

The Role of Vegan Diet on Health and Fitness

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ABSTRACT

Purpose: Veganism, which is a philosophy consisting of different aspects in itself from a dietary pattern to attitude towards the environment, with both personal and common goals, has been getting widespread all over the world. In a vegan diet, abstained nutritional sources could be substituted by various alternatives so that necessary intakes of vitamins and minerals could be met.

Methods: In the search for scientific literature related to this review the US National Library of Medicine (PubMed) used MEDLINE and SportDiscus data. The relevant literature has also taken its source from the research of relevant articles from reference lists derived from data studies.

Results: When all the possible advantages of a vegan diet are taken into consideration, one could state that a vegan diet provides various benefits for health. Besides, according to some studies, it could be also beneficial for the environment. Therefore, the awareness related to it should be increased and vegans should be encouraged.

Conclusion: Studies indicate that a vegan diet has a wide range of advantages on overall health such as protecting against various diseases such as cancer, type II diabetes, cardiovascular diseases, ischaemic heart disease.

Introduction

Nowadays, the habits of nutrition and practices have been changing considerably and rapidly as new ideas and intentions have emerged. These ideas have generally been developed and adopted by people with a specific aim. Among these practices, veganism, which is also a philosophy, has recently become prominent and widely been adopted by a great number of people all over the world. The Vegan Society defines veganism and states: "Veganism is a philosophy and way of living which seeks to exclude—as far as is possible and practicable—all forms of exploitation of, and cruelty to, animals for food, clothing or any other purpose; and by extension, promotes the development and use of animal-free alternatives for

the benefit of animals, humans and the environment. In dietary terms, it denotes the practice of dispensing with all products derived wholly or partly from animals." (The Vegan Society [1]). Regarding this definition, it is possible to point out various factors of veganism from its motives to its practices. In this study, we will discuss the nutritional aspect of veganism as distinguished from its other dimensions. In vegan diets, various components should be kept at normal levels so that general well-being and health could be sustained. For instance, protein intake, which is generally supplied with meat and some other animal products, might be provided by legumes and soy products and vegan diets containing these products

are proved to meet the recommended protein levels (Melina, et al. [2]). In addition, for zinc, it is reported that the appropriate vegan sources are soy products, grains, seeds, nuts, and so on (Melina, et al. [2]). Besides, calcium could be provided with vegan sources such as broccoli, cereals, soy-milk, other plant milk such as oat milk, and so on (Van Winckel, et al. [3]).

Furthermore, vitamin D poses a problem for vegans since the intake of vitamin D generally requires exposure to the sun and supplements. In this case, personal circumstances may also play a role in the levels of vitamin D of a vegan since, for instance, exposure of people living at high latitudes to the sun might be insufficient (Webb, et al. [4]). All of these substituents prove that an adequate intake of necessary vegan sources could assist in the balance of healthy minerals and vitamins. But what do vegan diets contribute to? What are the advantages of sustaining this philosophy in terms of nutritional adaptation? Compared to omnivores, since vegans consume great quantities of fruit and vegetables (Haddad, et al. [5-8]), containing fiber, folic acid and antioxidants, lower blood cholesterol (Djousse, et al. [9]), lower stroke risk and mortality and a lower risk of ischemic heart disease are observed in vegans (Bazzano, et al. [10,11]). In addition, nutritional sources of vegans, such as legumes, fruit, and vegetables, are reported to protect against cancer (World Cancer Research Fund [12]). For instance, it is stated that fruits and vegetables defend the body against lung, mouth, stomach cancer, and so on, whereas the risk of stomach and prostate cancers is reduced with the consumption of legumes (World Cancer Research Fund [12]). Besides, in a study carried out by Aune et al. it is reported that an increase in the daily consumption

of fruit and vegetables by 200 g. reduced the risk of stroke to 0.84, cancer morbidity to 0.97, and coronary heart disease to 0.92 (Aune, et al. [13]). In addition, in a cross-sectional study, it is found out that an average body mass index (BMI) of vegans are reported as 23.6, whereas average BMI levels of omnivores are reported as 28.8, which states that vegans have lower BMI levels when compared to omnivores (Tonstad, et al. [14]) and a normal BMI is accepted when it is between 22.5 and 25 (Mahan KL [15]).

