

A Study of Advantages and Disadvantages of Vegetarian Diet

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Abstract

The present paper is an attempt to study the advantages and disadvantages of vegetarian diet. Vegetarian diets come in a wide variety, but they all have one thing in common: they all forbid the intake of meat, fish, and poultry, and in some cases, eggs, milk, and dairy products as well. The vegetarian diet is very beneficial for everyone's health. The chance of developing cardiovascular disease can be lowered, as can cholesterol levels, weight, and blood pressure. It's a boon in the fight against cancer and other chronic diseases. Potentially, it can aid in making people live longer. However, poor diet planning can have serious negative effects on health. More research is needed to confirm the vegetarian diet's health benefits. If you're at risk for developing diabetes, cardiovascular disease, kidney stones, hyperlipidemia, cataracts, or depression, or if you're already experiencing these conditions, a vegetarian diet may be an excellent adjunctive therapy choice to explore.

Key words : Vegetarian, diet, advantages, disadvantages, health

Introduction

Foodstuffs of plant origin, such as grains, legumes, oilseeds, fruits, vegetables, nuts, and mushrooms, make up the bulk of vegetarian diets. Vegetarian diets come in a wide variety, but they all have one thing in common: they all forbid the intake of meat, fish, and poultry, and in some cases, eggs, milk, and dairy products as well. While vegetarian diets are low in proteins, calories, saturated fat, long chain n-3 fatty acids, choline, retinal, vitamin D, vitamin B12, calcium, iron, zinc, and iodine, they are high in carbohydrates, n-6 fatty acids, dietary fibre, carotenoids, folic acid, and vitamin C, vitamin E, magnesium, and phytochemicals. The American Dietetic Association agrees that healthy vegetarian diets can provide all the nutrients necessary for optimal health. Although it is well known that foods based on plants include components helpful to health, it is sad that they are now also tainted with various industrial pollutants, including nitrates. In addition, a healthy lifestyle, including regular exercise and the avoidance of dangerous activities like smoking and alcohol consumption, may also contribute to the success of a vegetarian diet. Vegetarians have been demonstrated to enjoy better health, experience fewer medical problems, and have higher levels of self-respect than those who follow a more conventional diet. The purpose of this study was to investigate and review the information within the literature on the influence that such diets have on the human body because numerous disagreements have arisen about the efficacy of adopting a vegetarian diet. According to research by Khanna, Lal, Kommi, and Chakraborty (2006), non-vegetarianism is more common among Indian female athletes than lacto- or ovo-vegetarianism. Non-vegetarians

fared better in terms of nutrient consumption, haemoglobin levels, and endurance times than lacto and ovolacto vegetarians. According to a study conducted by Kaushik, Aggrawal, Singh, Deswal, & Kaushik (2015), adhering to a vegetarian diet can help reduce body mass index (BMI), enhance plasma lipid profiles, and reduce the risk of developing cardiovascular disease, stroke, metabolic syndrome, and atherosclerosis. Furthermore, reduced incidences of diabetes and cancer have been noted, in addition to enhanced insulin sensitivity. But there is research suggesting that switching to a vegetarian diet could have unfavourable health consequences. Women who engage in excessive physical activity are at risk for a number of health issues, including hyperhomocysteinemia, protein deficiency, anaemia, low creatinine levels, and irregular menstrual cycles. There's a chance that after some of these alterations, you won't be able to exert as much energy into doing things. However, the positive aspects of a vegetarian diet outweigh the negative ones. Furthermore, it's important to recognise that the term "vegetarian diet" may encompass a wide range of dietary patterns and is not usually precisely defined in the literature. According to Stanisic et al. (2018), there is not enough evidence from long-term studies based on large population samples and using methodology that precludes bias and confounding factors to determine a single best diet, but the evidence strongly supports healthy dietary patterns while allowing for variations in food choice. Even though there is no doubt that a vegetarian diet, with its fewer restrictions, is better for cardiovascular health, the statistics demonstrate just a tiny difference in overall cancer risk between vegetarians and non-vegetarians. Claims for the superiority of vegetarianism, and especially its restricted versions, are undoubtedly overblown in the lack of actual proof. However, the current nutritional recommendations, as well as the promotion of health and the prevention of disease, indicate that any diet rich in fruit, vegetables, and whole grains, and low in processed foods is likely to be nutritionally adequate.

