

Exploring Health Outcomes of Vegetarian Diets

Vegetarian diets have long been linked to a decrease in many issues plaguing the public health of Americans today, and have consistently been associated with favorable health outcomes in regards to lifespan, immune function, and overall cardiovascular health [5]. Specifically, vegetarian diet are associated with a lower risk of mortality from cardiovascular diseases, lower low-density lipoprotein (LDL) cholesterol levels, lower blood pressure, lower rates of type 2 diabetes, lower BMI, and lower cancer rates. However, with the booming popularity of diets that emphasize a high-protein low-carb ratio such as the Paleolithic and Ketosis Diet, this leads to much discrepancy about which diet is nutritionally superior in regards to achieving optimal human health.

A study with a sample population of over 50,000 people who participated in the Adventist Health Study study showed strong evidence that all variants of a vegetarian diet (vegan, lacto-ovo, pescatarian and semi-vegetarian) were associated with a significantly lower risk of associated health risks in relation to BMI and type-2 diabetes. This study acknowledges that a possible reason why vegetarians have a tendency to be healthier in comparison to non-vegetarians is attributed to healthier lifestyle habits; they are more likely to engage in healthful behaviors such as exercise, and are more likely to avoid harmful behaviors such as smoking [1]. However, the study lacked external validity due to the sample size being homogenous- all participants were Seventh-Day Adventists.

However, the GEICO study comprised a geographically diverse population with sample size of over 20,000 to evaluate the health outcomes of a low-fat plant-based diet in a corporate setting. This study showed that adherence to a low-fat, plant-based diet was shown to improve body weight, plasma lipids, and glycemic control in people with diabetes. It even led to weight loss in the absence of exercise and reducing calories in their diets! The limitation to this study was that the population being studied were all specifically overweight diabetics, thus these results may not be generalizable to a population that is normal and not diabetic [2].

Another study done on comparing mortality rates of vegetarian and non-vegetarians in the UK found that fruit and vegetable intake was higher in vegetarians in vegans than it was in non-vegetarians [3]. However, differences found for specific causes of mortality require more research, making the findings collaborated in this study less valid.

A matched cohort study compared vegetarian subtype diets and non-vegetarian diets to measure metabolic profiles such as BMI, waist circumference, blood pressure, and cholesterol levels. All sub-types of vegetarian diets were shown to have a reduced likelihood of metabolic abnormalities, and in the longitudinal follow up a year later, obesity and blood pressure were reduced by 7-8% in those following a lacto-ovo or vegan diet [4]. However, despite the proposed health benefits strongly associated with a vegetarian diet, simply avoiding meat and other animal products alone does not explain these health benefits. The biggest attributing factor to these benefits is that a vegetarian diet is high in plant-based foods (fruits, vegetables, whole grains, seeds, nuts, and beans) that contain beneficial nutrients that are not typically lacking in the traditional American diet (antioxidants, fiber, vitamins, minerals, and phytochemicals) [5]. A typical concern seen with vegetarian diets is not meeting the nutritional requirements that animals and

animal products typically supply, such as calcium and protein. However, low-oxalate vegetables such as kale and bok choy are shown to have higher levels of calcium bioavailability than milk (approximately 50% vs 30%) [5]. Nuts and seeds are also rich in several minerals such as protein and calcium, while supplying vital micronutrients. Thus, this great bioavailability of calcium in vegetables, nuts, and seeds makes calcium deficiency an invalid concern [5].

Ultimately, following the right diet comes down to doing what is physiologically right for one's own individual needs. Various factors such as gender, age, lifestyle, environment, fitness level, pre-existing health conditions, and even socioeconomic status may affect one's dietary needs or preferences. However, as hypothesized, these studies strongly suggested that a plant-based vegetarian diet generally leads to more favorable health outcomes than a non-vegetarian diet.

Sources:

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