

Costs and Benefits: Supporting Evidence

As you use supporting facts, use them sparingly: statistics raise eyebrows but stories motivate people to act. Lead with the message you want to convey, and then consider statistics as a supporting point to underscore meaning.

When applicable, consider using social math to put statistics into perspective (e.g., "Exercise is something that children need every day. But half of all students attend schools that have reduced PE class to just one or two days per week. Part-time fitness is no more effective than part-time reading or math instruction.")

View the FrameWorks Institute EZine, "Doing Social Math: Case Study in Framing Food and Fitness," to learn more about this technique and find examples of how to apply social math to Food & Fitness communications:
<http://www.frameworksinstitute.org/ezine40.html>

Food & Fitness is an urgent issue for the next generation.

- Today's kids are overfed and undernourished.¹
- We're raising the first generation of children who live sicker and die younger than their parents.²
- The Centers for Disease Control and Prevention estimates that one in three American children born in 2000 will develop type 2 diabetes—in real terms this means blindness, amputation, and a slow, premature death.³
- There are nearly twice as many overweight children and almost three times as many overweight adolescents today as there were in 1980.⁴
- Research shows a link between childhood obesity and other chronic illnesses from type 2 diabetes to asthma.⁵

Chronic illnesses are a drain on our healthcare systems, our communities, and our country.

- Healthcare spending has skyrocketed since in 1960, from five to 16 percent of our national income.⁶
- This is largely due to the strain on the system of chronic illnesses—many of which are related to diet and inactivity.⁷
- The economic costs of our nation's rapid weight gain are estimated between \$98 and \$117 billion, second only to tobacco-related costs.⁸
- Forty-five percent of the U.S. population suffers from one or more chronic illnesses.⁹
- Four of the top 10 killers in America today are chronic illnesses linked to diet: heart disease, stroke, type 2 diabetes, and cancer.¹⁰

Economic status, race, and zip code are even more powerful predictors of health status and life expectancy than smoking.¹¹ Unnatural Causes

- Millions of the worst-off Americans have life expectancies typical of developing countries.¹²
- In the U.S., African-Americans and Latinos are more likely to live in polluted neighborhoods where there are higher rates of asthma and other environmentally triggered health problems.¹³

Research shows that being physically active and having access to healthy food influences children's behavior, health, and academic performance.¹⁴

- Childhood overweight can impair school performance in many ways, including health-related absenteeism.¹⁵
- Social problems—such as being teased or bullied—loneliness, or low self-esteem can also affect how well children do in school.¹⁶

Children are more likely to eat healthy foods when they are properly prepared and provided in supportive environments.

- Developing children's attitude toward food should be similar to teaching them how to handle money—by giving them growing responsibility along with sensible access.¹⁷
- When elementary school students entered middle school and gained access to school snack bars, they consumed fewer fruits and non-starchy vegetables, less milk, and more sweetened beverages and high-fat vegetables than they did when they were in elementary school with no options but the school lunch.¹⁸

Physical education and recess are important components of an effective school day.

- Physical education is an important but undervalued curricular area that helps students develop the knowledge, skills, and confidence to be physically active both in and out of school, and throughout their lives.¹⁹
- Time devoted to physical education does not lessen performance in other areas and can in fact enhance both students' readiness to learn and their academic achievement.²⁰
- Unstructured physical activity during recess allows children to have choices, develop rules for play, release energy and stress, and use skills developed in physical education classes.²¹
- Uninterrupted instructional time may cause attention spans to wane as restless children have difficulty concentrating on specific classroom tasks. One study found that fourth-graders had concentration problems on days without recess.²²

The path of our current food system is unsustainable and inequitable.

- Between 2002-2007, America lost more than 16 million acres of farmland—that's the equivalent of losing six acres every minute of every day.²³
- In the 1930s there were more than 6 six million farms in the U.S., feeding 130 million people. Today, just over 2 million farmers—with an average age of 56 years old— remain to feed a population of more than 300 million.²⁴
- The United States is under-producing fruits and vegetables. Research has shown that an additional 37,000 acres of production would be required in Michigan alone to produce enough fruits and vegetables for its residents to meet dietary guidelines.²⁵
- Conventional produce travels nearly 1,500 miles from field to fork—nearly 27 times further than the average distance traveled by locally grown produce.²⁶
- Decreased access to grocery stores has been associated with increased rates of obesity and other life-shortening illnesses such as cancer, diabetes, and heart disease.²⁷

Improving our food system will yield many benefits.

- In a study of the city of Detroit, shifting 20 percent of food spending to local sources would stimulate the local economy by creating 4,700 new jobs and providing the city with \$20 million more in business taxes each year. Supporting a regional food system within the five surrounding counties would cut Detroit's unemployment rates in half.²⁸
- Significant environmental improvements could be brought about through a combination of land use and farming practice changes. The benefits from adapting minimum tillage and establishing perennial plant systems and wetlands could be achieved for little more, and possibly less, than what taxpayers currently pay into federal farm programs.²⁹

Poor diet and physical inactivity have dire consequences.

- Diet and inactivity are responsible for more than 25 percent of all preventable deaths in the U.S., second only to smoking.³⁰
- Physical inactivity contributes to at least 300,000 preventable deaths annually—that's akin to losing the population of Pittsburgh every year.³¹

Creating a culture of active living will bring about many benefits.

