THREE AUTHORS REPLY

We thank Dr. Krstić for his comments (1) on our recent article (2) on circulating 25-hydroxyvitamin D (25(OH)D) and risk of pancreatic cancer. We agree that further
investigation into potential mechanisms for the observed association between higher concentrations of 25(OH)D and increased pancreatic cancer risk is needed (1). Dr. Krstić (1) postulates potential mechanisms via genetic variants of the vitamin D receptor or metabolic pathways. Indeed, these deserve to be investigated, and a related study did examine the association between 25(OH)D concentrations and polymorphic variants in the vitamin D receptor (3). However, these mechanisms remain speculative.

Vitamin D deficiency is a significant public health problem and maintaining adequate status is desirable, particularly for maintaining bone integrity. However, the concentration needed for optimum health remains uncertain as does its role in preventing diseases such as cancer. Within the larger Cohort Consortium Vitamin D Pooling Project of Rarer Cancers, there was no evidence that high concentrations of 25(OH)D provided protection against cancer of the endometrium, ovary, kidney, stomach or esophagus, or non-Hodgkin lymphoma (4–9). Furthermore, 2 recent systematic reviews concluded that there is limited evidence to support a causal link between vitamin D and cancer (10, 11), with the potential exception of an increased risk for colorectal cancer and adenoma with low 25(OH)D concentrations (11). Both reports suggest that purported associations between 25(OH)D and cancer may be due to possible confounding factors such as physical activity, obesity, and other lifestyle factors (10, 11). Finally, the Food and Nutrition Board at the Institute of Medicine of the National Academies based the new Dietary Reference Intakes (DRI) for healthy individuals on bone health only, concluding that the evidence for cancer was “deemed to be inconsistent, inconclusive as to causality, and insufficient to serve as a basis for DRI development” (12, p. 3).

ACKNOWLEDGMENTS

Conflict of interest: none declared.

REFERENCES


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DOI: 10.1093/aje/kwq431; Advance Access publication January 12, 2011