Obesity Drove Health Care Spending, 1987-2007

FROM A CONGRESSIONAL BUDGET OFFICE REPORT

f current trends continue and 37% of Americans are obese by 2020, health care spending per person will rise from \$4,550 in 2007 to about \$7,760 in 2020. But a decrease in the obesity rate would reduce total per capita health care spending by only a few percentage points, according to the report.

For example, if obesity rates level off at their current 28% share of the

Major Finding: Between 1987 and 2007,

health care spending on normal-weight adults grew by 65%, spending on over-

weight adults grew by 65%, spending on over-

on obese adults grew by 111%.

Data Source: Congressional Budget Office. **Disclosures:** None.

population, health care spending will rise 3% less, to total about \$7,500 per person in 2020, the CBO report said. And if obesity in the United States falls to its 1987 level by 2020, projected spending per adult would total \$7,230, about 7% lower than if obesity rates continue to rise, the study found.

Even though reducing levels of obesity could also reduce the amount spent on health care, designing public policies to achieve that goal is difficult, and the antiobesity initiatives themselves cost money, the CBO report said.

"The costs of ongoing interventions are likely to offset at least part of any reductions in health care spending attributable to weight loss, although the improvements in health that would result might still make the interventions an appropriate use of public or private funds," the report said.

The report – "How Does Obesity in Adults Affect Spending on Health Care?" – found that health care spending per adult grew substantially in all weight categories between 1987 and 2007, but the rate of growth was much faster among obese individuals than for people of normal body weight.

The percentage of adults considered obese rose from 13% in 1987 to 28% in 2007, while the share of adults considered overweight increased slightly during that period, the CBO report said. Meanwhile, the percentage of adults with normal body mass indexes dropped from 52% to 35%.

Overall, health care spending for all adults rose almost 80% from 1987 to

2007, from \$2,560 to \$4,550, according to the CBO report. Spending on normal-weight adults grew by 65% in those 2 decades, while spending on overweight adults grew by 61% in the same time frame. However, spending on obese adults %

grew by 111%.

Specifically, spending for obese adults exceeded spending for normalweight adults by about 8% in 1987 and by about 38% in 2007. The CBO report said the gap in spending between the two groups may reflect several factors, including changes in health status for the obese and advances in technology that offer new treatments for conditions that plague the obese.

Spending on obesity-related diseases such as heart disease, type 2 diabetes, hypertension, and dyslipidemia generally is higher for obese adults, but normal-weight adults also develop these conditions, the CBO report pointed out.

Spending on obesity-related diseases accounted for about 60% of the \$1,530 difference in total spending between the obese and normalweight adults in 2007, the report calculated.

"That finding leaves about 40% of the spending differential unexplained and perhaps attributable to factors other than body weight," the report said.

Active Adults May Still Gain Weight During the Holidays

BY DOUG BRUNK

FROM THE ANNUAL MEETING OF The obesity society

SAN DIEGO – Adults with high total daily energy expenditure are not protected from holiday weight gain, results from a large study demonstrated.

This is one of only a few studies that did not find evidence for the prevention of body weight gain via physical activity across the typical daily physical activity levels observed in the general population, Chad M. Cook said in an interview during a poster session at the meeting.

"We hypothesized that people who habitually burn more daily calories than predicted for their age, height, and body weight may be protected against holiday weight gain," said Mr. Cook, who is a graduate student in nutrition-

al sciences at the University of Wisconsin–Madison. "We found that's not true, at least in this particular population studied."

Mr. Cook and his associates analyzed body weight change during the 1999-2000 winter quarter in 443 men and women aged 40-69 years with doubly labeled wa-



Increased body weight at holiday time was not tied to total energy expenditure.

ter data who participated in the National Cancer Institute–sponsored Observing Protein and Energy Nutrition (OPEN) study. The original purpose of the OPEN study, completed in 2000, was to assess self-reported dietary measurement error by comparing results from self-reported di-

Major Finding: During the 1999-2000 holiday winter quarter, 73% of men and

- women gained 0.1 kg or more, with 19%
- gaining 2 kg or more. No correlations were seen between weight gain and total energy expenditure.

Data Source: An analysis of 443 men and women aged 40-69 years who participated in the Observing Protein and Energy Nutrition (OPEN) study.

Disclosures: The study was funded by the National Cancer Institute Intramural Research Program. Mr. Cook said he had no relevant financial conflicts.

etary intake questionnaires with objective biomarkers: doubly labeled water and urinary nitrogen.

The researchers used doubly labeled water to measure total energy expenditure, and calculated residual total energy expenditure after adjusting for age, height, and body weight. Over an average of 107 days, nearly three-quarters of study participants (73%) gained 0.1 kg or more, with 19% gaining 2 kg or more. Men gained more than women (an average of 1.1 kg vs. 0.7 kg).

Men with a baseline body mass index of 30 kg/m^2 or more gained an average of 1.5 kg, which was significantly more than men with a baseline BMI of 19-24 (an average of 1.0 kg) or men with a BMI of 25-29 (an average of 0.9 kg). There were no differences in body weight change between BMI categories among women, or between age and sex subgroups.

Mr. Cook also reported that there were no correlations seen between increased body weight and total energy expenditure or between increased body weight and total energy expenditure after the researchers adjusted for age and body size. Residual total energy expenditure above or below the average for body size ranged from −877 to 1,813 calories per day, with a median of −36 calories per day.

Obese Individuals Most Likely to Report Inadequate Sleep

BY BRUCE JANCIN

FROM THE ANNUAL MEETING OF THE ASSOCIATED PROFESSIONAL SLEEP SOCIETIES

SAN ANTONIO – Body mass index is strongly correlated with self-reported days of insufficient sleep per month among U.S. adults, based on a large national study.

The study included 384,020 U.S. adults who participated in the Centers for Disease Control

and Prevention's 2008 Behavioral Risk Factor Surveillance System survey, the world's largest telephone health survey. The 2008 version asked: "During the past 30 days, for about how many days have you felt you did not get enough rest or sleep?"

Days of insufficient sleep followed a linear trend across body mass index (BMI) categories. Among the 36.8% of respondents who were normal weight or underweight, the mean number of days of insufficient sleep in the past month was 7.9. The 36.4% of the population who were overweight averaged 8.4 days. For the 17.1% who were obese class I with a BMI of at least 30 and less than 35 kg/m², it was 9.4 days. And the 3.5% of adults who were obese class III with a BMI of 40 kg/m² or more averaged 11.1 days of insufficient sleep per month, Anne G. Wheaton reported at the meeting.

Twenty-five percent of nor-

mal-weight respondents indicated they had 14 or more days of insufficient sleep in the past 30 days. This proportion rose steadily through the BMI categories, reaching 37.1% among individuals who were obese class III, added Ms. Wheaton of the CDC.

In a multivariate regression analysis adjusted for demographic variables, physical activity, and smoking, respondents who were obese class I, II, or III were, respectively, 1.4-fold, 1.6-fold, and 1.8-fold more likely than were normal-weight individuals to have had at least 14 days of insufficient sleep in the past 30 days.

One implication of this study, she said, is that insufficient sleep should be addressed in weightreduction programs.

This study was supported by a grant from the Association for Prevention Teaching and Research, and the CDC. Ms. Wheaton reported no financial conflicts.

BY JANE ANDERSON