

Preview of Point/Counterpoint Articles on the Glycemic Index and Glycemic Load Debate

The following abstracts summarize opposing points-of-view in the debate on glycemic index and glycemic load and their role in building healthy diets. The full articles for these abstracts will be published in the July-August 2018 issue of *Cereal Foods World*.

Point: Glycemic Index—An Important but Oft Misunderstood Marker of Carbohydrate Quality

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ABSTRACT

The glycemic index (GI) is a measure of carbohydrate quality that is supported by many international health organizations for the management of chronic diseases and is included on food labels in several different countries to help consumers make healthier food choices. Despite its endorsement by various health and governmental organizations the GI concept remains controversial. The aim of this article is to address the most recent criticisms of the GI, related to its accuracy, precision, and role in chronic disease prevention and management. Many of the criticisms appear to stem from a misunderstanding of the GI and do not undermine the best evidence from prospective cohort studies and randomized controlled trials, which show important clinical and public health benefits of reducing the GI of the diet.

Counterpoint: Glycemic Index Is Not a Useful Consumer Tool

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ABSTRACT

Glycemic index (GI) and glycemic load (GL) were proposed in 1980 as a way to determine carbohydrate quality. Despite extensive research, there is inconsistency in the findings published in the literature with respect to most health outcomes. In addition, published values for GI in tables and on packages may not characterize the glycemic response of a food as eaten, especially when it is eaten as part of a meal. Further, the values do not consider variability introduced by any number of factors, such as variety, ripeness, degree and mode of cooking or processing, presence of other foods or ingredients, temperature of food when eaten, amount eaten, etc. The use of GI as a touchstone in food selection, diet planning, and other applications is concerning due to its wide variability and limited precision and accuracy. With standard deviations that are equal to class boundaries for medium-GI foods, designation of foods as high, medium, or low GI is prone to error. This discussion identifies some of the limitations surrounding the measure and its use and outlines the weak evidence for many health outcomes. Further, the assignment of GI values to food intake data collected in dietary surveys by food frequency and other vehicles is questioned. It is unclear whether GI and GL can help consumers determine carbohydrate quality and guide them to food choices that may reduce their risk of associated chronic diseases. Although a group of noted scientists has met and published a consensus on carbohydrate quality, their findings are not aligned with those of other recognized health-promotion organizations, such as the American Diabetes Association or the Academy of Nutrition and Dietetics Evidence Analysis Library. Thus, their conclusion that GI and GL are measures of carbohydrate quality is not substantiated by the state of the research at this point in time, which makes the publication of a consensus on the subject premature.