



Obesity: Increases Medical Costs and Deaths

What does the data say?

- **Cost:** Obesity related medical expenditures in the United States were calculated to cost \$75 billion (2003 dollars) per year. About one-half of these medical expenditures were financed by Medicare and Medicaid. In North Dakota, obesity related medical expenditures were calculated to cost \$209 million per year.
- **Prevalence:** In 2003, 63 percent of the adult population of North Dakota was overweight (39 percent) or obese (24 percent). In North Dakota between 1990 and 2003, the percent of adults who were overweight increased 11 percent (from 35 percent to 39 percent), and the percent of adults who were obese increased 100 percent (from 12 percent to 24 percent). Approximately 80 percent of adults did not get the recommended amount of five or more servings of fruits and vegetables each day. About half the adult population engaged in the recommended amount of physical activity, but about 11 percent did not report any physical activity.
- **Deaths:** Excess deaths are found to be associated with extremes of body weight, both underweight and obesity, especially at higher levels of obesity (compared to normal weight). Better medical treatment during the past three decades for heart disease risk factors, such as high blood pressure and high cholesterol, has reduced the impact of obesity on death rates. Improved lifestyle choices related to diet and physical activity have the potential to reduce the high costs associated with medical treatment of obesity-related risk factors.

How to improve the energy balance?

- **Reduce food intake or increase physical activity by 100 calories/day.** One study estimated that the average weight gain in young adults to be approximately 1.8 to 2 pounds per year. This would be equivalent to an energy imbalance of approximately 100 calories per day. Walking one mile burns approximately 100 calories.
- **Determine a time budget for TV.** Make a plan to reduce time spent watching television. Studies document that

more hours spent watching television results in a greater percent body fat.

- **Increase access for physical activity facilities.** Locate grant money to build community walking trails or fitness facilities. Get local schools to allow citizens to walk in the halls during specified time periods.
- **Walk during your daily activities.** Walk from the far end of the parking lot. You won't have trouble finding a parking spot! Take the stairs and not the elevator. Walk to do a 10 minute errand during the day. Walk during lunch or breaks. Walk while you talk on the phone.
- **Make healthy eating a priority.** Value good health and take the time to provide a good diet for you and your family. Eating healthy is not going to happen unless you spend time planning. Plan to have healthy food options available by making regular trips to the grocery store. Increase the purchase of fruits and vegetables and whole grain items. Reduce or eliminate the purchase of processed junk food including sweetened beverages. On the weekend prepare some food for the upcoming week.
- **Eliminate sweetened beverages.** Make it a habit to drink water or other unsweetened beverages rather than sweetened beverages. One can of pop contributes about 150 calories and 10 teaspoons of sugar. It would require walking about a mile and a half to expend that many calories.
- **Moderate portion sizes.** Research has demonstrated that we eat more food if we are served larger portions. Serving sizes have increased over the past two decades for processed foods in grocery stores, in restaurants and fast-food outlets, and in our homes. This has occurred during a time period when the level of physical activity of the population has been decreasing.

References

Finkelstein, E.A., et al. Obesity Research 2004; 12(1):18-24.
Daviglius, M.L., et al. JAMA 2004; 292(22):2743-2749.
Flegal, K.M., et al. JAMA 2005; 293(15):1861-1867.
Gregg, E.W., et al. JAMA 2005; 293(15):1868-1874.
Hill, J.O., et al. Science 2003; 299:853-855.
Nielson, S.J., B.M. Popkin. JAMA 2003; 289:450-453.
Hu, F.B., et al. JAMA 2003; 289:1785-1791.
www.ndhealth.gov
MMWR Dec. 2, 2005/54(47); 1208-1212.

For more information on this and other topics, see: www.ag.ndsu.edu

County commissions, North Dakota State University and U.S. Department of Agriculture cooperating. North Dakota State University does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, Vietnam Era Veterans status, sexual orientation, marital status, or public assistance status. Direct inquiries to the Vice President for the Division of Equity, Diversity and Global Outreach, 205 Old Main, (701) 231-7708. This publication will be made available in alternative formats for people with disabilities upon request, (701) 231-7881.

Jane U. Edwards, Ph.D.,LRD
NDSU Extension Specialist Nutrition and Health
Department of Health, Nutrition and Exercise Sciences
jedwards@ndsuent.nodak.edu

NDSU
Extension Service

North Dakota State University, Fargo, North Dakota 58105
DECEMBER 2005