

Study Examines the Heart Risks and Benefits of Today's Most Popular Fad Diets

Researchers examine claims associated with keto and intermittent fasting

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DENVER — In a review of existing scientific studies on trendy ketogenic and intermittent fasting diets, researchers at National Jewish Health concluded that these diets do seem to help people lose weight in the short-term, and modest evidence suggests they may contribute to cardiovascular health. However, these diets also allow consumption of foods that are known to increase cardiovascular risk and are unlikely to be as effective at preventing heart disease as well-established nutritional guidelines currently recommended by health experts.



“With diets like keto and intermittent fasting, social and popular media has been flooded with claims, promises and warnings that are at best unverified and at worst harmful to your health,” said [Andrew Freeman, MD](#), director of cardiovascular prevention and wellness at National Jewish Health and co-author of the study. “Diets recommended by health experts, such as plant-based and Mediterranean diets, have been extensively studied for safety and efficacy, and demonstrated conclusively to improve cardiovascular health.”

Keto is a very low carbohydrate dietary approach that sends the body into ketosis, a metabolic state in which it has reduced access to glucose and is instead mostly fueled by fat. While the limited study of the keto diet shows those who follow it initially lose weight, it tends not to be sustainable according to 12-month data. It is also unclear whether the weight loss is caused by ketosis or simply by calorie restriction.

Researchers also have concerns about the type and amount of fat consumed by those following a keto diet. While existing studies strictly controlled the type of fat and foods participants consumed, many who try keto consume high amounts of unhealthy saturated fat, which is associated with an increased risk of heart disease and high lipid levels in the blood. There is also evidence that eating a keto diet for an extended period of time may lead to stiffening of the arteries, and several studies found that those who eat a keto diet have a greater risk of death.

Keto does, however, show promise as a potential treatment for diabetes, with studies showing improved glucose levels as well as lower fasting glucose and insulin levels in mice fed a keto diet. Further research is needed to confirm these benefits and assess risk before keto is clinically recommended.

Researchers are also optimistic about potential health benefits of intermittent fasting, but are concerned about possible pitfalls. There are a wide range of practices being called “intermittent fasting”, with some fasting without food an entire day and others restricting meals to certain hours of the day. Experts also worry that the hunger induced by fasting causes many people to overeat when it is time for meals, or make unhealthy choices that have adverse effects on their cardiovascular health.

A majority of the current evidence regarding the potential benefits of intermittent fasting come from animal studies, which have shown increased longevity, weight loss, decreased blood pressure, improved glucose tolerance and

controlled lipid levels.

“The potential risks of intermittent fasting that require further study include effects of starvation and how it may impact organ function,” Dr. Freeman said. “It is particularly important for diabetics to speak with their doctor before trying intermittent fasting to discuss how to control their disease and the risk of hypoglycemia that may come with skipping regular meals.”

While there is modest evidence regarding favorable effects of both dietary approaches, neither the keto nor intermittent fasting is recommended for the treatment or prevention of any condition until large, long-term studies can more definitively examine their impact. Instead, experts recommend diets that have been extensively studied and scientifically proven to prevent or even reverse cardiovascular issues, which include the mediterranean diet, a whole food plant-based diet and the National Institutes of Health’s Dietary Approaches to Stop Hypertension (DASH). All of these share a common foundation that includes fruits, vegetables, legumes, nuts and whole grains.

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