Letters to the Editor

On the use of the dietary inflammatory index in relation to low-grade inflammation and markers of glucose metabolism in the Cohort study on Diabetes and Atherosclerosis Maastricht (CODAM) and the Hoorn study

Dear Sir:

We read with interest the article by van Woudenbergh et al (1), which was recently published online ahead of the printed version. We are gratified that these authors found our previous work in this area to be useful and that their adaptation of it produced results broadly consistent with the hypothesis that we formulated when we first devised the dietary inflammatory index (DII) (2). In the article by Cavicchia et al (2), which was used as the basis for the article by Woudenbergh et al, we reported a significant association between the DII and high-sensitivity C-reactive protein (hsCRP) in the longitudinal Seasonal Variation of Cholesterol Study (SEASONS) (3).

As we describe in an article that was published (4) while Woudenbergh et al’s article was in press, we also were not content with the scoring system that we used previously (1). In our revised method we constructed a regionally representative world database of food and nutrient intake on the basis of 11 data sets obtained from diverse populations in different parts of the world, which provides a robust, globally based estimated mean and SD for each food variable. The food variables, derived from an individual’s self-report intake, are then standardized relative to this database and converted to a centered percentile score (4). This approach obviates the arbitrariness in scoring as a result of specific units of measure converted to a centered percentile score (4). This approach obviates the arbitrariness in scoring as a result of specific units of measurement of various food variables as noted by van Woudenbergh et al, as well as addressing the “right skewing” commonly seen in nutritional data.

These changes in the scoring algorithm make interpopulation comparisons easier and more intuitively appealing because they relate to what people actually eat in a variety of human populations. The new, revised DII also benefits from a more robust literature base that drew on 3 additional years of published data (ie, 2008–2010, inclusive), resulting in a slightly more than doubling of the total number of articles scored: that is, 1943 articles were scored in the newer 2013 version (4) compared with 929 articles in the older 2009 version (2). In the current version we also modified the DII scoring algorithm to improve interpretability: that is, a higher DII score indicates a more proinflammatory diet and a lower DII score indicates a more anti-inflammatory diet (4), which is opposite to the older algorithm (2). We have made some additional changes that are well described in the recently published article (4). By using the new DII to reanalyze the SEASONS data, we found that its ability to predict interval changes in hsCRP (5) was better than the previous version (2) on which van Woudenbergh et al based their adaptation. We would be pleased to work with van Woudenbergh et al if they were interested in fitting the new, improved DII (4, 5) to their data.

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Note: The authors of the original article chose not to submit a reply.

REFERENCES


Studies of healthful dietary protein sources in the elderly are needed

Dear Sir:

Daly et al (1) studied the impact of red meat and resistance training on lean tissue mass, muscle strength, and inflammatory markers in elderly women. We laud their efforts to improve the health and physical activity of this population. However, we are concerned by their decision to provide 2 servings of red meat per day to participants rather than alternate protein sources.

The authors had no conflicts of interest to disclose.

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