

Cardiovascular Risk in Vegetarians and Omnivores: a Comparative Study

Dear Editor,

We congratulate the authors on the publication of their article in this journal (Arq Bras Cardiol. 2007; 89 (4): 237-44).

Obesity is clearly associated with an increased incidence of cardiovascular diseases. Much of this risk is due to the increase in other risk factors such as hypertension, diabetes mellitus and dyslipidemias. Eating habits are also implicated in cardiovascular risk factors. Thus, several diets have been proposed, and the one that currently shows the greatest cardiovascular benefit is the Mediterranean diet, which consists mainly of fruits, grains, vegetables, and unsaturated fat¹⁻⁴.

This observational study concluded that the unbalanced omnivorous diet implies a greater cardiovascular risk. Data presented in Table 1 showed higher values of BMI, WHR, total cholesterol, LDL, VLDL, glucose, urea, and Na/K in the omnivorous diet group.

However, it is worth pointing out that BMI considered alone varies between the two groups; the mean BMI in the vegetarian group (22.6) was lower than that of the omnivorous group (26.7). This difference may be related to the increased levels of lipids and glucose found in the study, thus increasing the cardiovascular risk.

Also worth pointing out is the type of Brazilian beef

which is different from the beef used in other studies of the international literature in that the latter comes from feedlot cattle raised on feed. The "green beef", as we call the Brazilian beef, is produced especially in the Southern region of the country, in a type of livestock farming where the animals roam at large in the pasture, and use mainly grass and mineral salts as their feed source, thus being produced in a more ecological manner. It is therefore rich in short-chain polyunsaturated fatty acids such as the linoleic acid⁵.

Additionally, vegetarian individuals establish a "life project"; they not only have good eating habits, but also fight stress, are engaged in physical activities, practice religion, so that there are many other non-measurable factors that make it difficult to reach any conclusion.

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AUTHOR'S REPLY

Dear Mr.,

We appreciate your interest in our study, as well as in raising questions for debate.

We agree with your arguments regarding the issues related to nutrition and cardiovascular diseases. One of the noteworthy issues addressed is the fact that omnivorous individuals have higher BMI than vegetarians, thus contributing to increase the

cardiovascular risk. In our study published in 2006 – *Estado nutricional e estilo de vida em vegetarianos e onívoros*. (Nutritional status and lifestyle in vegetarians and omnivores) (Rev Bras Epidemiol 2006; 9 (1): 131-43), you will be able to observe additional results that may contribute to this analysis.

However, it is worth pointing out that the objective of this study was to describe and analyze the cardiovascular risk based on the Framingham algorithm in two groups of individuals (vegetarians and omnivores). According to this algorithm, regardless of BMI and type of food, the individuals are classified



as per a determined set of criteria. Our purpose was not to prove that the vegetarian diet reduces the cardiovascular risk independent of other conditions. Thereby, our conclusion is that an unbalanced diet, such as the Western diet which is typically omnivorous, may be implicated, to a great extent, in the development of chronic diseases.

Please contact us for any further explanations.

Thank you for your attention.

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