

Harmful effects of High-Protein Diet - induced weight loss.

Gema Nieto*

Department of Food science and Nutrition, University of Leicester, Leicester, UK

Introduction

In recent years, high-protein diets have become increasingly popular among people looking to lose weight. The idea is that by increasing the amount of protein in your diet, you can boost your metabolism, reduce hunger, and promote weight loss. While there may be some truth to these claims, there are also some potential downsides to following a high-protein diet, particularly if it is not done correctly or if it is taken to an extreme.

One of the main concerns with high-protein diets is the potential harm they can cause to your kidneys. When you eat protein, your body breaks it down into its component parts, including nitrogen. This nitrogen is then excreted in the form of urea, which is filtered out of your blood by your kidneys. If you consume too much protein, however, your kidneys may struggle to keep up with the increased workload, leading to a condition known as proteinuria. Over time, this can lead to kidney damage and even kidney failure [1].

Another concern with high-protein diets is the effect they can have on your heart health. Studies have shown that people who consume large amounts of animal protein, in particular, are at a higher risk for heart disease. This is thought to be due to the fact that animal protein is high in saturated fat and cholesterol, which can contribute to the buildup of plaque in your arteries. Additionally, high-protein diets often include a lot of red meat, which has been linked to an increased risk of colon cancer.

In addition to the potential harm to your kidneys and heart, high-protein diets can also be hard on your digestive system. When you eat a lot of protein, your body produces more stomach acid to help break it down. This can lead to heartburn, acid reflux, and other digestive issues. Additionally, high-protein diets often lack the fiber and other nutrients that are important for maintaining a healthy gut microbiome. This can lead to constipation, diarrhea, and other digestive problems [2].

Another potential downside of high-protein diets is that they can be difficult to sustain over the long term. Because protein is so filling, you may find yourself feeling satisfied with smaller portions at first. However, over time, this can become monotonous and boring, leading to cravings for other foods. Additionally, high-protein diets can be expensive, as animal protein tends to be more expensive than plant-based protein sources [3].

Despite these potential downsides, there are some benefits to high-protein diets, particularly for people who are trying to lose weight. Protein is known to be more filling than carbohydrates or fats, so increasing your protein intake can help you feel fuller for longer. Additionally, protein has been shown to boost your metabolism, which can help you burn more calories throughout the day. Finally, because high-protein diets often exclude carbohydrates and sugars, they can help regulate your blood sugar levels and reduce your risk of developing type 2 diabetes.

So, what's the bottom line? While high-protein diets can be an effective way to lose weight in the short term, they may not be the best option for everyone. If you have kidney disease, heart disease, or other health concerns, you should consult with your doctor before starting a high-protein diet. Additionally, it's important to make sure you are getting enough fiber and other nutrients from sources other than protein. Finally, if you do decide to follow a high-protein diet, be sure to choose lean sources of protein like chicken, fish, and plant-based proteins like beans and tofu, and to include plenty of fruits and vegetables in your diet to help balance out your nutrient intake [4].

Another important consideration when following a high-protein diet is the quality of the protein you consume. Not all protein sources are created equal, and some are more nutritious than others. For example, plant-based proteins like beans, lentils, and tofu are often high in fiber and other nutrients, while animal proteins like red meat and processed meats are high in saturated fat and cholesterol.

When it comes to weight loss, the most important factor is creating a calorie deficit, or burning more calories than you consume. While high-protein diets can help with this by boosting your metabolism and reducing hunger, they are not a magic solution for weight loss. To lose weight safely and effectively, it's important to make sustainable changes to your overall diet and lifestyle, including increasing physical activity, reducing portion sizes, and eating a variety of nutrient-dense foods [5].

Conclusion

High-protein diets can be an effective way to promote weight loss and improve metabolic health, but they are not without potential risks and downsides. To ensure that you are getting the most benefit from a high-protein diet, it's important to choose lean sources of protein, include plenty of fruits and vegetables, and monitor your kidney function and other health indicators closely. Additionally, it's important to view high-

*Correspondence to: Gema Nieto, Department of Food science and Nutrition, University of Leicester, Leicester, UK, E-mail: Gemanieto535@le.ac.uk

Received: 24-Feb-2023, Manuscript No. AAJFSN-23-90108; Editor assigned: 28-Feb-2023, PreQC No. AAJFSN-23-90108 (PQ); Reviewed: 14-Mar-2023, QC No. AAJFSN-23-90108; Revised: 20-Mar-2023, QC No. AAJFSN-23-90108 (R); Published: 27-Mar-2023, DOI:10.35841/aaifsn-6.2.173

protein diets as part of an overall healthy lifestyle, including regular physical activity and a balanced, varied diet. By approaching weight loss in a holistic way, you can achieve your goals while also promoting optimal health and well-being.’.

References

1. Westerterp-Plantenga MS, Nieuwenhuizen A, Tome D, et al. Dietary protein, weight loss, and weight maintenance. *Annu Rev Nutr.* 2009;29:21-41.
2. Acheson KJ. Diets for body weight control and health: the potential of changing the macronutrient composition. *Eur J Clin Nutr.* 2013;67(5):462-6.
3. Wycherley TP, Moran LJ, Clifton PM, et al. Effects of energy-restricted high-protein, low-fat compared with standard-protein, low-fat diets: a meta-analysis of randomized controlled trials. *Am J Clin Nutr.* 2012;96(6):1281-98.
4. Santesso N, Akl EA, Bianchi M, et al. Effects of higher-versus lower-protein diets on health outcomes: a systematic review and meta-analysis. *Eur J Clin Nutr.* 2012;66(7):780-8.
5. Lejeune MP, Kovacs EM, Westerterp-Plantenga MS. Additional protein intake limits weight regain after weight loss in humans. *Br J Nutr.* 2005;93(2):281-9.