

WHY INCREASE SCHOOL BREAKFAST PARTICIPATION:



Studies show that breakfast is the most important meal of the day, especially for children. Eating school breakfast improves children's educational performance, behavior, and health.

SCHOOL BREAKFAST IMPROVES CHILDREN'S EDUCATIONAL PERFORMANCE:

- Children who eat a complete breakfast make fewer mistakes and work faster on math tests than children who eat a partial breakfast. ¹
- Children who eat breakfast at school, closer to class and test-taking time, perform better on standardized tests than those who skip breakfast or eat breakfast at home. ²
- Children who eat breakfast show improved cognitive function, attention, and memory. ³
- Participating in school breakfast is associated with improved math grades, attendance, and punctuality. ⁴

SCHOOL BREAKFAST IMPROVES CHILDREN'S ATTENDANCE AND BEHAVIOR:

- Schools that provide breakfast in the classroom to all students show decreases in tardiness and suspensions as well as improved student behavior and attentiveness. ⁵
- Providing students with breakfast in the classroom is associated with fewer disciplinary measures. ⁶
- Children who participate in school breakfast have lower rates of absenteeism. ⁷

BREAKFAST IMPROVES CHILDREN'S DIETS AND OVERALL HEALTH:

- Children who eat breakfast tend to have more adequate nutrient intake than children who do not. ⁸
- Children and adolescents who eat breakfast are more likely to maintain a healthy body weight. ⁹

Research Demonstrates that School Breakfast Improves Children's Education, Health, and Well-Being

For additional research on the benefits of the School Breakfast Program, see USDA "Discover School Breakfast Toolkit"

<http://www.fns.usda.gov/cnd/breakfast/toolkit/default.htm>

Adapted from The Food Research and Action Center's "Breakfast for Learning" Child Nutrition Factsheet.



¹Wyon D, Abrahamsson L, Jartelius M, Fletcher R. "An Experimental Study of the effects of Energy Intake at Breakfast on the Test Performance of 10-Year Old Children in School." *International journal of Food Science and Nutrition* 1997;48(1):5-12.

²Vaisman N, Voet H, Akivis A, Vakil E. "Effects of Breakfast Timing on Cognitive Functions of Elementary School Students." *Archives of Pediatric and Adolescent Medicine* 1996 150:1089-1092.

³Wesnes KA, Pincock C, Richardson D, Helm G, Hails S. "Breakfast Reduced declines in attention and memory over the morning in schoolchildren." *Appetite* 2003;41(3):329-31.

⁴Murphy JM, Pagano M, Nachmani J, Sperling P, Kane S, Kleinman R. "The Relationship of School Breakfast to Psychosocial and Academic Functioning: Cross-sectional and longitudinal observations in an inner-city sample." *Archives of Pediatric and Adolescent Medicine* 1998; 152:889-907; Powell CA, Walker SP, Chang SM, Grantham-McGregor SM. "Nutrition and education: a randomized trial of the effects of breakfast in rural primary school children." *American Journal of Clinical Nutrition* 1998;78:873-9.

⁵Murphy JM, Pagano ME, Patton K, Hall S, Marinaccio J, Kleinman R. "The Boston Public Schools Universal Breakfast Program; Final Evaluation Report." Massachusetts General Hospital, Boston, MA, 2000; Murphy JM et al. "Maryland Meals for Achievement Year III Final Report." Massachusetts General Hospital, Boston, MA 2001.

⁶Murphy JM, Drake JE, Weineke KM. "Academic & Breakfast Connection Pilot: Final Report on New York's Classroom Breakfast Project." Nutrition Consortium of New York State. Albany, New York. July 2005.

⁷Cook JT, Ohri-Vachaspati P, Kelly GL. "Evaluation of a Universally-Free School Breakfast Program Demonstration Project, Central Falls, Rhode Island." Center on Hunger, Poverty and Nutrition Policy, Tufts University, Medford, MA, 1996; Murphy JM, Pagano M, Nachmani J, Sperling P, Kane S, Kleinman R. "The relationship of School Breakfast to Pyschosocial and Academic Functioning" 1998.

⁸Rampersaud GC, Pereira MA, Girard BL, Adams J, Metzler JD. "Breakfast Habits, Nutritional Status, Body Weight, and Academic Performance in Children and Adolescents." *Journal of American Dietetic Association* 2005; 105:743-760.

⁹Fiore H, Travis S, Whalen A, Auinger P, Ryan S. "Potentially Protective Factors Associated with Healthful Body Mass Index in Adolescents with Obese and Nonobese Parents: A secondary Data Analysis of the Third National Health and Nutrition Examination Survey, 1988-1994." *Journal of the American Dietetic Association* 2006;106:55-64; Barton BA, Elderidge AL, Thompson D, Affenito SG, Striegel-Moore RH, Franko DL, Albertson AM, Crockett SJ. "The relationship of breakfast and cereal consumption to nutrient intake and body mass index: the National Heart, Lung, and Blood Institute Growth and Health Study." *Journal of the American Heart Association* 2005; 105(9):1383-1389.

¹⁰Based on 2009-2010 school breakfast reimbursement rates (\$1.46 per free breakfast served, \$1.16 per reduced priced breakfast, and \$0.26 per paid breakfast). Reimbursement rates are adjusted annually. In addition, in schools where at least 40 percent of lunches are served to students who qualify for free and reduced-price meals, schools receive an addition \$0.28 for "severe need" funding for free and reduced price meals. With SB07-059, there is no reduced price for K-2nd grade.

¹¹Colorado Department of Education regulations on classroom instructional time: 2254-R-2.06 (page 4) and Section 22-32-109, C.R.S. http://www.cde.state.co.us/cdeboard/download/bdregs_301-39.pdf