



COMMENT ON EVERT ET AL.

# Nutrition Therapy Recommendations for the Management of Adults With Diabetes.

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I read the new nutrition therapy recommendations with great interest. However, I was disappointed that the position statement includes “low-carbohydrate” diets as an acceptable option for managing diabetes (1). Low-carbohydrate diets focus on eating foods higher in protein and fat (meat, poultry, fish, etc.) (Table 3 in ref. 1). These low-carbohydrate diets may produce short-term weight loss and glycemic control, but there is evidence of long-term elevated glucose levels and insulin resistance (2). No reference was made to the abundance of data on meat consumption and the associated risks to type 2 diabetes and obesity:

- When researchers followed 26,357 men in the Health Professionals Study (1986–2006) and 122,786 women in the Nurses’ Health Study (1986–2006) and the Nurses’ Health Study II (1991–2007), they found that the participants who increased their red meat intake by 0.50 servings a day elevated their risk of type 2 diabetes by 48% in just a 4-year period (3).
- In an assessment of 60,893 participants in the Adventist Health Study 2 conducted in 2002–2006, it was found that as consumption of animal products increased, so did BMI and prevalence of type 2 diabetes (4). In fact, the vegan group (those not consuming any animal products) was the only group where BMI was in the ideal range

(23.6 kg/m<sup>2</sup>). The prevalence of type 2 diabetes increased from 2.9% in the vegans to 7.6% in the non-vegetarians. It was concluded that after adjustment for a number of socioeconomic and lifestyle factors, as well as BMI, vegans and lacto-ovo vegetarians had nearly one-half the risk of type 2 diabetes compared with the risk associated with non-vegetarians (4).

- In the European Prospective Investigation into Cancer and Nutrition (EPIC)-NL study, it was found that a high total animal protein intake—but not vegetable protein intake—was associated with diabetes risk (2). Among 38,094 participants, for every 5% of calories consumed from protein, at the expense of 5% of calories from carbohydrates or fat, diabetes risk increased by 30%. Animal protein intake significantly increased the risk of diabetes, even after correcting for BMI.
- More than three out of every four adults with diabetes are overweight, and nearly half of individuals with diabetes are obese. Data collected from the National Health and Nutrition Examination Survey (NHANES) showed those who consumed more meat also consumed more calories (700 kcal/day). Regression models showed a consistent positive association between meat consumption and BMI, waist circumference, obesity, and central obesity (5).

As a physician who works with individuals with prediabetes, diabetes, and metabolic syndrome on a daily basis, I believe this is a serious omission of data, limiting the ability of health care professionals and people affected by these conditions to make an informed decision when they are collaboratively selecting their day-to-day meal patterns.

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