

RESOURCES USED

All of the facts provided in this brochure were obtained by reliable, research-based studies referenced below:

Crepinsek, M.K., et al. (2009, Feb.). The third school nutrition dietary assessment study: findings and policy implications. *Journal of the American Dietetic Association*, 109(2), S7-S17.

Dilley, Julia. (2009, Sept.). Research review: school-based health interventions and academic achievement. Retrieved 4/16/12.

Florence, M.D., et al. (2008). Diet quality and academic performance. *Journal of School Health*, 78, 209-215.

Harnack L., et al. (2003). *Journal of the American Dietetic Association*, 103, 1015-1019.

Hollar, D., et al. (2010). Effect of a two-year obesity prevention intervention on percentile changes in body mass index and academic performance in low-income elementary school children.

American Journal of Public Health, 100(4), 646-653.

School meals: types of foods offered to and consumed by children at lunch and breakfast. (2009, Feb.).

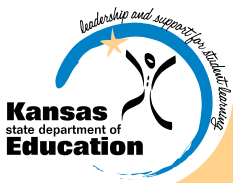
Journal of the American Dietetic Association, 109(2), S67-S78.

Stenberg, M. & Bark, K. (2004). The value of improving nutrition and physical activity in Montana schools. *Montana Team Nutrition*.

Adapted with permission from



Child Nutrition & Wellness
900 SW Jackson St, Suite #251
Topeka, Kansas 66612-1182
(785) 296-2276
www.ksde.org
www.kn-eat.org



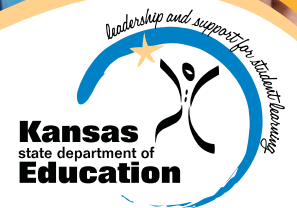
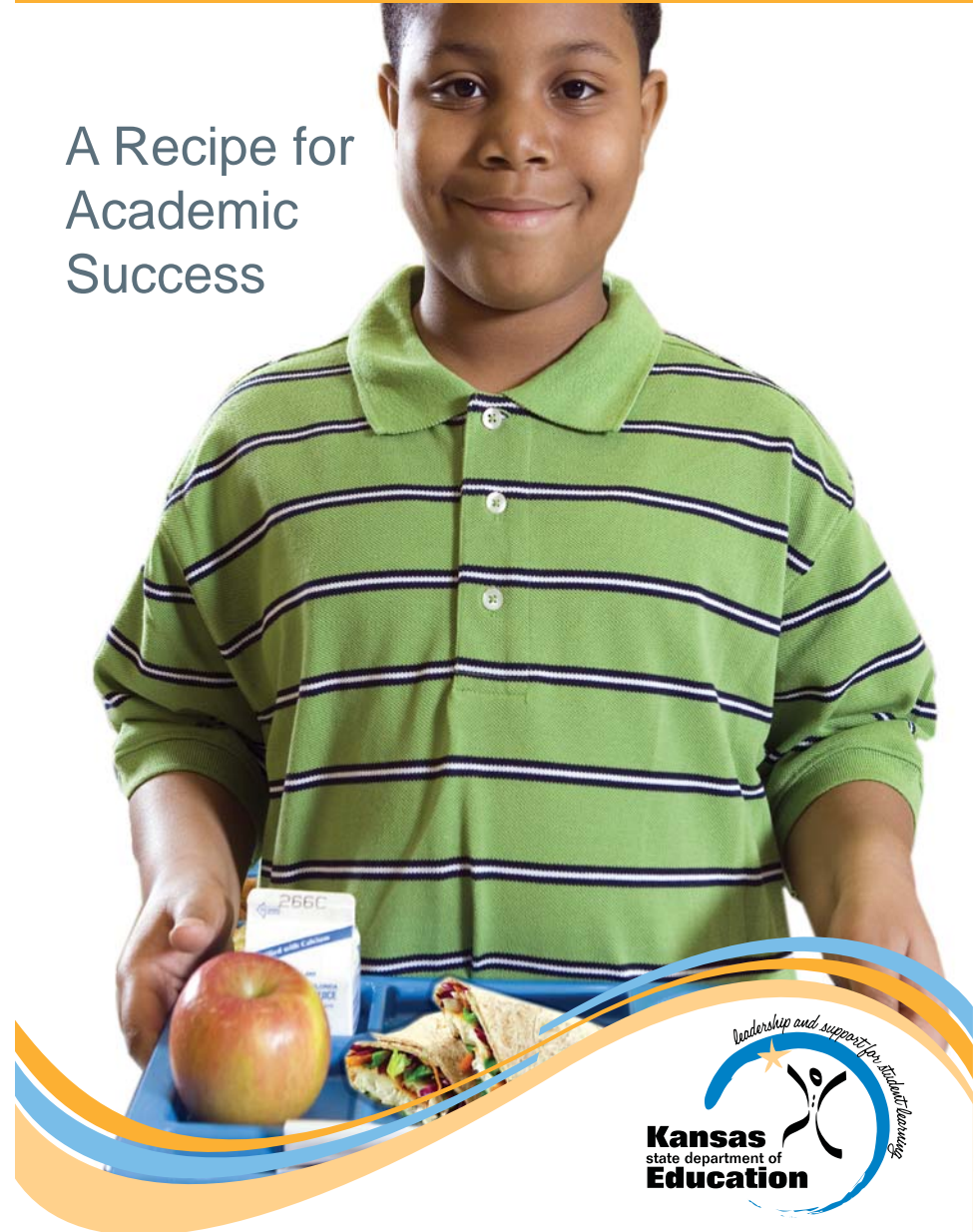
USDA is an equal opportunity provider and employer.

