Impact of usual intake of added sugars on nutrient adequacy in US children aged 2 to 18 years

Theresa A Nicklas¹, Carol E O'Neil² and Victor L Fulgoni³
¹Baylor College of Medicine, USA
²LSU, USA
³Nutrition Impact, LLC, USA

The impact of usual intake (UI) of added sugars on nutrient adequacy in US children (n=6,109) was measured using NHANES (2009-2012) data. Dietary intake data were obtained from 24-hour dietary recall interviews using an Automated Multiple-Pass Method. The National Cancer Institute Method was used to estimate UI of added sugars and other nutrients. Individual UI of children were separated into groups: 0 to <5, 5 to <10, 10 to <15, 15 to <20, 20 to <25, and ≥25% of energy as added sugars. Covariate adjusted regression coefficients examined the magnitude of the association between the percentages of the population below the Estimated Average Requirement (EAR) and added sugars intake. The percentage of children below the EAR significantly increased for vitamins D (p =0.0124) and E (p=0.0029) with increasing UI of added sugars. For each step in added sugars intake, there was an increase of ~5% of the population being below the EAR. The percentage of children below EAR increased for calcium (p=0.0031) with increasing UI of added sugars. For each step in added sugars intake, there was an increase of ~10.5% of the population being below the EAR. The percentage below EAR increased for magnesium (p=0.0147) with increasing UI of added sugars. The inflection point at which the greatest increase occurred was at 20% to <25% of total energy from added sugars. Results suggest that poor food choices independent, or only partially related to added sugars intake, probably have a larger impact on nutrient adequacy rather than added sugars specifically.

Biography

Theresa A Nicklas is a Professor of Pediatrics at Baylor College of Medicine. She has over 350 publications. For a decade, her research has focused on the epidemiological aspects of chronic disease prevention and health promotion. One of her primary interests has been looking at eating patterns associated or predictive of obesity between childhood and young adulthood.

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