Abstract Title

Food sources of total energy and overconsumed nutrients of public health concern among US adolescents: National Health and Nutrition Examination Survey 2011-2014

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Abstract

Introduction: There is high intake of energy and overconsumed nutrients of public health concern in adolescents' diet. Overconsumed nutrients are sodium, saturated fatty acids (SFA), and added sugars.

Objectives: To identify the most commonly consumed foods by adolescents as percentage of total energy, total gram amount consumed and for intake of sodium, SFA and added sugars.

Methods: One 24-h dietary recall from the cross-sectional National Health and Nutrition Examination Survey (2011-2014) was assessed among 3,156 adolescents 10-19 years of age. Mean percent energy, total gram amount, sodium, SFA, and added sugars consumed from food sources were sample-weighted and ranked based on percent contribution to intake of total amount consumed.

Results: The three-highest ranked food subgroup sources of total energy consumed were: 7.8% from sweetened beverages; 6.9% sweet bakery products, and 6.6% mixed dishes—pizza; while diet beverages and plain water each contributed 0%. Three highest ranked sources of total grams were 34.8% from plain water, 15.8% sweetened beverages, and 7.2% milk; while cooked cereals, crackers and snack/meal bars each contributed 0.5 to 1.2%. The three highest ranked sources of total sodium were 8.7% from mixed dishes—pizza; 6.7% mixed dishes—Mexican; and 6.6% cured meats/poultry; while yogurt, fruits and flavored/enhanced water each contributed 1.2 to 3.4%. The three highest ranked sources of SFA were 9.1% from mixed dishes—pizza; 8.3% sweet bakery products, and 7.9% mixed dishes—Mexican, while diet beverages, plain water, and flavored/enhanced water each contributed 0%. The three highest ranked sources of total added sugars were 42.1% from sweetened beverages, 12.1% sweet bakery products, and 7.6% coffee and tea; while eggs, milk and plain water each contributed 0%.

Conclusions: Identifying food sources of energy and nutrients of public health concern among US adolescents is critical for designing strategies to help them meet nutrient recommendations within energy needs.