Promoting Fruits and Vegetables in Schools:

Wellness Policy Opportunities

The Child Nutrition and WIC Reauthorization Act of 2004 requires all school districts across the country to develop wellness policies by the beginning of the 2006-2007 school year. Wellness policies must include goals for nutrition and physical education as well as guidelines for foods and beverages served throughout the school campus. Wellness policies provide a great opportunity for school foodservice operators and others to enhance efforts to promote a variety of fruits and vegetables both in the lunch room as well as in other venues where foods and beverages are offered or sold.

The National Alliance for Nutrition and Activity (NANA) has developed a set of model wellness policies that can be used by school districts in the development of their policies that can be found at **www.schoolwellnesspolicies.org**.

The following information provides ideas on how to promote fruits and vegetables throughout the school and is based on the fruit and vegetable policies included in the NANA Model Wellness Policies.

The Importance of Fruits and Vegetables

The *2005 Dietary Guidelines for Americans* strengthened recommendations urging Americans to consume a variety of fruits and vegetables — about 3½ - 5 cups per day for most school-aged students. Nearly one-half of what we eat should be comprised of fruits and vegetables.

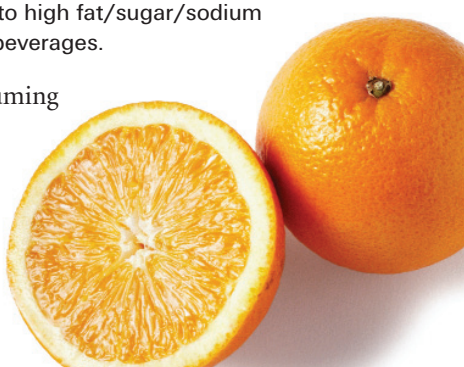
Girls	Boys
Ages 4 - 8 3 - 3½ cups total: 1½ cups fruit 1½ - 2 cups vegetables	**Ages 4 - 8** 3 - 3½ cups total: 1½ cups fruit 1½ - 2 cups vegetables
Ages 9 - 13 3½ - 4½ cups total: 1½ - 2 cups fruit 2 - 2½ cups vegetables	**Ages 9 - 13** 4 - 5 cups total: 1½ - 2 cups fruit 2½ - 3 cups vegetables
Ages 14 - 18 4 - 5 cups total: 1½ - 2 cups fruit 2½ - 3 cups vegetables	**Ages 14 - 18** 5 - 6 cups total: 2 - 2½ cups fruit 3 - 3½ cups vegetables

* Chart based on moderately active lifestyle that includes physical activity equivalent to walking 1½ - 3 miles per day at 3 - 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life.

Diets rich in a variety of fruits and vegetables are critical for health promotion and disease prevention in a number of key areas:

- Key nutrients: Fruits and vegetables are rich in some of the key nutrients that kids fall short in including calcium, potassium, fiber, magnesium and vitamin E.
- Disease prevention: Diets rich in a variety of fruits and vegetables are associated with a decreased risk of chronic diseases like stroke and other cardiovascular diseases, type 2 diabetes and some cancers.
- Healthy weight: Fruits and vegetables are a healthy and lower calorie alternative to high fat/sugar/sodium foods and beverages.

Most students fall far short of these fruit and vegetable recommendations - consuming about 1¾ cups of these health-promoting foods a day.



The School Environment

The school environment greatly influences fruit and vegetable intake among children. As the variety of food and beverage choices increases and students have more access to snack bar type foods (e.g. pizza, chicken nuggets, chips, sodas and French fries), they consume fewer servings of fruits and vegetables *(Cullen et al., 2000)*.

While the reimbursable school meals (breakfast and lunch) include fruit and vegetable choices, schools and school districts across the country are providing even more fruit and vegetable choices in the breakfast and lunch lines — enhancements that are needed to help students meet the higher fruit and vegetable recommendations in the *2005 Dietary Guidelines for Americans.*

In addition, other venues where foods and beverages are sold or offered throughout the campus, outside of the school meals — such as á la carte, vending, school stores, parties, snacks and fundraisers — should be used to promote more and a greater variety of fruits and vegetables.

