

Prepare and Eat **More Meals at Home**



**SCHOOL-AGE
CHILDREN
& YOUTH:
Trends, Effects,
Solutions**

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Eating smart and moving more are the cornerstone of a healthy lifestyle and provide a solid foundation for children and youth to succeed in school and in life.



There are many health benefits associated with good nutrition and physical activity. Eating smart and moving more help children and youth maintain a healthy weight, feel better and have more energy. These positive health benefits have the potential to translate into academic benefits at school. Good nutrition and physical activity nourish the brain and body, resulting in students who are present, on-time, attentive in class, on-task and possibly earning better grades.

As students work hard to achieve high academic standards, it is more important than ever that we provide opportunities for them to be active and eat healthy throughout the day. Families, schools and communities must share the responsibility of promoting and supporting children and youth to eat smart and move more.

Research points to seven key behaviors that can help children, youth and adults eat healthier and be more active:

1. Prepare and eat more meals at home
2. Tame the tube
3. Choose to move more every day
4. Right-size your portions
5. Re-think your drink
6. Enjoy more fruits and veggies
7. Breastfeed your baby



This paper will examine trends in and effects of eating more meals away from home. It will explore the role that preparing and eating more meals at home plays in role modeling healthy eating at school. It will also offer solutions for schools, government, communities and families to support children and youth in eating more healthy, simple meals at home and school.

Trends in Meals Eaten Away from Home

According to the USDA Economic Research Service, Americans in 2000 spent nearly 50 cents of every food dollar eating out, compared to 34 cents in 1970.

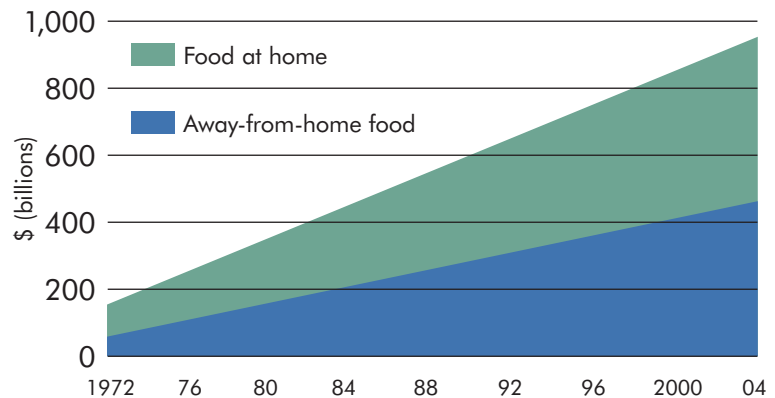
The percentage of total calories from foods eaten away from home increased from 18 percent in the 1970s to 32 percent in the 1990s.^{1,2} Additionally, the total number of calories consumed per person per day in the United States climbed in the same time period by more than 500 calories. At least some of these additional calories may be associated with eating out.³

Meals eaten away from home are higher in total calories, fat and saturated fat, and lower in calcium, fiber and iron than meals eaten at home.⁴ Conversely, adults and children who prepare and eat simple meals at home have healthier diets than those who eat out. Families who eat home-prepared meals together eat more fruits and vegetables, drink more milk, and eat less fat and fewer calories than those who eat out.^{5,6}

School Meals

The noticeable exception in the nutritional quality of foods eaten away from home is school meals. Studies indicate that children and youth who eat school lunch drink more milk, eat more fruits and vegetables, and drink

The away-from-home market now accounts for about half of total U.S. food expenditures



Source: USDA, Economic Research Service, Food Expenditure Series.
www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/Data/

fewer sodas and fruit drinks than those who bring lunch from home.⁷ In 1994, the United States Department of Agriculture (USDA) introduced efforts to make school meals consistent with the Dietary Guidelines for Americans. The USDA School Meals Initiative's goal is to reduce total fat and saturated fat, and increase fiber and other key nutrients, while maintaining the positive benefits school meals make to the overall healthy diets of children and youth.

North Carolina has improved upon the requirements of the School Meals Initiative (SMI) by instituting greater accountability than that required by USDA. School systems are required to analyze their menus for compliance to the SMI guidelines twice a year and report to the N.C. Department of Public Instruction. In addition, the North Carolina State Board of Education adopted the N.C. Nutrition Standards for Elementary Schools in October 2006. Mandatory implementation of these more stringent standards is required for all elementary schools by the end of the 2008-09 school year. These standards, which apply to à la carte foods, school meals and after-school snacks, promote gradual change to increase



fruits, vegetables and whole-grain products, and decrease foods high in total fat, trans fat, saturated fat, cholesterol and sugar.

