



Issue Statement

Response to the AP article on CDC's Study Linking Obesity and Sweet Drink Consumption

Actual CDC Research Findings

A recent study by researchers at the Centers for Disease Control and Prevention¹ found an association between consumption of sweet drinks and overweight in low-income preschool children in Missouri. Sweet drinks included sodas, fruit drinks, vitamin C-containing juices, and other juices. However, when fruit juice consumption was considered independent from sodas and ades, there was **no** significant association between fruit juice consumption and weight for at-risk or normal/underweight children. The **only** positive association between juice and weight was for 2 and 3 year old children who were **overweight at baseline**; however, those results were of only **borderline significance**, according to the authors. Welsh and the other authors of this article note that the CDC findings are consistent with the Dr. Jean Skinner² and Dr. Alexy's³ research that found no relationship between children's juice intake and short stature or overweight and that as juice consumption decreased, intakes of less nutritious beverages increased.

According to CDC Communications Office, Jean Welsh is not distinguishing the intake of fruit juice from the total sweet drink intake when discussing the association with weight. The CDC simply says "for overweight and at risk children and for parents concerned about children who might be at risk of being overweight, minimizing sweet drink consumption to less than one drink per day can be one way to help children control weight."

¹ Welsh, J, Cogswell M, Rogers S, et al. Overweight Among Low-Income Preschool Children Associated with the Consumption of Sweet Drinks: Missouri 1999-2002, *Pediatrics*, 115 (2):223-229e (February 8, 2005)

² Skinner JD and Carruth BR. A Longitudinal study of Children's Juice Intake and Growth: The Juice Controversy Revisited. *J Am Diet Assoc.* 2001; 101 (6): 432-437

³ Alexy U, Sichert Hellert W, Kersting M, et al. Fruit juice consumption and the prevalence of obesity and short stature in German preschool children: results of the DONALD study. *J Pediatr Gastroenterol Nutr.* 1999; 29:343-349.
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Talking Points

1. In an AP article headlined *Sweet drinks linked to Preschool Obesity*, suggested the association of natural juice and increased weight misrepresents the findings of the research. The actual research found that when fruit juice consumption was considered independent from sodas and ades, there was **no** significant association between fruit juice consumption and weight for **at-risk, normal or underweight children**. The **only** positive association between juice and weight was for 2 and 3 year old children who were **overweight at baseline**; however, those results were of only **borderline significance**, according to the authors.
2. The *2005 Dietary Guidelines* suggest that consumption of whole fruits rather than fruit juice for the majority of the total daily amount of 5-13 servings is suggested to ensure adequate fiber intake. Fortified 100% apple juices are affordable, convenient sources of Vitamin C, folic acid, potassium, boron, and, for some products, calcium. Apples and apple juice have a generally low Glycemic Index, 52 and 58, respectively and provide important antioxidants.
3. Several ongoing health research projects on apples suggest that the bio-active compounds may play a role in cognitive function and asthma, important concerns of parents today.
4. The preponderance of research has shown no relationship between children's juice intake and short stature or overweight. Research supports the finding that 100% fruit juices, and not fruit drinks and ades, are an important source of nutrients for Americans, and do not compromise children's growth, or contribute to overweight Americans. (Refer to the list of research articles below.)
5. Fruit drinks and ades are less nutritious, contain little juice, have added sugars, and are not made from whole fruit. These fruit drink ades are more popular with children than fruit juices and intake of ades has increased concurrent with the increase in obesity, according to USDA food consumption data. Refer to the attached table indicating trends in consumption patterns from 1977 to 1998. A review of the USDA CSFII 1994-96, 98 by Forshee and Store found that boys and girls ages 6-11 years old from all ethnic groups, consumed about one-third the amount of non-citrus juice as fruit ade [37 gm non-citrus juice to 150 gm fruit ade for boys and 44 gm non-citrus juice to 131 gm fruit ade for girls].

Other research on apple juice consumption and obesity

- USDA's Center for Nutrition Policy and Promotion found no relationship between fruit juice consumption of 12 or more ounces per day and body mass index and height. Furthermore, USDA found that children drinking more fruit juice were actually slightly taller with slightly lower BMI's, based on usual dietary intake data from 850 children nationwide.⁴ Average fruit juice consumption was 5.1 ounces per day for 2 to 3-year-olds and 3.5 ounces per day for 4 to 5 year-olds. Fewer than 10% of children averaged 12 or more ounces of juice per day. In addition, children consuming higher levels of fruit juice also consumed higher levels of milk and lower levels of fruit drinks and soft drinks.
- Furthermore, fruit consumption can help control weight. Overweight children and obese adults of both genders consumed significantly less fruit, including fruit juices, than their healthy-weight counterparts, according to an Economic Research Service analysis of the USDA 1994-96 *Continuing Survey of Food Intake by Individuals* (CSFII)⁵.
- Data consistent with Skinner and USDA has also been reported in Germany. Alexy and other researchers examined fruit juice consumption and anthropometric measures in 205 preschool children at ages 3, 4, and 5 years. Only five children consumed greater than 12 ounces of fruit juice per day in all three food records. None of these children were of short stature or overweight. Growth, body mass index, and height were not associated with juice consumption.
- Several recent studies have documented the lack of food stores that carry fresh produce in low-income neighborhoods. It has been found that the local food environment has a significant impact on the food choices of individuals, and that poor and minority communities may not have equal access to the variety of healthy food choices available to non-minority and wealthy communities. (*Am J Public Health*. 2002 Nov; 92(11):1761-7. *Am J Prev Med*. 2002 Jan; 22(1):23-9.)

⁴ USDA Center for Nutrition Policy and Promotion. *Nutrition Insights*, March 1997. Accessed at <http://www.cnpp.usda.gov/InsgtM97.html> 11/14/03.

⁵ Lin BH and Morrison RM. Higher Fruit Consumption Linked with Lower Body Mass Index. *Food Review*, 2002, 25(3):28-32.

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Trends In Fruit Juice/ Fruit Drinks and Ades 1977-1998

Year	Fruit drinks & Ades Ages 6-11 (not 100% juice)	Fruit drinks & Ades Ages 12-19 (not 100% juice)	Citrus Ages 6-11 (100% juice)	Citrus Ages 12-19 (100% juice)	Non-Citrus Ages 6-11 (100% juice)	Non-Citrus Ages 12-19 (100% juice)
1977	94.5 gm	84.5 gm	57.5 gm	56.5 gm	14.5 gm	10.5 gm
1989	100	95.5	55	76	40.5	15.5
1998	180	134	57	80.5	41	32

28 grams = 1 ounce

