

OHIO POPULATION NEWS: OBESITY IN OHIO

Over the past few years, considerable attention has been given to the increasing prevalence of obesity in the United States. The most recent data from the Centers for Disease Control suggest that the prevalence of obesity ranges from a high of 30.9 percent of the adult population in Mississippi, to a low of 17.8 percent among the adult population in Colorado.¹ **The State of Ohio, with twenty-four percent of adults classified as obese, ranks 15th in the nation** (based on combined data 2003-2005). Just ten years ago, only 15.8 percent of the adult U.S. population and 17.5 percent of adult Ohioans were obese. To measure obesity and overweight, public health researchers often use the Body Mass Index (BMI)—a number calculated from a person's weight and height (see box to the right).

This matter of increasing obesity is particularly significant when recognizing the importance of weight in the overall health of a population. **Obesity can contribute to a variety of negative health conditions such as high blood pressure, diabetes, heart disease, and respiratory problems.**² According to data from the Behavior Risk Factor Surveillance System (2005), **sixteen percent of obese adults in Ohio have been told by their doctor that they have diabetes and roughly 2 out of 5 (44 percent), suffer from high blood pressure.** There are also economic costs associated with increasing obesity. For example, costs directly related to obesity come in the form of prevention programs and treatment services while indirect costs are incurred due to decreased productivity and absenteeism, along with increases in morbidity and mortality. **Recent estimates suggest, between 1998 and 2000, obesity-related Medicare and Medicaid expenditures cost Ohio \$3.3 million.**² The purpose of this research brief is to present current prevalence estimates of obesity and overweight among Ohio's adults and children.

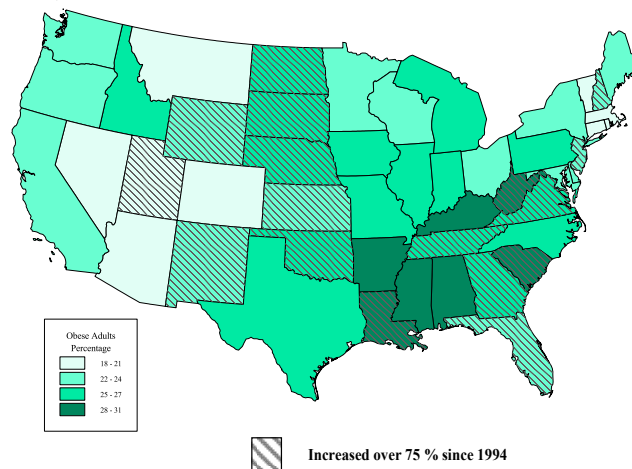
ADULTS

The prevalence of overweight or obesity among adults varies across groups. For example, roughly 46 percent of adult men in Ohio are considered overweight—that is, with BMI's between 25 to 29, compared to just 29 percent of women. This gender difference in the prevalence of *just overweight* and not obese is only present and statistically significant among non-Hispanic whites. However, just under a quarter of both men and women in the state are obese. Taken together, **three out of five (62 percent) of adult Ohioans have BMI scores that classify them as overweight or obese.**

Race and ethnicity. In 2005, thirty-four percent of adult Black Ohioans had BMI scores that classified them as obese. Gender differences persist with 37 percent of non-Hispanic Black women and 30 percent of non-Hispanic Black men suffering from obesity compared to 23 percent of non-Hispanic white women and 24 percent of non-Hispanic white men. When examining the population that is just overweight but not obese, the highest prevalence is seen among non-Hispanic white men (47 percent) and non-Hispanic Black men (38 percent). The figures for overweight, yet not obese, among women are 31 percent for non-Hispanic Blacks and 28 percent non-Hispanic whites. (Insufficient sample size prohibits the analysis of Hispanics or Asians separately. Hispanics, Asians, and others reporting multiple races are categorized here as "Other").

Association between Obesity and Socioeconomic Status. Research has shown that in the U.S., obesity has a strong inverse relationship with socioeconomic status, particularly for women. That is, higher levels of income and education (two indicators of socioeconomic status), are associated with lower levels of obesity on average. In Ohio, recent data suggest that this may be true—there are clear and **significant differences between the rates of obesity among women with a college degree (19-percent) compared to women who hold only a high school degree or less (28-percent).** This relationship did not hold true for men, however.