Even with all of these improvements to the foods offered, students do have other choices in school cafeterias. This is the case for middle and high school students in particular. In addition to the school lunch, school cafeterias offer a variety of foods and drinks called à la carte that may or may not be listed on the menu. These foods and drinks may tempt youth away from the healthier school meal, and they often cost more. Some à la carte foods, such as a carton of low-fat milk or a serving of fruit are healthy choices. Others, such as ice cream, French fries or cookies, should be occasional treats.

In addition to meals and à la carte items in the cafeteria, students may have access to foods and beverages in school stores, through fundraisers or other sources. These foods or beverages, sold or offered to students in competition with the National School Lunch or School Breakfast Programs, are called competitive foods. If the sale or availability of foods/beverages competes with a student's ability and/or willingness to receive or purchase a school meal, it competes. Competitive foods are often made available in larger portions and may be of lower nutritional value.



Since school meals are required to meet the Dietary Guidelines for Americans 2005, they are more likely to be of an appropriate portion size for the child or teen's age and activity level. Many children—teens especially—make meals out of à la carte and competitive foods and drinks. Often these meal choices are not good substitutes for healthy school breakfast or lunch. Parents and teachers should coach children and teens to buy and eat school meals because they are the healthy, low-cost choice.

For many students, school meals play an important role in ensuring their health and academic success. According to the USDA, school-age children and youth get only 19 percent of their total daily intake from school meals on average. However, low-income children who depend more heavily on school meals get half of their daily intake at school.⁴ Student dependence on school meals to meet their basic nutrition needs is one reason that the quality of the school meals and participation by all students in the school meals program is so critical. Schools and families must work together to ensure that all children and youth have access to healthy, affordable meals that will promote their health, happiness and success as students.



Effects of Eating Meals Away from Home

When children and adolescents eat too many of their meals away from home, their overall diet quality suffers. While a direct causal relationship between eating meals away from home and overweight and obesity has not been confirmed, many studies show an association between meals eaten away from home and risk for overweight or obesity. For example, a study of adolescents in Minnesota found that those teens who ate fast food more often ate more calories and fat, and drank more soft drinks. They also drank less milk, and ate fewer fruits and vegetables.⁸ The 2006 publication of the findings of the Keystone Forum on Away-From-Home Foods highlights a number of studies linking frequent restaurant meal consumption to excess calorie and fat intake, higher body weights and higher body fats in both adults and children.⁹

While there are no studies specifically linking meals eaten away from home to academic performance, we do know that poor nutrition during the school day can result in behavior and learning problems. Chronically undernourished children score poorly on standardized tests, are more irritable and exhibit lower energy levels.¹⁰ Even short-term or periodic hunger or malnutrition from skipping meals impacts brain function.¹⁰ Meal-skipping is a phenomenon seen more in older students, particularly girls skipping breakfast. Encouraging students to eat school breakfast, by serving breakfast in the classroom, serving grab-and-go breakfast or serving breakfast after first period would ensure more students break their overnight fast and benefit from it.

Overweight in Children and Youth

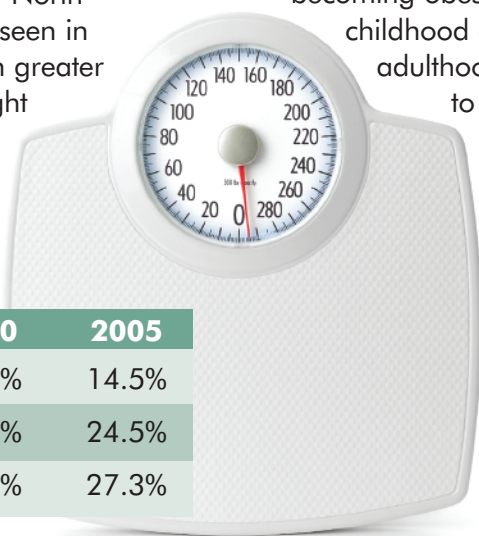
According to the 2001 Surgeon General's *Call to Action to Prevent and Decrease Obesity*, today there are nearly twice as many overweight children and almost three times as many overweight adolescents as there were in 1980.¹¹ Results from the 2003-04 National Health and Nutrition Examination Survey (NHANES), using Body Mass Index (BMI), indicate that an estimated 13.9 percent of children ages 2-5 years, 18.8 percent of children ages 6-11 years and 17.4 percent of adolescents ages 12-19 years are overweight.¹² North Carolina 2005 data from children seen in public health settings show an even greater increase in the number of overweight children.¹³

