

# Weight loss and use of a low carbohydrate diet research papers examples

[Health & Medicine](#), [Obesity](#)



Weight loss is increasingly becoming the goal of many people in an effort to fight obesity, a global health issue which is associated with an array of health concerns, including heart diseases and diabetes. As such, nutritionists, patients and healthcare personnel have always looked for solutions to this increasingly serious disease. Researchers have suggested that high-fat and high-cholesterol diets increase the risk for obesity, recommending consumption low-carbohydrate and low-fat diets. This led to a scenario where all food companies designed their food to make them low in fat and carbohydrates to enhance weight loss. Seeing as there is a lack of strong research consensus as to how much fat and carbohydrates one should consume in a day to lose weight, researchers have been exploring other treatments. This paper presentation discusses weight loss and the use of low-carbohydrate diets. As well as recommends lorcaserin and the phentermine-topiramate combination as viable, evidence-based treatments that have been approved by the Food and Drugs Administration for use in achieving sustainable weight loss.

## **Weight Loss**

Obesity is a serious health problem that affects people in virtually all parts of the world, necessitating weight loss among obese people. The health condition is associated with multiple diseases such as heart diseases, cancers and diabetes and hypertension (Kushner, Apovian and Fujiona 2013). Over the years, researchers have tried to develop weight loss treatments. Dietary therapies including low-fat diets (LFDs) and low-calorie-diet (LCDs) have been used to achieve weight loss and manage this health condition (Kushner et al. 2013). However, despite the use of low-fat, calorie-

deficient diet interventions which are acceptable, obesity has continued to increase in the general population (Disease entity definition).

While LCDs have been shown to cause a decrease in weight among obese individuals, a majority of the studies that reported these findings conducted clinical tests of no more than six months (Bravata et al. 2003). According to Foreyt et al. 2009), the efficiency of the LCDs and LFDs in the short term can be attributed to spontaneous decrease in energy intake and the satiating effect of proteins, which are major components of the diets. Considering the seriousness of obesity and the apparent inefficiency of LCDs and LFDs in the long-term weight loss, it is imperative that more effective, evidence-based interventions are used to control the health condition (Available treatment, EBM). A new treatment is explored here.

## **Treatment**

While use of low-carbohydrate diets has shown positive results as evidenced by multiple studies, their sustainability has been inconclusive. According to Kushner et al. (2013), only a minority of overweight patients who follow dietary interventions are able to maintain weight loss over an extended time. To this end, a more recent treatment using lorcaserin and the phentermine-topiramate combination has been shown to be more effective in treating obese patient. Lorcaserin functions by reducing food intake, by stimulating the release of alpha-melanocyte-stimulating hormone from the hypothalamic POMC neurons. This stimulation causes an increase in satiety and appetite, hence a reduction in food intake, leading to weight loss (Kushner et al. (2013). Lorcaserin is more selective, which reduces the risks of association

with valvulopathy (new treatment, EBM).

The phentermine-topiramate combination is appropriate for patients with an initial BMI equal to or more than 30kg/m<sup>2</sup> or 27 kg/m<sup>2</sup> where there is patient comorbidity related to obesity (Kushner et al. 2013). This treatment combination has appetite-reducing (due to the phentermine) and satiety-prolonging effects (due to the topiramate). The combinatorial use of phentermine and topiramate increases their effectiveness, reduces the dosing of the individual medications, and the two medications reduce each other's side effects (Kushner et al. 2013). The two-evidence-based treatments options for weight loss were approved by FDA based on their effectiveness in the long-term. Using these medications, obese patients are able to maintain weight loss in the long-term. Moreover, the new medications have few side effects compared to previous treatments such as fenfluramine.

## **Recommendations**

Low-carbohydrate diets have are effective in weight loss and should be used following evidence-based recommendations. In addition, the new treatments based on reduction of food intake have been shown, through clinical tests to be effective in the long-term (Kushner et al. 2013). This is unlike dietary interventions which, despite being effective, evidence is limited as to their long-term effects on weight loss. Based on this premise, it is recommended that nursing personnel and nutritionists consider applying the aforementioned new weight loss treatments. In developing long-term, individualized strategies for optimal health outcomes among patient with

obesity, it is imperative that healthcare personnel consider the existing evidence and the evaluation results of specific patient to determine the best treatment plan. The medications can be used in combination with low-fat and low-carbohydrate diets with a view to achieving optimal weight loss results for the patients. Because the treatments have been shown to be effective in the long, combining them with LCDs and LFDs can go a long way in overcoming the challenges associated with the latter, namely inability for patients using them to maintain weight loss in the long term (Kushner et al. 2013).

## **Conclusion**

In conclusion, dietary interventions such as LCDs and LFDs have been used to manage obesity for decades. They are currently in use, primarily because they lead to weight loss. However, they are limited in that a majority of patients who followed the therapies are unable to maintain weight loss in the long-term. As such, the new treatments (use of lorcaserin and the phentermine-topiramate combination) have been shown to be more effective in the long-term, as they have satiety-prolonging and appetite-limiting effects, besides having only minimal side effects. It is recommended that development of optimal treatment strategies for patient with obesity consider these new treatments.

## **Works Cited**

Bravata, D. M., Sanders L., et al. Efficacy and safety of low-carbohydrate diets: a systematic

Review. *Journal of American Medical Association*, 289. 14 (2003): 1837-1850.

<https://assignbuster.com/weight-loss-and-use-of-a-low-carbohydrate-diet-research-papers-examples/>

Foreyt, John, P., Salas-Salvado Jordi, et al. Weight-reducing diets: Are there any Differences?

Nutrition Reviews, 67. 1 (2009): 99-101.

Kushner, R. F., Apovian C. M., and Fujioka K. Obesity consults-comprehensive obesity

Management in 2013: Understanding the shifting paradigm. Obesity (Silver Spring), 21. 2 (2013): 1-15.