Figure 1: Prevalence of Obesity among Adults (ages 18 and over), 2005



Source: Centers for Disease Control and Prevention (CDC), *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, [1994 and 2005].

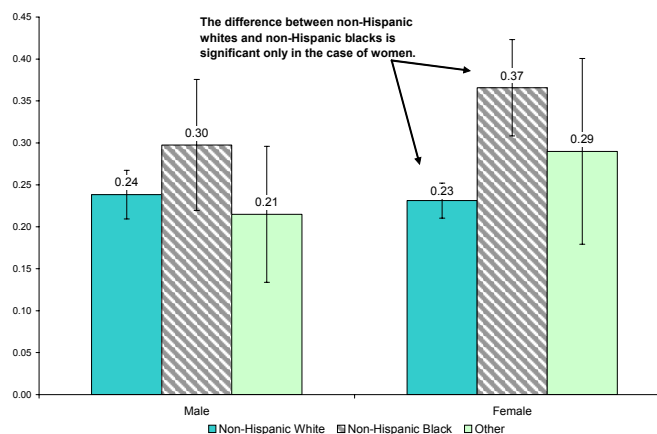
What is BMI?

To determine whether a person is overweight or obese researchers often use a measurement tool called Body Mass Index (BMI). BMI is used because for most people, it is often correlated with their level of body fat. BMI is expressed as weight/height², or kg/m². **For adults, a BMI of 30 or higher is considered *obese* while a BMI between 25 and 29 is considered *overweight*.**

BMI	Classification
Below 18.5	Underweight
18.5 to 24.9	Healthy weight
25.0 to 29.9	Overweight
30 or higher	Obese

You can find the CDC's BMI Calculator at the following location:
<http://www.cdc.gov/nccdphp/dnpa/bmi/index.htm>

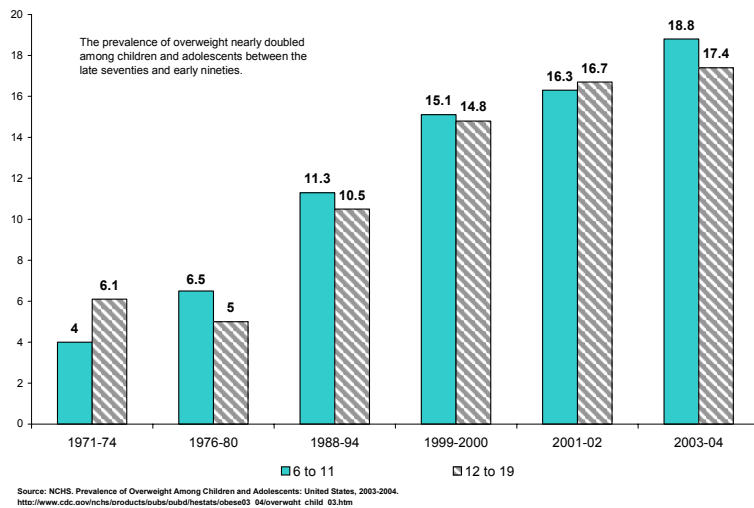
Figure 2: Prevalence of Obesity among Adults by Gender and Race, Ohio 2005.



Source: CDC BRSS 2005 data. Survey weights applied.

The 95% confidence intervals (indicated by the vertical lines) shown for each value represent the level of certainty surrounding the point estimates.

Figure 3: Prevalence of Overweight among Children and Adolescents: U.S., 1971-2004 (NHANES estimates).



Overweight is a growing health concern for children and adolescents.

Recent data from the National Survey of Children’s Health (2003) indicate that in Ohio, 14.2 percent of children ages 10 to 17 are overweight (indicated by BMI scores at or above the 95th percentile) and 16.3 percent are at risk for overweight (between the 85th and 95th percentiles). (Following NCHS recommendation, NSCH data are analyzed only for children ages 10 to 17).

