Obesity Rates in Maine Exceed New England's Obesity Rate: A look at possible contributing factors

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Introduction

Obesity causes many serious health problems such as:

- Diabetes
- Stroke
- Cancer
- Sleep apnea
- Gall stones
- Infertility in women

Some astounding obesity estimates are:

- 300,000 -- US adults die of causes attributable to obesity each year.¹
- 1.6 trillion -- Obesity-related diseases and health problems account for 61 percent of healthcare costs in the United States totaling over this amount a year.²
- $164 billion -- The estimate of what U.S. employers are losing in productivity each year due to obesity-related issues with employees.³
- $62 billion -- Medicare and Medicaid are spending nearly this amount every year on obesity-related costs.³
- 105% -- Obese Americans pay more than double what individuals who are not obese pay for prescription drugs.³

Definition of Obesity - Body mass index greater than 30:

- Body mass index (BMI) is a measure of body fat based on height and weight that applies to adult men and women.
- To calculate your BMI:
  1. Multiply your height in inches times your height in inches.
  2. Divide your weight by the number you arrived at in Step 1.
  3. Multiply the number you came up with in Step 2 by 705.
- Table 1 shows Weight status for a person five feet nine inches tall.

Table 1. Example of BMI and Weight Status

<table>
<thead>
<tr>
<th>Height</th>
<th>Weight Range</th>
<th>BMI</th>
<th>Weight Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>5’9”</td>
<td>129 lbs or less</td>
<td>Underweight</td>
<td></td>
</tr>
<tr>
<td>5’9”</td>
<td>130-169 lbs</td>
<td>Normal</td>
<td></td>
</tr>
<tr>
<td>5’9”</td>
<td>170-202 lbs</td>
<td>Overweight</td>
<td></td>
</tr>
<tr>
<td>5’9”</td>
<td>203 lbs or more</td>
<td>Obese</td>
<td></td>
</tr>
</tbody>
</table>

Objective

The purpose of this study was to explore adult obesity data to:

- Compare Maine’s rates with other New England states
- Explore differences in Maine counties by looking at known risk factors

Method

Data was obtained from:

- The 2010 U.S. Census
- Behavioral Risk Factor Surveillance System

Prevalence estimates were based on self-reported height and weight to calculate body mass index (BMI) to assess obesity rates. This project was submitted to the Institutional Review Board at the University of Southern Maine.

Limitations:

- New England averages were calculated by averaging the state rates.
- Reviews of the prevalence data were used – no statistical tests were done.

Findings

This study found that:

- Maine has the highest rate of adult obesity in New England (27.4%) see Map 1. Inset.
- Twelve of Maine’s 16 counties have obesity rates higher than the New England average (24.9%), as shown in Map 1.
- Of the twelve counties with obesity rates greater than 24.9 %
  - All have a lower percent of adults with a bachelor’s degree than the New England average, see Chart 1.
  - Seven have poverty rates higher than the New England average as shown in Chart 2.

Further research suggested:

- Determine what factors are contributing to the band of high obesity across the central Maine region.
- Studied Oxford County to determine what factors are keeping its obesity rate down even though the number of people with bachelor degrees is relatively low and the prevalence of poverty is relatively high.

Acknowledgements

- This poster was produced for a class project with help and encouragement from Brenda Joly, fellow classmates and coworkers.

References

3: From the Motley Fool website which cited the following sources: Reuters, Brooking Institute, Society of Actuaries, Columbia University.