School Wellness Policies to Promote Fruits and Vegetables

Below are specific policies to consider when developing a district-wide wellness policy to enhance fruit and vegetable offerings throughout the school day:

- To the extent possible, schools will offer at least two non-fried vegetables and two fruit options each day and will offer five different fruits and five different vegetables over the course of a week. A variety of fruits and vegetables are encouraged – fresh, canned, frozen and dried – as long as they meet fat, sugar, and sodium guidelines established by the district. Schools are encouraged to source fresh fruits and vegetables from local farmers when practicable.
- To the extent possible, the school district should pursue implementing salad bars in school cafeterias.
- A choice of at least two fruits and/or non-fried vegetables will be offered for sale at any location on the school site where foods are sold. Such items could include, but are not limited to: fresh fruits and vegetables; 100% fruit or vegetable juice; cooked, dried or canned fruits (canned in 100% fruit juice or light syrup); and cooked, dried or canned vegetables (that meet fat and sodium guidelines established by the district).
- Snacks served during the school day or in after-school care or enrichment programs will make a positive contribution to children's diets and health, with an emphasis on serving fruits and vegetables as the primary snacks.
- Marketing of fruits and vegetables on campus is encouraged.
- Nutrition education and promotion efforts to promote healthy dietary habits must include a strong fruit and vegetable component that includes enjoyable, developmentally appropriate, culturally relevant, participatory activities such as contests, promotions, taste testing, farm visits and school gardens.
- To support children's health and nutrition education efforts, school fundraising activities will not involve food or will use only foods that meet strong nutrition and portion size standards for foods and beverages sold individually. The school district will make available a list of ideas for acceptable fundraising activities.

Strategies to Increase Fruit and Vegetable Intake

- Research has shown that schools with salad bars offer a significantly wider range of fruit and vegetable categories than other schools; items offered include green salads, raw vegetables, fresh fruit, canned fruit and dried fruit. While initial costs may be significant, many schools and districts have been successful in getting start-up funds to purchase equipment and utensils. The addition of a salad bar may reduce the need for other entrees, thereby helping offset the cost of setting up the bar. *(FNS Report: Changes in Children's Diets: 1989-1991 to 1994-1996)*

- A "Salad Bar/Salad Options" pilot project in school districts in Florida that included changes in the school foodservice operations, promotions and marketing, and nutrition education activities resulted in an increase of fruit and vegetable consumption ranging from 9% to 31% in schools studied. The pilot also showed that complementary programming (e.g., fruit and vegetable promotions and nutrition education) resulted in more fruit and vegetable consumption by students — especially in elementary schools. *(Produce for Better Health Foundation, "Eat Your Colors Every Day Salad Bar and Salad Options Project" in Florida Schools, 2004)*

- A price reduction study was conducted in secondary schools in Minnesota to evaluate whether sales of fresh fruits and vegetables sold in á la carte areas could be increased among adolescents in a secondary school setting. Results showed a significant increase in sales of fresh fruits and baby carrots during the low price period relative to the baseline period. Sales of fresh fruit were more than four times greater and sales of baby carrots more than doubled. These results show that students are price-sensitive, even for items typically not popular among this age group. *(French, Story, Jeffery et al. JADA 1997;97:1008-1010)*

Resources: Fruit and Vegetable Promotion in Schools

- National Alliance for Nutrition and Activity Model School Wellness Policies. **www.schoolwellnesspolicies.org.**
- Fruits and Vegetables Galore: Helping Kids Eat More, U.S. Department of Agriculture. **www.fns.usda.gov/tn/Resources/fv_galore.html.**
- School Foodservice Guide: Successful Implementation Models for Increased Fruit and Vegetable Consumption, Produce for Better Health Foundation. Order online for $24.95 at **www.shop5aday.com/acatalog/School_Food_Service_Guide.html.**
- School Foodservice Guide: Promotions, Activities, and Resources to Increase Fruit and Vegetable Consumption, Produce for Better Health Foundation. Order online for $12.95 at **www.shop5aday.com/acatalog/School_Food_Service_Guide.html.**
- National Action Plan To Promote Health Through Increased Fruit and Vegetable Consumption. Produce for Better Health Foundation. Free download at **www.pbhfoundation.org/actionplan.**
- National Farm-to-School Program website, hosted by the Center for Food and Justice, **www.farmtoschool.org.**
- Produce for Better Health Foundation website has downloadable fruit and vegetable curricula, research, activity sheets and more at **www.pbhfoundation.org.**
- Fruit and Vegetable Program for Schools Resource Center, hosted by United Fresh Fruit and Vegetable Association, **http://www.uffva.org/fvpilotprogram.htm.**

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