

Vegetarians



OF WASHINGTON

To the Editor in Chief
Derek LeRoith, MD, PhD, FACE
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Dear Sir,

In your article "CONSENSUS STATEMENT BY THE AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS AND AMERICAN COLLEGE OF ENDOCRINOLOGY ON THE COMPREHENSIVE TYPE 2 DIABETES MANAGEMENT ALGORITHM – 2016 EXECUTIVE SUMMARY" published in ENDOCRINE PRACTICE Vol 22 No. 1 January 2016, your algorithm for the treatment of type II diabetes mellitus makes no mention of the therapeutic utility of a plant-based diet, giving it only passing mention with reference to obesity.

It has long been known and documented that vegetarians in general, and vegans in particular, have much lower rates of type 2 diabetes. This fact has led to the study of the efficacy of plant-based diets as a treatment for type 2 diabetes. The results of research are compelling. In a number of studies, vegetarians and vegan diets have been shown to be safe and efficacious treatments for type 2 diabetes, and their effects rival drugs such as Metformin. These studies have demonstrated improvements across a broad range of clinical variables.

In one study, which emphasized employing a plant-based diet, good results were obtained in diabetic patients. After a median length on the diet of 7 months, the mean HbA1C dropped from 8.2% to 5.8% ($p = 0.002$), with sixty-two percent of participants reaching normoglycemic levels ($HbA1C < 6.0\%$). (1) A 22-week study showed a drop of 1.23 Hba1c points on a vegan diet. As in other studies, those on the plant-based diet had better reductions in BMI and cholesterol levels. (2)

Looking more broadly at other variables, a 24-week study of diabetics placed on a vegetarian diet showed a wide range of effects including improvements in adipocytokines and inflammatory markers, BMI, fasting glucose, Hb1Ac as they have in other studies. However, this study also looked at additional variables. Highly Sensitive Cardio Reactive Protein (hsCRP) and homocysteine levels fell, a very desirable effect, indicating reduced inflammation and insulin resistance. In addition, adiponectin levels rose, which is also a desirable effect indicating improved insulin sensitivity. Resistin and leptin both were reduced, again indicating less insulin resistance. (3)

While the recommendation for most patients to increase exercise is sound, many are not compliant. It is therefore important to determine the benefit of dietary intervention independent of exercise. In a small 12-week pilot study, the use of a low fat, vegetarian diet in patients with non-insulin dependent diabetes was associated with significant reductions in fasting serum glucose concentration and body weight, in the absence of increased exercise. The mean fasting serum glucose of the experimental

group, from 10.7 to 7.75 mmol/L (195 to 141 mg/dl). The mean weight loss was 7.2 Kg and was significantly better than the control group (P<0.05). (4)

In a 7-month study by Jenkins et. al, a high-protein vegetarian diet, utilizing meat and dairy analogues, such as veggie burgers, veggie sausages (containing soy and wheat gluten proteins) and soy milk, along with tree nuts, was compared with a high carbohydrate vegetarian diet as a control. The experimental diet achieved the same significant reductions in HOMA-IR and fasting glucose as the control group. However, the experimental group achieved significantly greater weight loss, reduction in BMI, total cholesterol, LDL-C, TC:HDL, and APOB and APOB:APOA1 and CHD 10-year risk on the experimental diet. Given the popularity of meat and dairy analogues and tree nuts, patients preferring these foods may be able to achieve the same glycemic control while achieving even greater reduction in CHD risk. (5)

Your algorithm rightly focuses on the increased risk of coronary artery disease type II diabetics face. Here the plant-based diet has shown efficacy as well. (6) While the algorithm did not address complications of type 2 diabetes mellitus such as diabetic peripheral neuropathy, here good results are also obtained with a plant-based diet in an otherwise hard to treat disease. (7)

Patient compliance on plant-based diets has been good in almost all studies. The degree of compliance has often been very high. For instance, one study obtained a 99% compliance. (8) In a 22-week study 94% of subjects on a vegan diet were compliant. (2)

Treatment with a plant-based diet has no adverse reactions and no contraindications, treats several comorbidities and is extraordinarily cost effective and deserves a prominent place in your algorithm.

Respectfully,

Amanda Strombom & Stewart Rose
President & Vice President
Vegetarians of Washington

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