

Obesity and Other Diet- and Inactivity-Related Diseases:

National Impact, Costs, and Solutions

2005

National Alliance for Nutrition and Activity (NANA)

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National Alliance for Nutrition and Activity

The National Alliance for Nutrition and Activity (NANA) advocates national policies and programs to promote healthy eating and physical activity to help reduce the illnesses, disabilities, premature deaths, and costs caused by diet- and inactivity-related diseases. Those diseases include heart disease, stroke, cancer, diabetes, high blood pressure, and obesity.

The Problem:

- **Two-thirds of premature deaths in the U.S. are due to poor nutrition, physical inactivity and tobacco use.** Federal and state governments conduct effective programs to reduce tobacco use, but programs to reduce obesity and promote healthy eating and physical activity to the general public are limited.
- **Over the last 25 years, obesity rates doubled among U.S. adults and children and tripled in teens.** Overweight and obesity affect the majority of American adults (65%).
- **Diet and inactivity are cross-cutting risk factors, contributing significantly to four out of the six leading causes of death (i.e., heart disease, cancer, stroke, and diabetes).**

The Costs:

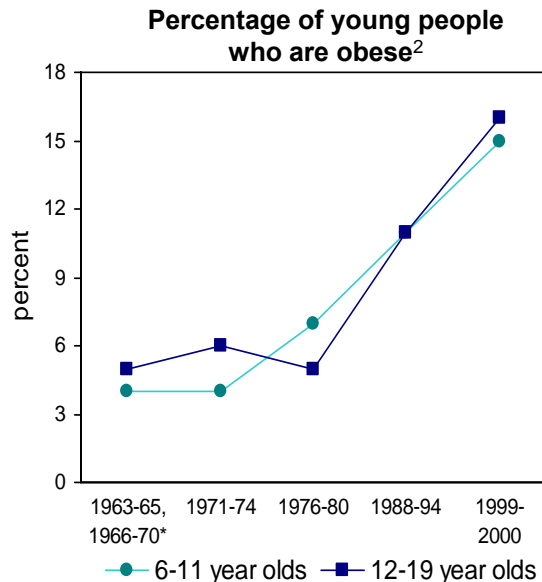
- According to the U.S. Department of Agriculture, **healthier diets could prevent at least \$71 billion per year** in medical costs, lost productivity, and lost lives. The Centers for Disease Control and Prevention (CDC) estimates that **if all physically inactive Americans became active, we would save \$77 billion** in annual medical costs.

What Congress Can Do:

- **Provide a FY 2006 appropriation of \$70 million for the CDC's Division of Nutrition and Physical Activity to promote healthy eating and physical activity and reduce obesity.** This level of funding would allow the CDC to fund 47 states, with about 17 funded at a basic implementation level. For FY 2005, funding is \$41.9 million, allowing CDC to fund 28 states (AZ, AR, **CO**, FL, GA, IL, IA, KY, ME, MD, **MA**, MI, MO, MT, NM, NY, **NC**, OK, OR, **PA**, RI, SC, SD, TX, VT, **WA**, WV, and WI), five (those in bold) at a basic implementation level.
- Provide the CDC with a FY 2006 appropriation of \$70 million for **the Childhood Obesity Prevention Program (VERB Campaign), which uses modern marketing techniques to promote physical activity to youth,** and begin message and program development for a national fruit and vegetable promotion campaign. FY 2005 funding for the campaign is \$58.8 million.

Obesity is one of the greatest health challenges of our time

- **Obesity rates have doubled in adults and children and tripled in adolescents over the last two decades.**
 - Almost two-thirds (64%) of American adults are seriously overweight or obese.¹
 - One in seven young people are obese and one in three are overweight.²



- **Diet and inactivity are cross-cutting risk factors, contributing significantly to four out of the six leading causes of death.**

Leading Causes of Death⁴

(Diet and inactivity are leading risk factors for causes of death shown in red.)