Gender and Age. In Ohio, estimates suggest that 11.5 percent of girls and 16.7 percent of boys’ ages 10 to 17 are overweight; and another 13.8 percent of girls and 18.6 percent of boys are at risk of overweight. Among those ages 10 to 13, one out of six children are overweight while just one out of ten are overweight among those children ages 14 to 17.

Poverty. The prevalence of overweight appears to be negatively related to family income. For example, in the U.S. over a fifth of children (ages 10 to 17) who live in poverty are overweight (22.4) compared to just 9 percent of children who live in families with income well over the poverty level. (Estimates for Ohio are not stable).

It is important to note that the analyses presented in this research brief do not control for selected variables. Controlling for variables such as education, income, and age may demonstrate whether gender and racial differences continue to exist after adjustment.

Additional Sources:

¹Behavior Risk Factor Surveillance System, Trends Data, Centers for Disease Control and Prevention, www.cdc.gov

²“Overweight and Obesity: Economic Consequences” Centers for Disease Control and Prevention, http://www.cdc.gov/nccdphp/dnpa/obesity/economic_consequences.htm

³U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *The National Survey of Children’s Health 2003*. Rockville, Maryland: U.S. Department of Health and Human Services, 2005. Available online: <http://healthymamericans.org/reports/obesity2006/Obesity2006Report.pdf>

NCSH 2003 Data. Blumberg SJ, Olson L, Frankel MR, Osborn L, Srinath KP, Giambo P. Design and operation of the National Survey of Children’s Health, 2003. National Center for Health Statistics. Vital Health Stat 1(43). 2005. <http://www.cdc.gov/nchs/about/major/slaits/nsch.htm>

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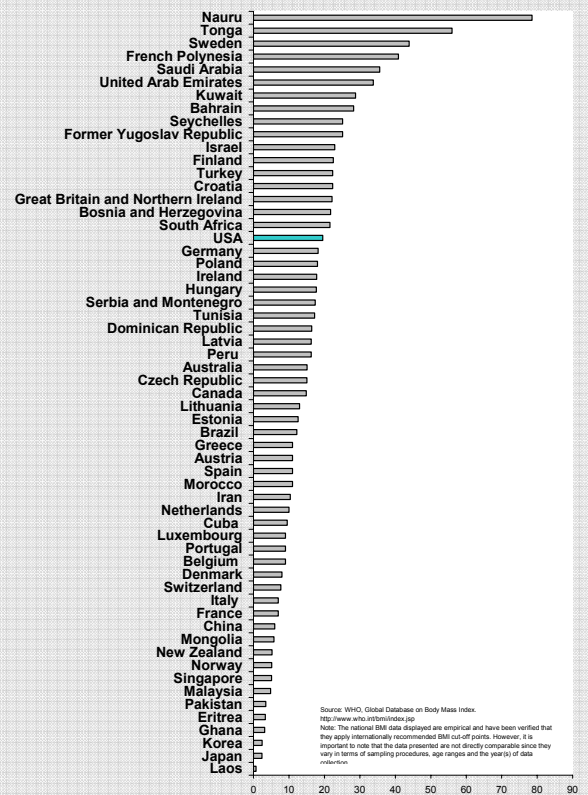
MEASURING CHILDREN

The CDC discourages the application of the term *obese* for children, preferring the terms *overweight* and *at risk for overweight*. For children ages 17 and younger, “overweight” is defined as having a body mass index (BMI) at or exceeding the 95th percentile within age- and gender-specific groupings, and “at risk for overweight” as between the 85th and 95th percentiles. In other words, a percentile ranking of 95 means that at least 95 percent of children among the same gender and age grouping have lower BMI scores.

Where in the World?

The prevalence of obesity is increasing in most part of the world, such that it is no longer just a concern for developed countries but it is becoming an increasing problem in many developing countries. The global epidemic of overweight and obesity (referred to as “globesity” by the World Health Organization) has become a major public health problem in many areas of the world, often coexisting with under-nutrition in developing countries. Economic development can lead to a shift in BMI in developing countries such that overweight begins to increase among the poor population.

Figure 4: Percentage Obese Adults – Country Comparison



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