

Consumption of Fruit and Fruit Juice in Healthy Weight and Obese Children

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Introduction: According to the USDA My Plate Dietary Recommendations, children are encouraged to consume 2 cups of fruit each day. While fruit juice satisfies this recommendation, fruit juices have many unhealthy added ingredients such as high fructose corn syrup, are less filling than solid fruit, and contain less fiber. It has been proposed that fruit juice consumption leads to intake of excess calories which may contribute to obesity. The purpose of this study was to compare fruit and fruit juice consumption between healthy weight and obese children.

Methods: A cross-sectional analysis of 40 participants [20 obese (>95th body mass index (BMI) percentile, 20 healthy weight (25th - \geq 85th BMI percentile), 37 Caucasian, 2 Asian, 1 African-American; age range 7-10 years; 13 males, 13 females] prior to participation in a before-school physical activity program were administered the University of California Food Behavior Checklist. Descriptive statistics were computed for all of the data. T-tests were performed to compare fruit consumption between the healthy weight and obese children. Significance was set at 0.05.

Results: Obese children reported higher consumption of servings of fruit (3.09) compared to healthy weight children (2.43) however it was not statistically significant. Obese children also reported a higher consumption of fruit juice (1.33) compared to healthy weight children (1.19), again not statistically significant. Obese children self-reported lower ratings of their overall eating habits (6.67) compared to healthy weight children (7.62) although this also was not statistically significant.

Discussion: On a positive note, while obese children consumed more solid fruit than the healthy weight children, they also consumed more fruit juice. It is unknown whether or not this excess fruit juice consumption may be contributing to their excess weight. Consumption of both solid fruit and fruit juice will continue to be explored along with other dietary habits in these children.