1. Heart Disease	684,462
2. Cancer	554,643
3. Stroke	157,803
4. Chronic Lower Respiratory Diseases	126,128
5. Accidents	105,695
6. Diabetes	73,965
7. Pneumonia and Influenza	64,847
8. Alzheimer's Disease	63,343
9. Nephritis	42,536
10. Septicemia	34,243
11. Suicide	30,642
12. Chronic Liver Disease/Cirrhosis	27,201
13. Hypertension	21,841
14. Parkinson's Disease	17,898
15. Pneumonitis	17,457

- **Obesity increases the risk of heart disease, high blood pressure, diabetes, arthritis-related disability, and cancer.** ³

Unhealthy eating and physical inactivity cause 1/3 of premature deaths

- HHS estimates that **unhealthy eating and inactivity cause about 1,000 deaths every day.** That's 5 times more than the number of people killed by guns, HIV, and drug use combined.⁵
- **50% of American adults do not get the recommended amount of physical activity.**⁶ Regular physical activity helps to prevent heart disease, colon cancer, obesity, diabetes, and high blood pressure.
- **Only 12% of Americans eat a healthy diet** consistent with federal nutrition recommendations.⁷ The typical American diet is too high in saturated and trans fat, salt, and refined sugar and too low in fruits, vegetables, whole grains, calcium, and fiber.
- Much of our nation's disease burden is preventable. Seventy-one percent of premature deaths are caused by poor nutrition, physical inactivity, and tobacco use.

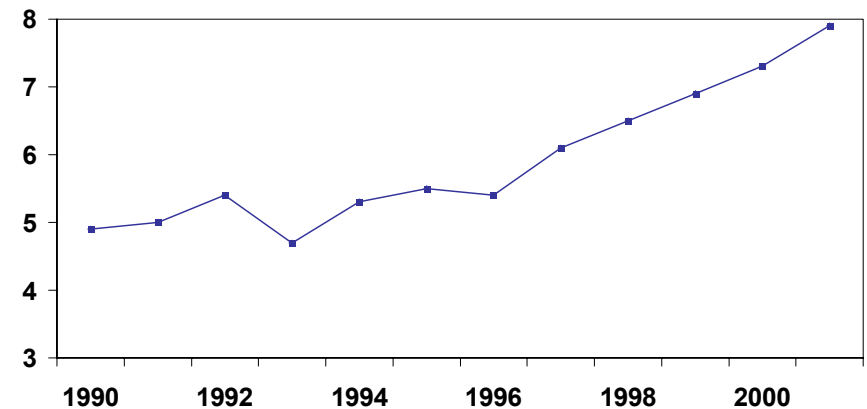
Leading Contributors to Premature Death⁵

Tobacco	435,000
Diet and Physical Inactivity	365,000
Alcohol	85,000
Microbial Agents	75,000
Toxic Agents	55,000
Motor Vehicles	43,000
Firearms	29,000
Sexual behavior	29,000
Drug Use	17,000

Diabetes: Obesity's Twin Epidemic

- Diabetes rates have risen along with obesity rates. **Between 1990 and 2001, diabetes rates rose by 61%.⁸**
- **Type 2 diabetes is no longer called “adult onset” diabetes because of rising rates in children.** In a study conducted in Cincinnati, the incidence of type 2 diabetes in adolescents increased ten-fold between 1982 and 1994.⁹
- **90-95% of diabetes is type 2. Between 50% and 80% of diabetes cases are associated with unhealthy eating patterns and sedentary lifestyles.¹⁰**
- **Through physical activity and healthy eating, the onset of type 2 diabetes was reduced by 60% in at-risk individuals.** (In comparison, the diabetes drug metformin reduced the onset of type 2 diabetes by 30%.)¹¹
- Federal Medicare and Medicaid costs due to diabetes were \$14.5 billion in 2000.¹²
- Employers pay an average of \$4,410 more per year for employee beneficiaries who have diabetes than for beneficiaries who do not have diabetes.¹³

**Diabetes Prevalence
(percent of adults)**



Poor diet and physical inactivity are causing “adult” diseases in children



- **Only 2% of children eat a healthy diet** (i.e., a diet consistent with federal nutrition recommendations).¹⁴
- **35% of children are physically inactive.**¹⁵
- Three out of four American high school students do not eat the recommended 5 or more servings of fruits and vegetables each day.¹⁶
- Three out of four children consume more saturated fat than is recommended in the *Dietary Guidelines for Americans*.¹⁷

- **25% of children ages 5 to 10 years have high cholesterol, high blood pressure, or other early warning sign for heart disease.**¹⁸ Autopsy studies of teenagers and young adults have shown that virtually all have fatty streaks in their arteries (which is the first step toward clogged arteries). One in ten study subjects had advanced fibrous plaques in their arteries.¹⁹
- As the number of young people with type 2 diabetes increases, diabetic complications like limb amputations, blindness, kidney failure, and heart disease will develop in people of younger ages (likely in their 30s and 40s).
- **From 1979 to 1999, annual hospital costs for treating obesity-related diseases in children rose three-fold** (from \$35 million to \$127 million).²⁰