Percent of North Carolina Children and Youth Who Are Overweight¹³

	1995	2000	2005
Ages 2-4	9.0%	12.2%	14.5%
Ages 5-11	14.7%	20.6%	24.5%
Ages 12-18	22.7%	26.0%	27.3%

BMI, an index of a person's weight in relation to height, is commonly used to classify overweight and obesity among adults and is also recommended to identify children who are overweight or at risk of becoming overweight. Children with a BMI \geq 85th percentile but $<$ 95th percentile are overweight (formerly considered at risk for being overweight) and children with a BMI \geq 95th percentile are obese (formerly considered overweight).¹⁴

Studies have indicated that overweight children (especially adolescents) are at higher risk of becoming obese adults.¹⁵ The likelihood that childhood overweight will persist into adulthood ranges from approximately 50 to 70 percent, increasing to 80 percent if one parent is overweight.^{16,17} Obesity is no longer a concern for adults only. Signs of chronic disease associated with obesity are showing up in overweight children. These include atherosclerotic plaques,¹⁸ hypertension,^{19,20,21} increased triglycerides,^{19,21} increased insulin resistance and Type 2 diabetes.^{18,22}



Solutions for Preparing and Eating More Meals at Home for Children and Youth

In order to encourage more families to eat meals at home, and to encourage students to eat school meals, school officials, policy makers, families and community members must recognize the value that healthy meals will have on the health of children and youth.

Schools

- Implement and maintain the N.C. Nutrition Standards for Elementary Schools.
- Enforce policies that prohibit the sale of competitive foods and beverages during school hours.
- Ensure school meals meet the Dietary Guidelines for Americans 2005.
- Promote school meals as the healthy, low-cost choice.
- Price healthy foods more competitively than à la carte foods higher in fat and sugar.
- Prohibit advertising of sugar-sweetened beverages in schools.
- Start a school garden or a Farm-to-School Program.
- Implement policies to encourage providing healthy options in age-appropriate portion sizes in all situations where food and beverages are served on the school grounds.

Government

- Create policies that provide economic incentives to encourage production and distribution of healthy foods and beverages, including fruits and vegetables.

Communities

- Conduct community-wide campaigns to support messages about preparing and eating more meals at home to coordinate with school efforts.
- Work with schools and community-based organizations to ensure summer-feeding programs are implemented for needy families.
- Support community-based nutrition education classes to teach students and families how to prepare and eat more meals at home.

- Engage community leaders as role models to promote preparing and eating more meals at home.
- Increase access to community gardens and farmers' markets where fresh fruits and vegetables can be grown or purchased.
- Work with farmers to increase the availability of fruits and vegetables that can be sold locally.
- Increase access to a variety of affordable, healthy foods in grocery stores and restaurants in all neighborhoods.
- Make healthy choices available at food service establishments.
- Advocate for adequate funding and resources for school food service programs and nutrition education in schools.
- Advocate for nutrition standards for all foods and beverages available at school.

Families

- Plan, shop, fix and eat more meals at home.
- Encourage children and youth to eat school breakfast and school lunch meals.
- If packing breakfast or lunch, pack healthy foods that support student success, while considering food safety. Keep hot foods hot and cold foods cold with insulated lunch boxes.
- Fix balanced meals that include lean meats, fish or meat substitutes, whole grains, fruits, vegetables and low-fat dairy.
- Eat school lunch in the cafeteria with your kids. Use this opportunity to coach children and teens on the healthful selections available to them at school.
- Take healthy foods and beverages to school to support school functions. Vegetable platters with low-fat ranch dip, sliced apples with caramel or yogurt dip, or whole-grain pretzels or crackers with string cheese are welcome additions to hungry students who need a lift to rehearse a play or get through sports practice.

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Developed by the North Carolina School Nutrition Action Committee (SNAC), a partnership of the N.C. Department of Public Instruction, the N.C. Division of Public Health and the N.C. Cooperative Extension Service. The goal of SNAC is to coordinate school nutrition activities that link the cafeteria, classroom and community to eating smart and moving more.

These institutions are equal opportunity providers.

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