19. Sugar-sweetened beverages and type 2 diabetes: a meta-analysis of observational prospective studies
(Douglas Weed)

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Background. Whether an association exists between sugar-sweetened beverages (SSB) and type 2 diabetes (T2D) is unclear. We undertook a meta-analysis of observational studies to examine this issue.

Methods. We searched PubMed and Scopus to identify prospective observational studies on SSB and T2DM. Data were combined using random effects meta-analysis. We identified possible confounders, assessed the control of confounding, and calculated summary relative risks (SRREs) and 95% Confidence Intervals (CIs) including dose-response. Publication bias was assessed using funnel plots and Egger's regression.
Results. Eight studies met inclusion criteria. The summary estimate for extreme categories of SSB intake across fully adjusted models (SRRE=1.16; 95% confidence interval, 1.07-1.26) relative to the age-adjusted models (SRRE=1.47) resulted in a large (66%) attenuation in T2D risk and decreased the variance due to statistical heterogeneity (85% to 37%). A dose-dependent increase in risk was observed for categories of SSB intake up to 1 serving/day, although not for the highest serving category (2+/day). Many confounding factors influenced the SSB-T2D association, which differed for each selected study. Statistical examination did not suggest publication bias; however, a tally of cohorts that have reported on diet and T2D (N=22) suggests that the SSB-T2D relationship has been published in only a subset (N=8).
Conclusion. Although positive associations between SSB intake and T2D were observed in several meta-analysis models, interpretation is complicated by confounding and the potential for selective reporting of results across cohort studies.
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20. Effect of a Low-Glycemic Index/Load Diet on Body Weight: A Systematic Review and Meta-Analysis of Randomized Controlled Trials
(Catherine Braunstein)

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Objective: It is unclear whether low glycemic index and load diets contribute to weight loss. To synthesize the evidence of the effect of low glycemic index/load (GI/GL) diets on body weight in order to inform clinical practice guidelines.