Advantages of Vegetarian Diet

Many researches shows that adhering to a vegetarian or vegan diet has many positive effects on health. One of the most noticeable changes in the Western diet is the dramatic rise in protein and grain intake, which leads to a chronic propensity toward tissue acidity. Reduced energy output, altered bowel function, lower mineral and vitamin absorption capacity, dysbiosis, and an increased risk of inflammation and related degenerative diseases are only some of the detrimental effects of tissue acidity on overall health. Fruits and vegetables, fibre, complex carbs, and healthy fats are all abundant in a vegetarian diet, making it a healthier health. In terms of cardiovascular disease, vegetarians and vegans do far better than meat eaters. The cholesterol-lowering and atherosclerosis-preventing effects of a vegetarian diet have been well-documented. Probably, this is because:

Vegetarians and vegans have a much lower risk of developing heart disease. A vegetarian diet has been shown to be effective in reducing cholesterol levels and reducing the risk of atherosclerosis. This is most likely due to:

1. Avoiding high-fat red meat that places a strain on the digestive system.
2. High intake of fibres and complex carbohydrates.

Vegetarians have a lower risk of hypertension and generally have lower blood pressure. While there is little difference in the amount of sodium consumed, the vegetarian diet provides more potassium, complex carbohydrates, fibre, calcium, magnesium, and vitamin C, all of which support healthy heart function and circulation. Blood sugar levels may be more easily maintained on plant-based diets.

The risk of developing breast cancer is reduced in those who follow a vegetarian diet. The diversity and efficiency of gut bacteria are both diminished by a Western diet. Regular consumption of processed carbohydrates and red meat both increase transit time and decrease bowel movement frequency. We excrete oestrogen, which can be used by the microorganisms in our faeces to produce new oestrogen. Therefore, oestrogen levels and the risk of oestrogen-dependent disorders such as fibrocystic breast disease rise in proportion to the length of time that faeces remain in the colon.

The risk of developing gallstones is reduced by following a vegetarian diet. The higher fibre content of a vegetarian diet is probably to blame for this. Animal proteins have also been demonstrated to promote gallstone development, while soy and other vegetarian proteins have been shown to inhibit gallstones from forming.

Research has found that the risk of developing osteoporosis is reduced in those who follow vegetarian or vegan diets. There is no significant difference between vegetarians and meat eaters in bone mass during the third to fifth decades of life, but significant differences emerge during the later decades, suggesting that the lower incidence of osteoporosis among vegetarians is not attributable to greater initial bone mass but rather to reduced bone loss during old age. The decreased protein and phosphorus intake likely have the most role since these nutrients increase calcium output in the urine and contribute to tissue acidity.

Asthma sufferers can benefit greatly from adopting a vegan diet that is free of all meat products. Probably, this is because plant-based diets lack polyunsaturated fats, like those present in animal products, which would trigger the formation of pro-inflammatory chemicals called leukotrienes. Leukotrienes are powerful bronchoconstrictor stimulators.

Disadvantages of Vegetarian diets

On the other side, it's crucial to comprehend a vegetarian's, and especially a vegan's, unique nutritional requirements. All other amino acids can be synthesised by the body from the eight essential amino acids (protein building blocks) provided. All animal products (meat, fish, eggs, poultry, dairy, and soy) provide all eight essential amino acids. However, because they are deficient in or absent of one or more necessary amino acids, plant foods necessitate a more strategic approach to meal planning. Combining foods like rice and beans, bread and peanut butter, lentils and potato, etc., is necessary. It's especially important to eat foods that are both freshly prepared and cooked properly because vegetable amino acids are less stable and breakdown more easily during food storage and preparation.

Vegetarians might easily run out of energy due to a lack of protein if they aren't careful about getting enough of the amino acids they need from beans, pulses, peas, and lentils. If this is the case, eating more protein or taking an amino acid diet may help. Legumes, tofu, seitan, edamame, quinoa, and chia seeds are all high-protein plant-based options.

Iron insufficiency is a typical reason vegetarians don't have enough energy. Green leafy vegetables, nuts, grains, and beans are other excellent sources of iron, in addition to meat, fish, and eggs. Vegetarians have slightly lower haemoglobin levels than meat eaters because iron from vegetables is significantly more difficult to absorb than iron from meat. Vegetarians may benefit from taking iron supplements once a month for a week, preferably in an absorbable compound like iron glycinate or iron picolinate. Only when iron is supplied in an unabsorbable form, like sulphate, can it cause constipation.

