

# High-fat diets and endurance research paper example

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



The use of fat in the context of athletics remains one of the most equivocal topics across various parts of the globe. This is because there exists varied opinions on the efficiency of fats in enhancing performance of endurance athletes. Nonetheless, the arguments postulated by those in support and in opposition of the use of fats in athletics are justified in a number of ways. Those in support of the use of high fat diets to enhance the performance of endurance athletes postulate that high fat diets proved a more concentrated form of energy, which is certainly crucial during periods of exercise that are often characterised by the increased energy needs. Such notions are substantive based on the fact that one gram of fat provides close to nine kilocalories, when compared to carbohydrates whose one gram provides only four kilocalories of energy (Williams, 2012). Notably, various endurance athletes have indeed confirmed that high fat diets have a positive influence on their performance. This confirms the notions that high fat diets have a positive implication on performance on endurance athletes.

Often referred as ketogenic diets, high fat diets have an increased capability to increase the fat oxidation, particularly during periods of increased exercise. This offers a comprehensive platform that increases endurance amongst athletes. In a nutshell, oxidation is the primary way in which the human body derives energy. Fats are often more prone to oxidation than carbohydrates. Therefore, consumption of high fat diets increases the rate of oxidation in the body, which results in a subsequent increase in energy production, which elevates the performance of endurance athletes. On another note, those in support of the notion that high fat diets are recommendable for endurance athletes assert that high fat diets increases

the rate at which hormone testosterone is released in the body when compared to carbohydrate diets that lower testosterone levels. An increase in the testosterone levels in the body increase endurance of athletes because it gives them power to engage in various athletic activities such as cycling (Williams, 2012).

While much has been hypothesized regarding the essence of high fat diets in enhancing the endurance of athletes, it is imperative to note that such notions have been opposed significantly by various dietetics practitioners. In fact, there are various reasons that indicate that indeed high fat diets are not suitable for enhancing endurance. More importantly, the use of fats as the principal source of vitality can be fatal because it results in ketoacidosis. Speaking of ketoacidosis, this connotes to a condition resulting from the release of ketone bodies when fats are oxidized to provide energy. The ketone bodies released from fat breakdown increases the availability of free radicals in the body, which can lead to coma and eventual death. This analysis shows that despite the fact that high fat diet can provide energy suitable for endurance athletes, it has wider implications that are not desirable (Williams, 2012).

On a similar note, the use of high fat diets in enhancing the endurance of athletes has been opposed based in the fact that fats cannot be oxidized for use as energy in the absence of carbohydrates. Precisely, fats have to be mixed with carbohydrates in order for the fats to be utilized. This is evident by the famous saying “ fats can only burn in the flame of carbohydrates.” Therefore, consuming high fat diet with the thought that it will offer more energy can be tragic because fats cannot be metabolized in the absence of

carbohydrates. With regards to this, the body's preferred source of energy or fuel when carrying out an endurance sport is glycogen (Williams, 2012). Therefore, use of fats instead of glycogen results in fatigue and inability to maintain racing or training intensity.

## **Reference**

Williams, M. H. (2012) Nutrition for health, fitness, & sport (10th Ed.) New York: McGraw-Hill.