

4 Burden of Poor Nutrition, Physical Inactivity, Obesity, and Other Chronic Diseases

Nutrition and physical activity status affect death and disability and can impact the physical, mental, and emotional quality of life. Poor nutrition, inactivity, and tobacco use account for 35% of all deaths in Maine, with an estimated four people dying every day in Maine from an underlying cause of poor nutrition or physical inactivity.⁷⁷ Fourteen percent of all U.S. deaths have been attributed to poor diets and/or sedentary lifestyles.⁷⁸ Research has shown that a complete absence of physical activity is correlated with the highest risk for death and disability and some form of regular activity improves physical and mental health.⁷⁹

Obese people generally have higher health care costs, face greater health risks, and are more likely to experience a disability.⁸⁰ People who are obese incur annual medical expenses that are 36% higher than those who are of normal weight.⁸¹ Estimated annualized medical expenditures attributable to obesity are \$357 million for adults in Maine; it is estimated to cost 11% of the State's Medicaid expenditures, or roughly \$137 million per year.⁸² These same authors state that medical spending attributable to overweight and obesity accounted for 9.1% of total annual U.S. medical expenditures in 1998.⁸³ Medicare and Medicaid finance approximately half of these costs. In 1999, it was estimated that the aggregate lifetime costs of health care associated with overweight for men and women ages 35 through 64 was \$2.2 billion.^{84, 85}

Obesity increases a person's risk of death from all causes by 50%–100%, more than previously thought.⁸⁶ The association between obesity and increased morbidity and mortality translates into substantially increased medical and disability costs. In 2000, the economic costs of obesity in the U.S. were \$117 billion.⁸⁷ Most of the costs associated with obesity are due to type 2 diabetes, coronary heart disease,

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Burden (continued)

and hypertension. In fact, obesity affects more people and is linked to an increase in chronic medical conditions and significantly higher costs of medication and health care than smoking. For example, when compared with normal weight individuals of the same age, gender, and social demographics, obese people suffer from an increase in chronic conditions of 67%. In contrast, the increase in chronic conditions for normal weight daily smokers is 25%.^{88, 89}

Maine ranks nineteenth in the nation for deaths due to the four major chronic diseases: cardiovascular disease, cancer, chronic respiratory diseases, and diabetes.⁹⁰ These four represent the top four causes of death from chronic disease in Maine, and they all are influenced directly by diet and physical inactivity. Cardiovascular disease is the most common cause of death in Maine, accounting for about 40% of all deaths and resulting in greater costs than any other disease. The reported hospital costs of cardiovascular disease in Maine were \$474 million in 2002—29% of all hospital charges.⁹¹ Cancer accounts for about 25% of all deaths in Maine, the nation's tenth highest rate of death from all cancers.⁹² Diabetes, although less common, results in the second greatest disease costs in Maine. The numbers of people in Maine diagnosed with diabetes has more than doubled, from an estimated 33,000 in 1994 to over 73,000 in 2002. The vast majority of these are type 2 diabetes, which is associated with obesity.⁹³

Obesity in children and adolescents is associated with chronic diseases such as diabetes, asthma, sleep apnea, and gallbladder disease. Fifty-eight percent of overweight children, even as young as five, were found to have at least one additional risk factor for cardiovascular disease, and 20% were found to have two or more.⁹⁴ In the United States over the past twenty years, increases in the percentage of hospital discharges were found for obesity and obesity-related illnesses as follows: obesity, 197%; sleep apnea, 436%; and gallbladder disease, 228%. During this same period of time, obesity-associated annual hospital costs for youth aged 6 to 17 years have increased more than threefold, from \$35 million in 1979–1981 to \$127 million in 1997–1999.⁹⁵ Although the direct medical consequences of being overweight or obese are often emphasized, psychosocial consequences also are profound for adults as well as children.⁹⁶

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