Vegetarians can develop a deficiency in vitamin B12 because the vegetarian sources, such as seaweed, spirulina, and tempeh, are not typical in the Western diet. The situation is further exacerbated by the fact that folic acid can hide vitamin B12 insufficiency, and it is typically abundant in a vegetarian diet. One week on, one week off; or two weeks on, two weeks off of an activated B12 supplement (adenosyl-, hydroxy-, or methyl-cobalamin forms) is therefore likely to be recommended. To maintain optimal health on a vegan diet, vitamin B12 supplementation is strongly recommended.

Although vitamin A is only present in animal products, it can be synthesised from beta-carotene (found in abundance in many vegetables) with the help of zinc. Vegetarians need to pay special attention to their zinc intake because this is the most prevalent mineral deficit in the Western world.

Vitamin B3 and B5 deficits are also common among vegetarians because these nutrients are often found in much larger concentrations in meat and fish. Vegetarians who don't consume fish may have a hard time getting enough omega-3 oils in their diet. Poor media awareness and fad diets contribute to the widespread lack of knowledge about healthy and unhealthy fats. Oils are crucial to the health of the human body, and nuts and seeds are a vital part of the vegetarian and vegan diet. All vegetarians and vegans should take omega 3 oils daily, whether from flax seed, linseed, or EPA derived from algae. It is recommended to monitor iron, B12, and zinc levels in the blood on a regular basis.

Dietary recommendations

Having weighed up the nutritional advantages and disadvantages of becoming vegetarian or vegan, consider the following recommendations:

- Ensure a correct combination of protein and carbohydrate sources to complete the range of amino acids
- Recommend a regular intake of foods naturally high in iron and vitamin B12
- Ensure a high intake of zinc as a food source or in supplement form
- Ensure a daily intake of mixed seeds and nuts for vitamin B3 intake
- Ensure a daily intake of untreated cereal e.g. buckwheat or granary bread for vitamin B5 intake
- Add a dietary supplement of omega 3 oil e.g. flax seed oil or algae-based EPA
- Ensure the fruit and vegetables eaten are fresh. Prepare vegetables by breaking rather than cutting wherever possible (which better preserves the micronutrients and enzymes), and steam in preference to any other mode of cooking.

- Vegan sources of minerals are often high in compounds that prevent absorption. These “phytates” can be denatured by steaming or boiling.
- Aim to “eat the colours of the rainbow” on a daily basis as this covers the full spectrum of nutrients the body needs for optimum health. Focus more heavily on those that grow above the ground.

Guidelines for a Healthier Diet

Once you've thought over the pros and downsides of a vegetarian or vegan diet, here are some suggestions to think about:

- Complete the amino acid spectrum with the right protein and carbohydrate sources.
- Ensure a daily dose of mixed seeds and nuts for vitamin B3 intake; ensure a daily intake of untreated grain e.g. buckwheat or granary bread for vitamin B5 intake; recommend a diet rich in foods naturally high in iron and vitamin B12; take zinc supplements or eat a lot of zinc-rich foods.
- Take an omega-3 oil supplement, such as flax seed oil or EPA (an omega-3 fatty acid found in algae).
- Make sure you're eating fresh produce. When preparing veggies, it is preferable to break them instead than slicing them so that the vitamins and enzymes are not destroyed.
- Many plant-based mineral sources have chemicals that interfere with their absorption. In order to remove these "phytates," cooking methods like steaming and boiling are used.
- Try to "consume the colours of the rainbow" every day, as this provides a wide variety of nutrients essential for good health. Those that appear to be growing above ground should be given additional attention.

Conclusion

Beneficial to one's health is the vegetarian diet. The chance of developing cardiovascular disease can be lowered, as can cholesterol levels, weight, and blood pressure. It's a boon in the fight against cancer and other chronic diseases. Potentially, it can aid in making people live longer. However, poor diet planning can have serious negative effects on health. More research is needed to confirm the vegetarian diet's health benefits. If you're at risk for developing diabetes, cardiovascular disease, kidney stones, hyperlipidemia, cataracts, or depression, or if you're already experiencing these conditions, a vegetarian diet may be an excellent adjunctive therapy choice to explore.

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