

Research paper

There are many varieties of diets that people use to lose unwanted weight. Many research showed that well planned vegetarian or vegan diets bring many health benefits, and can be used for weight loss and its maintenance. This research presented in this paper evaluates five different diets and their effect on a body weight. Researchers wanted to find out if their results would affirm that plant-based diets could be effectively used for weight loss. The main difference between those diets is in the intake of animal products. While vegans exclude all animal products, vegetarians allow eggs and dairy products in their diet. Pesco-vegetarians exclude only meat and poultry, where semi-vegetarians eat everything but they limit consumption of red meat and poultry. Omnivores do not have any restrictions, meaning that they eat all animal products.

The research presented in this paper recruited overweight adults with a stable health condition who were interested in losing weight, via newspaper ads and worksite listserv messages. All subjects were of a similar age, 49 years old, with the average BMI of 35 kg/m². This research was a first interventional study. Thus, subjects were randomly assigned to their diet, and all had to adjust to a new style of eating. They had to follow dietary guidelines and menu given by the dietitian assigned to their specific diet. Also, all participants, including omnivores, had to follow low-fat and low-glycemic index diets. The study lasted six months and data were collected at the baseline, at two months, and six months points. All participants except the omnivores had to attend weekly meetings for a first two months and then monthly meetings until the end of the study. Due to the omnivorous group being the control and being allowed to observe what changes would occur in the body weight with minimal intervention, they had to attend only meetings when data was collected. Participants received \$20 for finishing first two months of the study. The results show that some variables that were significant at the two months

point were not significant in the later phase of the study including protein and fiber intakes. None of the groups was limited to the number of calories consumed. However, even though the energy intake did not matter among all the five groups, it was meaningful at the six month point between vegans and omnivores. The significant difference between groups could be observed in the consumption of fat, saturated fat, carbohydrates, and cholesterol. Vegans significantly decreased intake of fat and saturated fat in comparison with other groups that consumed meat, and their cholesterol intake was significantly lower. The opposite happened with consumption of carbohydrates which was increased significantly in vegans compared to semi-vegetarians and omnivores. Researchers concluded that plant-based diet, especially the vegan diet that does not contain meat, might be successfully used by people who want to achieve short-time weight loss and improve the quality of the food they eat. However, they believe that other studies need to examine long term effects of plant-based diets on weight loss and its maintenance.

One of the strength of this research is the fact that it was an interventional study, where all participants were not previously exposed to their assigned diets. Another strength is that all participants were of a similar age and BMI. If they were of different ages, their metabolic rates would be different, and it might affect the results. Next advantage is that participants from plant-based diets had access to online support and classes, so they were not left alone, and they could seek help if they needed it. In the paper format, I do not like the way all the information is presented. For me, most of the data is difficult to understand due to large amount of information. Instead of listing all data, I would list only ones which are significant for this study. As stated in the research, after the two month period, the participants could make alterations in their diets, which could influence the results. In addition, they were not paid for completion of six months period so they did not have any obligation to continue and keep following the dietary guidelines.

If I led this study, I would keep the same participants. However, I would pay them for every period they completed to motivate them, and keep them on the track because for some of them the adjustments to a new diet could be difficult. I do not really understand the role of the vegetarian group in this study. This group is not mentioned in any of the results, and it is not compared to vegans or other groups. The only information that is given is the percentage weight loss of the subjects. If I were the researcher, I would compare this group with other groups, or I would not include a vegetarian diet in this research at all. Even though the semi-vegetarians limit their meat intake, it was not mentioned whether they ate more or less meat than omnivores. It should be clearly stated how many meals containing meat were consumed by each group, so the results would be more credible. In addition, all participants were not blinded, so the results might be biased. Since every person knew what results were expected, omnivores or other groups could be less involved and not abide the restrictions of their diets as well as vegans, from whom the greatest weight loss was expected. Another limitation is the fact that the sample included only two races with majority of the participants being white and only a few blacks. Knowing that there are racial differences in metabolic rate, we cannot imply the results of this study to all races because all diets have been mainly tested on Whites. Also, females were a majority in the sample, so it is hard to conclude if a vegan diet would have the same effects on males. Next, the results show only the weight that participants lost. However, it does not say if it was fat that they lost, or muscles, since the lean body mass was not measured before the research. Even though it seems that this study had more disadvantages than advantages, I think that as a first interventional research study it gave pretty helpful results. The results are based on a short period of time and longer study is needed. Furthermore, knowing all the limitations of this study, a longer study can be only an improvement.

Work Cited

Turner-McGrievy, G., Davidson, C., Wingard, E., Wilcox, S., & Frongillo, E. (2015).

Comparative effectiveness of plant-based diets for weight loss: A randomized controlled trial of five different diets. *Nutrition (Burbank, Los Angeles County, Calif.)*, *31*(2), 350.