In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age or disability. To file a complaint of discrimination, write USDA, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C., 20250-9410, or call (866) 632-9992 (voice). Individuals who are hearing impaired or have speech disabilities may contact USDA through Federal Relay Service (800) 877-8339; or (800) 845-6136 (Spanish). USDA is an equal Opportunity provider and employer.

The following person has been designated to handle inquiries regarding the non-discrimination policies at the Kansas State Department of Education, KSDE General Counsel, 120 S.E. 10th Avenue, Topeka, KS 66612 (785) 296-3201.

RESEARCH-BASED EVIDENCE SUPPORTING KANSAS SCHOOL MEALS

A Recipe for Academic Success



Child Nutrition & Wellness
www.ksde.org www.kn-eat.org

THE NEED FOR KANSAS NUTRITION STANDARDS

STUDIES PROVE THE IMPORTANCE OF CHILD NUTRITION PROGRAMS:

“Consumption of school meals is positively related to children’s intakes of key food groups at lunch and breakfast. Offering more fresh fruit, whole grains, and a greater variety of vegetables could lead to additional health benefits.”³

“School lunch participants consumed more nutrients - protein, vitamin A, vitamin B-12, riboflavin, calcium, phosphorus, potassium, and zinc - at lunch than non-participants.”⁴

The Kansas meal pattern standards require schools to serve the most important basic meal components.

- Whole grains
- Fruits
- Vegetables
- Low-fat and fat-free milk
- Lean protein



NUTRITION IS TIED TO ACADEMIC SUCCESS

Studies Show the Importance of Healthy Meals:

“Students with increased intake levels of fruits and vegetables and lower caloric intake levels of fats were significantly less likely to fail the literacy assessment test.”

“Poor nutrition, inactivity and weight problems adversely affect academic achievement and possibly cost schools millions of dollars each year.”

“Children not getting adequate nutrients have lower test scores.”

“In early studies, low-income students who were offered free breakfast at school not only improved their nutrition, but also had improved standardized achievement test scores and decreased absences and tardiness.”

HOW WILL THE MEAL PATTERNS HELP?

Research show that a high intake of fat contributes to obesity. And studies show that in addition to socioeconomic status; obesity, poor nutrition, and food insufficiency affect a child’s school achievement.

The major sources of fat in school lunches were salad dressing, condiments/spreads, pizza products, peanut butter sandwiches, and French fries.

The meal pattern standards will...

- Reduce saturated fat and trans fat in meals.
- Limit discretionary sources of calories (solid fats and added sugars).
- Encourage students to consume reduced-fat salad dressings and low-fat dairy products.

WHOLE GRAINS ARE AN IMPORTANT SOURCE OF FIBER AND OTHER NUTRIENTS

The Dietary Guidelines recommend that whole grains make up at least half of the grains you eat each day.

The new meal pattern standards require schools to serve more whole grains because...

“Only 7% of children ages 2-19 years meet the Dietary Guidelines recommendation for whole grains.”

“Studies concluded that interventions are needed to increase intake of whole grain foods for adolescents.”



GOOD NUTRITION FUELS LEARNING!