Poor diet and physical inactivity contribute to the leading causes of disability among Americans

Number of Americans Affected by Diseases to which Diet and Inactivity are Major Contributors

Overweight/Obese ²¹	134,750,000
High Blood Pressure ²¹	65,000,000
Diabetes ²³	18,200,000
Coronary Heart Disease ²¹	13,000,000
Osteoporosis ²⁴	10,000,000
Cancer ²⁵	9,800,000
Stroke ²¹	5,400,000

- **Diabetes is a leading cause of serious disabilities such as blindness and amputation.** Each year, 12,000 to 24,000 people with diabetes become blind, almost 130,000 receive treatment for kidney failure, and 82,000 undergo diabetes-related lower-extremity amputations.²³
- **The leading cause of permanent, premature disability in the U.S. labor force is coronary heart disease,** which causes 19 percent of disability allowances distributed by the Social Security Administration.²²
- **Stroke is a leading cause of serious long-term disability.**²¹ 2.2 million Americans have disabilities resulting from high blood pressure.²⁶
- **Most hip fractures are caused by osteoporosis.**^{24, 27} Of people over age 50 who fracture a hip, 24% die within one year and 25% require long-term care.²⁴ A broken hip is the second leading cause of admission to nursing homes.

The costs of diet-, inactivity-, and obesity-related diseases are borne by individuals, businesses and governments

Costs of Diet- and Inactivity-Related Diseases*

Cancer ²⁵	\$190 Billion
Coronary Heart Disease ²¹	\$142 Billion
Obesity ²⁸	\$117 Billion
Diabetes ²⁹	\$132 Billion
Stroke ²¹	\$57 Billion
High Blood Pressure ²¹	\$60 Billion
Osteoporosis ^{24,**}	\$17 Billion

*Estimates of annual direct + indirect costs. **Figure includes direct costs only.

- **The total U.S. healthcare costs due to obesity are \$94 billion per year.³² Half that cost (\$47 billion) is paid through Medicare and Medicaid.**

Federal Medicaid & Medicare Costs, 2000¹²

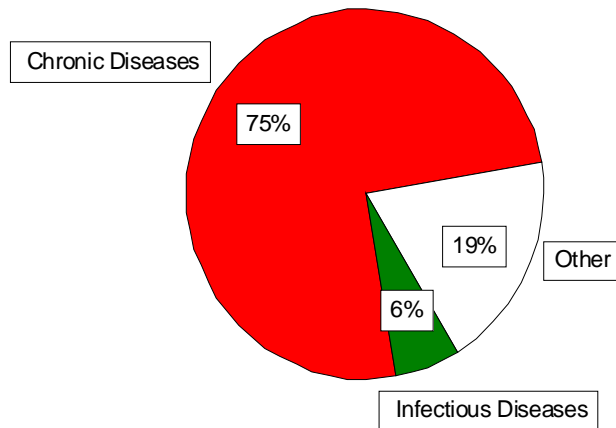
Disease	Cost
Heart Disease	\$43.1 billion
Cancer	\$18.8 billion
Diabetes	\$14.5 billion
Stroke	\$7.0 billion

- **Diet- and inactivity-related diseases increase out-of-pocket costs to families.** For example, diabetes patients pay about \$2,000 per year in drug store expenses.³⁰
- **Diet- and inactivity-related diseases increase costs to businesses.** Medical costs of General Motors employees increased from \$2225 to \$3753 per year with increasing body mass index (BMI) of the employee.³¹
- Obesity increases inpatient and ambulatory health care costs by \$395 per person per year -- more than smoking and problem drinking.²⁸
- Health care spending is expected to rise by 25% by 2030, since the American population is aging. Chronic diseases are responsible for 75% of health care costs.³³
- According to the USDA, **healthier diets could prevent at least \$71 billion per year** in medical costs, lost productivity, and lost lives.³⁴
- CDC estimates that **if all physically inactive Americans became active, we would save \$77 billion** in annual medical costs.³⁵

