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Walnuts: Are They Beneficial for Type 2 Diabetes?

Walnuts are nutrient dense foods with a beneficial omega 3 to omega 6 fatty acid ratio. [2] Research surrounding this nut has looked at the effects in preventing or improving certain disease states. Type 2 diabetes is an increasingly prevalent chronic disease with an undeniable impact on quality of life and a huge cost to individuals and the medical system. Lifestyle plays a significant role in the development of type 2 diabetes, and researchers have attempted to isolate specific foods that may prove preventative or improve outcomes.

In April, The New York Times published an article titled Prevention: Walnuts may Curb Diabetes. [1] This article was short, fairly accurate according to the original research article. The newspaper article came to the same conclusion as the research article. It stated that since 1999, 5,930 women out of 138,000 in a women's health study went on to develop type two diabetes. The researchers found correlation with regular walnut intake, eating fish, and exercising to a reduced risk of developing diabetes. They were also found to weigh less. The women who consuming 8 oz or more of walnuts a month had a 24% decreased chance of developing type 2 diabetes when compared to women who ate no walnuts. A quote from a professor of medicine at Harvard stated that this was the first study on walnuts and diabetes. This statement was misleading. This study may have been the first to link consumption of walnuts and decreased risk for chronic disease, however, there have been other studies done on the direct effects of walnuts on patients who have diabetes. This article was funded in part by the California Walnut Commission.

It is also important to be skeptical of epidemiological data since it cannot be used to prove cause and effect. Correlation is not equal to causation. It is impossible to isolate a single variable when

so many exist. Furthermore, food frequency questionnaires are prone to subject bias.

Interestingly, the original research article examined at three different intake levels of walnuts including 1-3 servings per month (one serving= 28 g), 1 serving per week, and 2 or more servings per week. [3] The inverse relationship between walnuts and diabetes was seen more strongly the more servings were eaten. This study looked at walnuts, peanut, and other tree nuts. The study found that increased walnut consumption was associated with increased peanut consumption as well. However, the authors insisted walnuts were the beneficial factor in increasing the health of the subjects. While the large sample size was a strong point in this study, the fallibility of surveys and epidemiological data, plus the self interested funding agency need to be considered before any substantial conclusions can be drawn.

Other research in the field of type 2 diabetes and walnuts include intervention studies where individuals with the disease were supplemented with walnuts or a placebo. In one study that specifically examined the effects of a modified diet and 30 g of walnuts per day on blood lipids, researchers demonstrated a beneficial shift in cholesterol ratios with a decrease in LDL and an increase in HDL levels. [4] The beneficial polyunsaturated fats are likely to contribute to these results however this remains controversial. Other parameters like HbA1c (a marker for type 2 diabetes) and body composition, including percent body fat and body weight, were unchanged. While this modification of blood lipids may not have a direct effect on diabetes and glucose control it is an important risk factor for cardiovascular disease.

In conclusion, walnuts can be a part of a healthy diet. They are desirable for their beneficial polyunsaturated fatty acid ratio which may improve risk factors for cardiovascular disease and may play a role in the development of other chronic diseases like type two diabetes. It is important for future research in this field to elucidate the relationship between different foods and disease states.

References

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