



COMPARISON OF BMI BETWEEN VEGETARIAN AND NON VEGETARIAN

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ABSTRACT

Aim: To compare the BMI of people who consume vegetarian and non vegetarian food.

Objective: To compare nutrient intakes between dietary patterns characterized by consumption of vegetarian and non vegetarian foods.

Background: Differences in nutrient profiles between vegetarian and non vegetarian dietary patterns reflect in different BMI measurements of the people who consume that. They may contribute to the development of disease.

Reason: To create awareness among the people to make them understand what type of food they should consume.

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INTRODUCTION

Body mass index (BMI) has received considerable attention as a risk factor for mortality and a number of conditions including diabetes, heart disease and some cancers. Obesity, typically categorised as BMI ≥ 30 kg/m² [1] is responsible for substantial morbidity and early mortality [2] and relatively low body weights have also been associated with increased mortality. [3,4] Previous studies have shown considerable differences in BMI and nutrient intakes between meat-eaters and vegetarians. [5-7] The Oxford cohort of the European Prospective Investigation into Cancer and Nutrition (EPIC-Oxford) intentionally recruited a high proportion of non-meat-eaters, including a large number of vegans. [8] Thorogood *et al* assessed the differences in BMI between different diet groups in EPIC-Oxford and evaluated the contribution of major dietary and lifestyle factors to these differences. [5] In general, vegetarian diets are lower in saturated fats, cholesterol and animal protein, and higher in fiber and folate than non-vegetarian diets. Consequently, vegetarians tend to have substantially reduced risks for obesity, heart disease, high blood pressure, diabetes mellitus, osteoporosis, and some forms of cancer - particularly lung cancer and colon cancer. In western countries, vegetarians often live longer, on average, than non-vegetarians. And, of course, not all vegetarians eat healthily. If a vegetarian replaces meat with high-fat cheeses, junk food and so on, they're unlikely to reap many health benefits – after all, there's no meat in ice cream, potato chips, or fudge brownies! It's certainly possible to be a vegetarian and still consume

large quantities of high-fat, high-sugar empty calories. [15] An extensive body of research documents the health benefits of vegetarian dietary practices and the lower incidence of chronic disease, especially heart disease, in vegetarians. Much of the data are derived from investigations in which Seventh-day Adventist vegetarians, most of whom consume a lacto-ovo vegetarian diet, were examined. Strict vegetarian or vegan diets, which exclude all foods of animal origin, are increasingly being adopted. The adequacy and nutritional effect of diets based entirely on plant foods is still under investigation. [6]

MATERIALS AND METHODS

This is a questionnaire based study of 50 individuals of age ranging between 17 - 36 years who were coming to outpatient in Saveetha University. Each individual's height and weight were measured using the weighing machine and measuring scale. The results were tabulated below.

RESULTS

The measured values of height and weight were tabulated and their average was calculated. The results are discussed below

Average BMI of vegetarian	Average BMI of non-vegetarian
20.45	22.19

DISCUSSION

From the above results it is clear that the BMI of the non vegetarian is more than that of the vegetarian. Usually the non vegetarian food contains more of cholesterol and fat in it than that of the vegetarian food which leads to obesity and also causes the increase in the BMI of the normal person. The BMI of vegetarian can also be higher some times due to their food

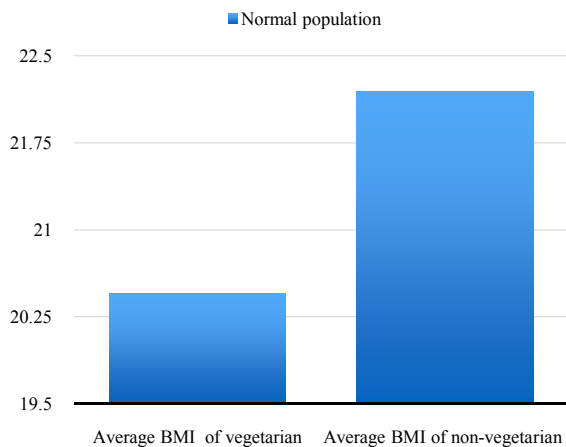
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habits but generally speaking their BMI is under control most of the time.[10] In comprising a substantial number of vegans and large numbers of vegetarians, fish-eaters and meat-eaters, with a wide range of BMI and nutrient intakes between the diet groups. There was a wide range of BMI within each diet group, indicating that diet group was not the only determinant of BMI.[12]



Nutrient intakes and lifestyle factors varied across the diet groups. Nondietary lifestyle factors such as smoking and exercise explained some of the difference in BMI between diet groups; however, after adjusting for these factors, over 95% of the difference remained.[14][13] Energy and macronutrient intake explained about half the difference in mean BMI between meat-eaters and vegans, suggesting that these differences are largely attributable to dietary factors. After adjusting for all lifestyle and dietary factors included in this study, statistically significant differences in mean BMI between the diet groups remained.[13] However, the estimates of nutrient intakes from the FFQ are not very accurate and adjustment for the true nutrient intakes might account for a greater proportion of the variation in mean BMI between the diet groups.

CONCLUSION

From the above results it is evident that the BMI of the people who consume non-vegetarian food is more than that of the people who consume vegetarian food. So, this may create awareness among non-vegetarian to concentrate on their BMI.

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