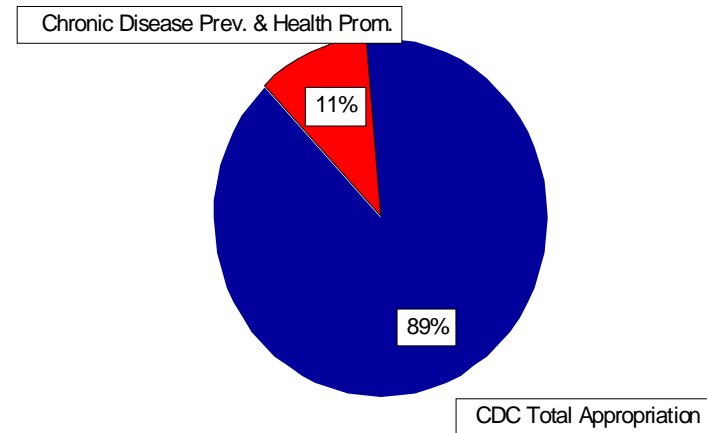
National investment in disease prevention is inconsistent with current science

- **Over 75% of deaths in the U.S. are due to chronic diseases. Yet, the budget for CDC's National Center for Chronic Disease Prevention and Health Promotion represents only 11% of CDC's overall budget.**

Leading Causes of Death ⁴



CDC FY 2005 Spending for Chronic Disease Prevention and Health Promotion



Strengthen the CDC's Division of Nutrition and Physical Activity

- **While 1/3 of premature deaths in the U.S. are attributable to poor nutrition and physical inactivity, funding for the CDC's Division of Nutrition and Physical Activity (DNPA) represents just 1/2% of the CDC's total budget** and is 5% of the CDC's chronic disease budget.
- **Support a FY 2006 appropriation of \$70 million for the CDC to promote healthy eating and physical activity and to reduce obesity.** For FY 2005, funding is \$41.9 million, allowing CDC to fund 28 states (AZ, AR, **CO**, FL, GA, IL, IA, KY, ME, MD, **MA**, MI, MO, MT, NM, NY, **NC**, OK, OR, **PA**, RI, SC, SD, TX, VT, **WA**, WV, and WI), five (those in bold) at a basic implementation level.
- \$70 million would allow the CDC to fund 30 states at a planning level and 17 states at a basic implementation level.
 - The average award for the planning level grants is \$400,000 per state, which supports the development of a state-wide plan for physical activity, nutrition and obesity, partnerships, and implementation and evaluation of demonstration projects.
 - The basic implementation grants enable states to expand their efforts to conduct effective programs and to provide mini-grants for community-level programs.
- 85% of funded **states have leveraged additional funds** from private foundations, businesses, states and other sources to supplement DNPA funding, with leveraged amounts ranging from \$100,000 to over \$1 million. With grants from DNPA, funded states have developed and implemented programs to address poor diets and physical inactivity. Examples include:
 - **Texas- I-CAN! (Initiatives for Children's Activity and Nutrition)** is a school-based intervention to increase fruit and vegetable intake, reduce fat intake, and increase physical activity;
 - **Colorado Physical Activity and Nutrition (COPAN) Program**, with a coalition of over 450 public and private partners, developed a comprehensive plan to prevent obesity and promote healthy eating and physical activity, including making it safer and easier for Coloradans to walk and bike.
 - **Massachusetts** worked with schools to increase opportunities for physical activity and improve the nutritional quality of school foods.
- Funding is also needed to further develop, test, and disseminate practical interventions and effective policies, to conduct surveillance and communications campaigns, and to strengthen the 5 A Day program (which is in the process of being moved from the National Cancer Institute to CDC).

Fund the CDC's Childhood Obesity Prevention Program/ VERB Campaign

- **Provide the CDC with a FY 2006 appropriation of \$70 million for the VERB Campaign** to promote physical activity to youth, and begin message and program development for a fruit and vegetable campaign. FY 2005 funding for the campaign is \$58.8 million.
- The VERB Campaign uses paid television, radio and print advertising, an interactive web site, and community events to encourage children to be physically active.
- The VERB campaign is a key component of CDC's current efforts to increase physical activity levels among middle school aged children, and, thereby, to help reduce the national epidemic of youth overweight and obesity. VERB demonstrates the power of public-private collaboration. Based on the **evaluation of the first year of the campaign**, VERB has:
 - Reached extraordinarily high awareness levels among tweens (74 percent nationally and 84 percent in high-dose communities) and very high understanding (90 percent nationally) of the campaign's core messages to be physical activity and have fun.
 - Narrowed the gap in physical activity between girls and boys.
 - Resulted in lower income tweens becoming more physically active, despite greater barriers to being active.

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