
CLOSING CONFERENCE

Chair: Gregorio Varela-Moreiras, PhD. Professor of Nutrition and Bromatology. Head of Health and Pharmacist Sciences Department. CEU San Pablo University. Madrid. Spain.

Will reducing sugar-sweetened beverage consumption reduce obesity? Evidence supporting conjecture is strong, but evidence when testing effect is weak

Speaker: Kathryn A. Kaiser, PhD. Office of Energetics, Dean's Office. School of Public Health. University of Alabama at Birmingham. Alabama. United States of America.

We provide arguments to the debate question about the effects of reducing sugar-sweetened beverages (SSBs) on obesity and update a previous meta-analysis with recently published studies on effects of SSBs on body weight/ composition indices (BWIs). We abstracted data from randomized controlled trials examining effects of consumption of SSBs on BWIs. Six new studies met these criteria: (i) human trials, (ii) ≥ 3 weeks duration, (iii) random assignment to conditions differing only in consumption of SSBs and (iv) including a BWI outcome. Updated meta-analysis of a total of seven studies that added SSBs to persons' diets showed dose-dependent increases in weight. Updated meta-analysis of eight studies attempting to reduce SSB consumption showed an equivocal effect on BWIs in all randomized subjects. When limited to subjects overweight at baseline, meta-analysis showed a significant effect of roughly 0.25 standard deviations (more weight loss/less weight gain) relative to controls. Evidence to date is equivocal in showing that decreasing SSB consumption will reduce the prevalence of obesity. Although new evidence suggests that an effect may yet be demonstrable in some populations, the integrated effect size estimate remains very small and of equivocal statistical significance. Problems in this research area and suggestions for future research are highlighted.

Key words: obesity, randomized controlled trials, soft drinks, weight loss.