RESPONSE TO COMMENTS ON EVERT ET AL.

Nutrition Therapy Recommendations for the Management of Adults With Diabetes. Diabetes Care 2013;36:3821–3842

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Dr. Sigal (1) and Jardine et al. (2) summarize several observational studies showing that consumption of animal products is related to incidence of type 2 diabetes. Nutrition therapy for the prevention of type 2 diabetes is an important topic that has substantial evidence supporting its effectiveness based on randomized controlled trials (RCTs) (3,4). The focus of the position statement, however, was on the management of patients already diagnosed with type 1 or type 2 diabetes (5). Therefore, the studies summarized in Sigal and Jardine et al. were excluded from the literature review.

While observational studies were included in the literature review, the position statement placed emphasis on RCTs because of the biases inherent to observational research. For example, people who consume larger amounts of meat may have other behaviors or characteristics that confound the relationship between meat intake and disease. As an example, in the European Prospective Investigation into Cancer and Nutrition (EPIC)-NL study, the relationship between animal protein intake and diabetes incidence was not statistically significant after adjusting for waist circumference and BMI, and, in fact, the hazard ratios mirrored those for vegetable protein intake (6).

It is also important to consider the totality of evidence. For example, other reports from the EPIC study showed higher incidence of type 2 diabetes with intake of total carbohydrate and dietary glycemic load, no relationship with intake of dairy foods, and lower incidence of type 2 diabetes with cheese intake (7,8). Additionally, the 74-week follow-up of one of the cited RCTs examining a vegan diet (9) did not show a statistically significant difference in hemoglobin A_{1c} from the control group in the primary intent-to-treat analysis. In this study, both the intervention and control groups lost weight; weight loss is a difficult-to-address confounder in many studies examining nutrition therapy for diabetes. Further, weight loss must be considered a confounder with dietary changes whether energy intake is explicitly limited in the intervention or spontaneously decreases during the intervention as occurred in the vegan diet studies described by Jardine et al.

The position statement emphasizes that currently there is not one particular eating pattern with definitive evidence. Further, studies commonly do not clearly identify effects that are independent of energy balance from those that are due to a shift in energy balance and weight loss. Therefore, diabetes management should be individualized based on the individual's metabolic status, health-related goals, and dietary preferences.

The 2013 position statement is the first to include a section dedicated to eating patterns, and it included a plant-based diet as one of several options. Given most evidence for eating patterns is C-level evidence, we based our rating on expert opinion and included a broader statement. This allows health care providers the opportunity to assist individuals to adopt eating patterns honoring their own culture, food preferences, and food availability while still achieving glycemic control and optimizing risk factors for cardiovascular disease and other chronic complications of diabetes. The authors of the position statement encourage

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more research on eating patterns and diabetes so we can make a more definitive statement in the future.

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