohydrate, high-protein diet, which was a commercial success and popularized low-carb diets to a new level). Today, other low-carb diets including the Paleo, South Beach, and Dukan diets are all high in protein but moderate in fat. In contrast, the ketogenic diet is distinctive for its exceptionally high-fat content, typically 70% to 80%, though with only a moderate intake of protein."
MATERIALS AND METHODS
A survey proforma was prepared including the present and past medical history, diet they are following, carbohydrate and protein content, food habits, fatigue, timings of food intake, exercise etc.

INCLUSION CRITERIA
- Residents of Guntur region who are following keto diet without any bar of age, sex, caste and religion.

EXCLUSION CRITERIA
- People outside Guntur region.
- Patients with known case of TB, Severe HTN and other malignancies.

SELECTION OF PATIENTS
- People who take keto diet to their knowledge are selected.
- Patients with frequent morning headaches, diabetes, increased thirst, dry mouth, increased appetite.

OBSERVATIONS AND RESULTS
Present survey was conducted in 100 patients. Out of 100 patients, when BMI is calculated, 58% of people were found as overweight and that is the prior reason for them to follow keto diet. The second important diagnosis is 55% of the people who are following keto diet have diabetes and are at an age of 50-80 years. Their sugar levels monitored and found that the keto diet doesn’t help them to decrease diabetic levels. 57% of population never does exercise and simply saying they are following the keto diet instead of exercise. 33% have high work stress and 26% have very high work stress. The important identification is that, 61% of the populations are not yet completely aware of the education regarding keto diet. 46% of people are also facing health effects due to this keto diet.

CONCLUSION
Medical intervention to manage obesity is very few, and most of them only work with a robust lifestyle intervention programme. This leads to frustration among individuals with obesity, leading them to resort to extreme dietary interventions to obtain quick weight loss. One such extreme dietary intervention which has gained popularity in recent years is the ketogenic diet. Ketogenic diets are characterized by a marked reduction in carbohydrates (usually to <50 g/day) and a relative increase in the proportions of protein and fat.
Besides a positive effect on weight loss, studies have shown that low-carbohydrate ketogenic diets also reduce serum triglycerides dramatically. However, there are also several adverse effects of ketogenic diets. These include muscle cramps, bad breath, changes in bowel habits, keto-flu and loss of energy. That is why, it is recommended to have complete education and awareness on keto diet before starting it.

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