

Nutrition and Academic Performance: More Than Breakfast on Test Days!

Developed by
New England Dairy & Food Council



Good Eating Habits the Exception, Not the Rule

- 2% meet MyPyramid Five Food Group recommendations
- 1 out of 5 eat five daily servings fruits and vegetables
- 1 out 3 consume two or more Milk Group servings

The Learning Connection: The Value of Improving Nutrition and Physical Activity in Our Schools. Action for Healthy Kids. October, 2004.



New England Dairy & Food Council, 2009



Nutrients of Concern

Calcium

Magnesium

Vitamin A

Fiber

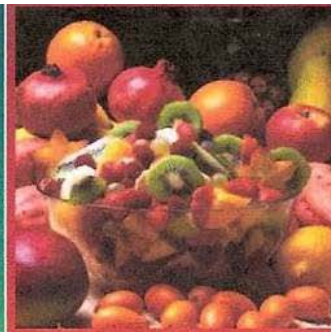
Potassium



Whole Grains



Vegetables



Fruits



Milk and Milk Products
Low-fat and Fat-free



“Food Insufficiency” and Academic Performance

5,000 6-11 and 12-16 year-olds

- Significantly lower math test scores
- 1.44 times more likely to repeat a grade
- 1.89 times more likely see a psychologist
- Peer interaction

Alaimo K, et al. *Pediatrics*. 2001;108(1):44-53.



When kids miss out on key food groups or nutrients, it deprives them of essential nutrients they need for optimal learning.





Taiwan Elementary School Children Nutrition and Health Survey

Study basics....

- 2,200 6-13 year-olds
- 2001-2002 school year
- Compared five eating patterns to school performance



Fu ML, et al. *J Am Diet Assoc.*
2007; 107(11):1935-43.



Effect on Performance



Nova Scotia Literary Assessment and Diet

The Basics...

- 5,200 5th graders
- Compared diet quality to test scores
- Divided kids into thirds based on diet quality

Compared to the bottom third of diet scores...

- Middle third 26% less likely to fail
- Top third 41% less likely to fail

Florence MD, et al. *J Sch Health*.
2008;78(4):209-15; 239-41.



Adequacy

Variety



Florence MD, et al. *J Sch Health*.
2008;78(4):209-15; 239-41.

New England Dairy & Food Council, 2009



Hunger Continuum

Malnutrition



Undernutrition



TRANSIENT HUNGER





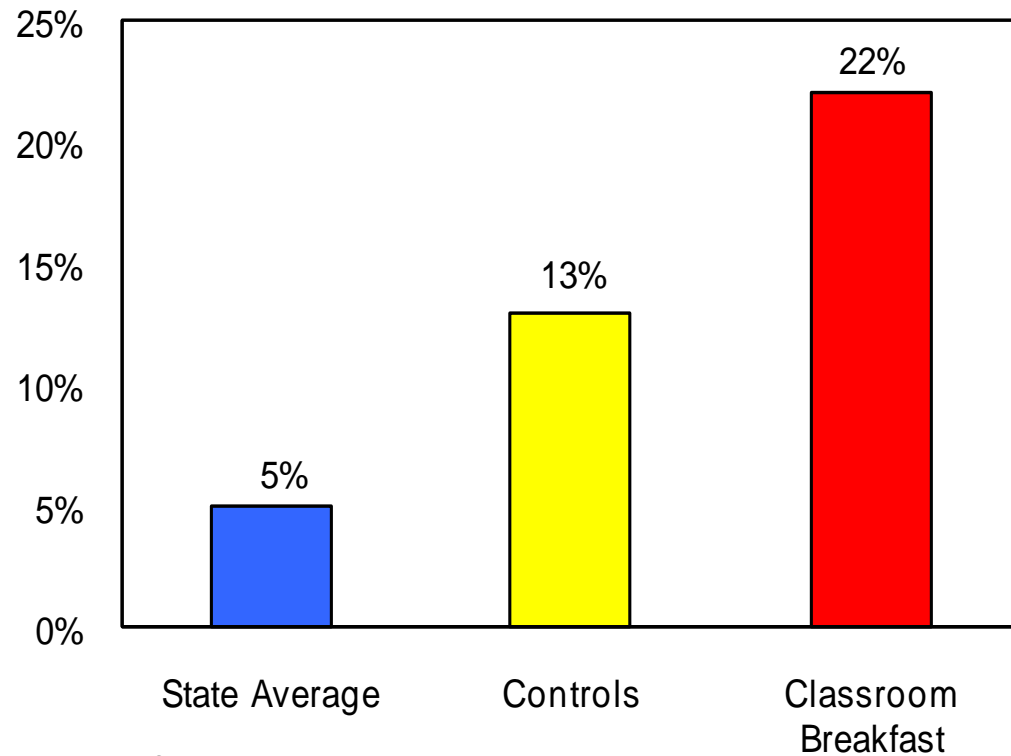
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Maryland Test Scores

Percent Improvement in
MSPAP* "Satisfactory" Rating



*Maryland School Performance Assessment Program

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Childhood Overweight and Learning

A Learning Connection?





New Hampshire Data

Schools with the highest rates of overweight tended to have the lowest scores on English and math proficiency

About 61% of difference linked to overweight

Caution!





Nutrition and Learning

“Well-nourished children tend to be better students, while poorly nourished children tend have poorer academic performance.”



Want Higher Test Scores? Make Nutrition a Priority

- Promote breakfast
- Make nutritious foods available school wide 24/7
- Encourage school lunch
- Educate parents
- Make nutrition education and school wellness a priority
- Get involved with **Fuel Up to Play 60!**



Fuel Up to Play 60

Mobilizing youth to improve their lives
through healthy eating and daily
physical activity