Also, in a study, it is found that high levels of consumption of fruits and vegetables diminish the risk of diabetes type II (Cooper, et al. [16,17]). Considering these advantages and benefits of vegan diets, it would not be wrong to state that veganism has a great number of followers all over the world. For instance, in a study, it is found that the distribution of the number of people following a vegan diet in the USA increased considerably from approximately 300,000 to 500,000 in 1997 to 2.5-6 million in 2012 (Newport, et al. [18,19]). In addition, in a survey conducted among 2,000 participants in the USA on the attitudes of consumers towards a vegan diet, 26% of the participants evaluated it as “very healthy” and 35% of them stated it was “somewhat healthy”, which points out that most of the participants are aware of the benefits of a vegan diet in some way (Wunsch NG [20]) (Figure 1). Considering these, it would not be wrong to state that a vegan diet is not unsustainable or tough as it is generally biased by many people because of the unfamiliar aspects of it and infollution. In addition, regarding the benefits of it in the long term, it could be very healthy if necessary steps are taken and the intake of vitamins and minerals at adequate levels are provided.

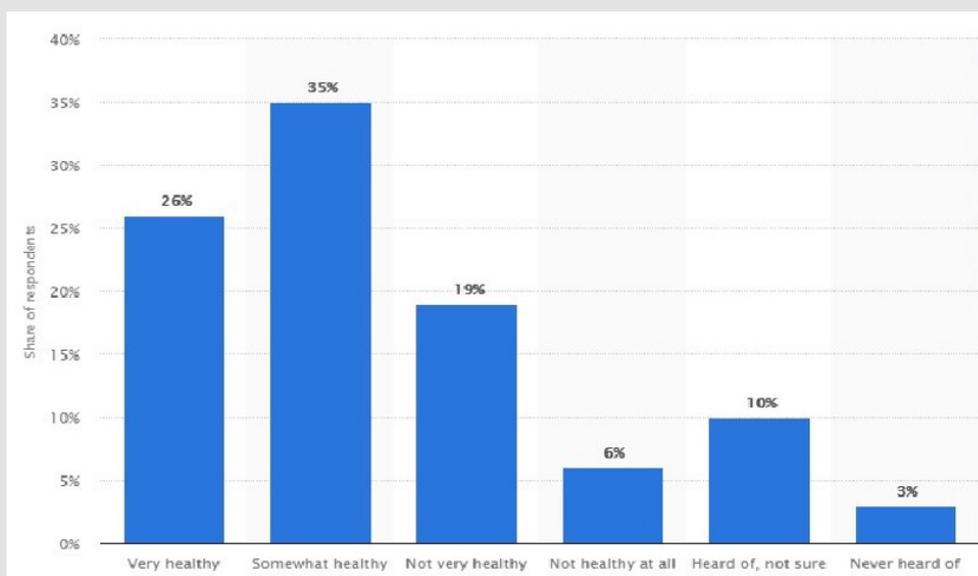


Figure 1: The figure shows the responses of consumers towards a vegan diet in the USA. 26% of the participants state it is very healthy, whereas 35% of them regard it as somewhat healthy. On the other hand, 19% of them evaluate it as “not very healthy”, while 6% of the state it is “not healthy at all”. In addition, 10% of them heard of a vegan diet but are not sure about the benefits of it, while 3% of them have never heard of a vegan diet (Wunsch [20]).

Discussion

A study was conducted on 11,004 British men and women to compare hypertension, systolic and diastolic blood pressure. Participants were divided into four diet groups consisting of meat eaters, fish eaters, vegetarians, and vegans. At the end of the study, it was found out that the highest values of systolic and diastolic blood pressures were observed in meat eaters, whereas the lowest values were observed in vegans, which proves that the risk of cardiovascular diseases is reduced on vegans [Appleby, et al. [21]]. Another study, in which 44,561 men and women from England and Scotland participated, was carried out by European Prospective Investigation into Cancer and Nutrition (EPIC) - Oxford. 34% of these participants were vegetarians and it was proved that vegetarians had a 32% lower risk of ischaemic heart disease (IHD) [Crowe, et al. [22]], which shows us that a plant-based diet has a significantly positive impact on health.

Conclusion

Veganism, as it is stated before, consists of various components in itself from a dietary pattern to a viewpoint, which has both personal and shared goals such as animal rights, health, and environment. In the case of a dietary pattern, according to the studies, the lack of certain vitamins and components that a body requires to be healthy, which sometimes occurs in vegan diets, could be substituted with numerous nutritional sources and these sources should be taken in adequate amounts. In addition, additional supplements could be utilized. Besides, vegan diets have a wide range of benefits on health, for instance, protection against various diseases such as cancer, type II diabetes, IHD, and so on.

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Conflict of Interest

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Author's Contributions

All authors read and approved the final version of the manuscript.

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