- Research has shown that residents are more physically active when there are sidewalks, bicycle lanes, mixed-use land development, and stronger planning policies.³²
- America's public transportation systems save 1.4 billion gallons of gasoline each year—that's equivalent to a supertanker leaving the Middle East every 11 days.³³

- Americans want to drive less. Ninety percent believe that communities should be designed so that we can walk more and drive less, and that public transportation should be improved and accessible.³⁴
- After investing in special biking facilities, one community in North Carolina estimated that the annual economic impact of visiting cyclists was almost nine times as much as the one-time expenditure of public funds used in construction.³⁵
- A conservative estimate of the annual economic impact of visiting cyclists in North Carolina is \$60 million, with 1,400 jobs created/supported per year.³⁶

Notes

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³ Centers for Disease Control and Prevention, <http://www.cdc.gov/>

⁴ U.S. Surgeon General David Satcher, Jan. 11, 2007 report

⁵ "Type 2 diabetes: Childhood Obesity: The Health Issue." *Obesity Research* (2001) 9, s239-S243, <http://www.nature.com/oby/journal/v9/n11s/full/oby2001125a.html>; doi: 10.1038/oby.2001.125. Deckelbaum, Richard J. and Christine L. Williams. "Obesity and the Risk of Newly Diagnosed Asthma in School-age Children." *American Journal of Epidemiology*. 158(5): 406-415, September 2003. Gilliland, Frank D., Kiros Berhane, et al, <http://www.nature.com/oby/journal/v9/n11s/full/oby2001125a.html>

⁶ Poisal, J.A., et al., "Health Spending Projections Through 2016: Modest Changes Obscure Part D's Impact." *Health Affairs*, 21 February 2007: W242-253, <http://content.healthaffairs.org/cgi/reprint/26/2/w242>

⁷ Improving Chronic Illness Care, <http://www.improvingchroniccare.org/>

⁸ U.S. Department of Health and Human Services & Poisal, J.A., et al., "Health Spending Projections Through 2016: Modest Changes Obscure Part D's Impact." *Health Affairs*, 21 February 2007: W242-253, <http://content.healthaffairs.org/cgi/reprint/26/2/w242>

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¹⁰ *National Vital Statistics Report*, vol. 52, no. 9, 7 November 2003. In Deaths and Leadings causes for 2001, http://www.cdc.gov/nchs/data/nvsr/nvsr52/nvsr52_09.pdf

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¹² Christopher Murray, Harvard School of Public Health, cited in "Does ZIP code affect your life span?" Associated Press, Sept. 11, 2006, <http://www.cbsnews.com/stories/2006/09/11/health/main1999188.shtml>

¹³ "Disparities in health: Differences in the incidence, prevalence, mortality and burden of diseases and other adverse health conditions that exist among specific population groups in the United States." *Families USA*, January 2006, <http://www.familiesusa.org/issues/minority-health/facts/minority-health-health-quick-facts.html>

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Activity and Academic Performance." *Active Education*, Fall 2007 research brief. Active Living Research, <http://www.rwjf.org/files/research/activeeducation.pdf>

¹⁵ Action for Healthy Kids, *The Learning Connection: The Value of Improving Nutrition and Physical Activity in Our Schools*, 2004, http://www.actionforhealthykids.org/pdf/LC_Color_120204_final.pdf

¹⁶ National Institute for Health Care Management Foundation, *Obesity in Young Children* (see note 6); I. Janssen and others, "Associations between Overweight and Obesity with Bullying Behaviors in School-Aged Children," *Pediatrics* 113, no. 5 (2004): 1187–94, <http://pediatrics.aappublications.org/cgi/reprint/113/5/1187>

¹⁷ "Junk Food vs. Healthy Nutrition For Children," *Medicinenet.com*, 2004, <http://www.medicinenet.com/script/main/art.asp?articlekey=9522>

¹⁸ Karen Weber Cullen and Issa Zakeri, "Fruits, Vegetables, Milk, and Sweetened Beverages Consumption and Access to à la Carte/Snack Bar Meals at School," *American Journal of Public Health* 94, no. 3 (2004): 463–67, <http://www.ajph.org/cgi/reprint/94/3/463>

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²³ U.S. Census of Agriculture, <http://www.usda.gov/wps/portal/usdahome>

²⁴ *Ibid.*

²⁵ Conner, D.S., Knudson, W., Peterson, H.C., Hamm, M.W. *Journal of Hunger & Environmental Nutrition*, 2008.

²⁶ "Checking the food odometer: Comparing food miles for local versus conventional produce sales to Iowa institutions," Leopold Center for Sustainable Agriculture, 2003, www.leopold.iastate.edu/pubs/staff/files/food_travel072103.pdf

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³⁰ Centers for Disease Control and Prevention, <http://www.cdc.gov/>

³¹ Centers for Disease Control and Prevention, 2006 Census.

³² "Designing for Active Living Among Adults," Spring 2008 Research Summary. Active Living Research, http://www.activelivingresearch.org/files/Active_Adults.pdf

³³ "The 2007 Growth and Transportation Survey," Smart Growth America and the National Association of Realtors, <http://www.smartgrowthamerica.org/narsgareport2007.html>

³⁴ Ibid.

³⁵ "Pathways to Prosperity: Economic Impact of Investing in Bicycle Facilities: A Case Study." North Carolina Department of Transportation Division of Bicycle and Pedestrian Transportation, Technical Report, July 2004, http://www.ncdot.org/transit/bicycle/safety/economic_impact_summary.pdf

³⁶ Ibid.