Overweight and Obesity Report
Johnson County, Kansas

Summary

Prevalence in Johnson County

Defining Overweight & Obesity

Health Impact

By Age Group, Gender, Income & Ethnicity

Youth Status

Physical Activity Aspect

Nutrition Aspect

Causes of Overweight & Obesity

Proactive Steps We Can Take

References

Released September 2008
Report: Overweight and Obesity
Johnson County, Kansas

- Johnson County -- along with the State of Kansas and the nation -- has continued over the past decade to show an overall increase in the percentage of people who are either overweight or obese. According to data calculated from the Behavioral Risk Factor Surveillance System (BRFSS), since 2001 over half the adult population of our county is either overweight or obese.

- Johnson County's overweight and obesity statistics continue to remain below state and national averages. Since 2003, the Johnson County prevalence* of overweight also showed a decline until 2007, where there is a slight increase. The prevalence of obesity continues to rise across all populations in all geographic areas.

- This report provides an overview of the prevalence and trends of overweight and obesity status in Johnson County and a comparison to state and national data. The data identify characteristics of those individuals most at risk and factors contributing to the development of being overweight and obese.

- The goal of this report is to identify trends in our community and promote the achievement of an appropriate weight for our population's health and well-being.

The majority of Johnson County adults are either overweight or obese.

In 2001, 53% of Johnson County adults 18 years and older were either overweight or obese.

By 2007, this figure increased to 58.3% attributed specifically to the increase in the obese category, which carries a greater health risk.

In 2007, 35.3% of Johnson County adults reported being overweight and 23% reported being obese.

*Prevalence = percent of the population that has a given disease or condition at a specific point in time.
What is Overweight or Obese?

Overweight and obese are terms used to describe specific weight-to-height ratios, defined by a body mass index (BMI). For both men and women, ages 18 and older, a BMI of 18.5 to 24.9 is considered a healthy weight, while a BMI of 25 to 29.9 is considered overweight and a BMI of 30 or higher is considered obese. The general rule of thumb is that a BMI of 30 is about 30 pounds overweight for a woman and 35-40 pounds overweight for a man, both of average height.

BMI is calculated by dividing a person’s weight by the square of their height in inches and multiplying by 703 or by using the BMI Table. To use the table, find your height in the left column and your weight in the top row.

Measuring Body Fat

In 1998, a National Institutes of Health panel recommended using BMI as a classification for overweight and obesity, as BMI correlates with risk of disease and death. It is simple, fast and inexpensive to calculate; and for the majority of people, it correlates well with total body fat. A limitation of the BMI calculation is that it does not account for very muscular people (i.e., athletes) who may fall into the overweight category, nor people who have lost muscle mass (e.g., elderly) who may fall into the healthy weight category.

Waist circumference is another measure of a person’s body fat. For the general population, a waist circumference of >40 inches for men, and >35 inches for women indicates excess body fat out of proportion with total body fat. This does not apply to persons less than 18 years of age, or to persons less than five feet in height, or with a BMI of 35 or above.
OVERWEIGHT AND OBESITY contributes to the development of certain chronic conditions like diabetes and high blood pressure.

Obesity increases the risk of developing many diseases including type 2 (non-insulin dependent) diabetes, heart disease, and hypertension (high blood pressure). These three diseases constitute some of the leading causes of early death in our country for the obese, with overweight and obesity also related to an array of other conditions.

In Johnson County, for adults who were informed they had either high blood pressure (HBP) or high blood cholesterol (HBC), the rates of HBP and HBC were compared to those at a healthy weight.

In Johnson County, 41% of adults who have diabetes were also overweight and 40.8% were obese.

Prevalence of overweight and obesity in Johnson County is consistently less than that in the State of Kansas and across the United States.

Over half (58.3%) of Johnson County adults were either overweight or obese (2007).

Over six out of every ten adults in the State of Kansas and in the United States were either overweight or obese (2007).
Prevalence of overweight and obesity differs by age, race and ethnicity.

In 2005, the 55-64 age group had the highest prevalence of adults overweight or obese at 70.0%, or seven out of ten individuals in Johnson County.

In 2005, the 18-24 year old age group had the lowest total prevalence of overweight and obesity, with two out of ten young adults either overweight or obese.

This compares to four out of ten in the State of Kansas and the U.S. for this age group. 2007 data was unavailable for this comparison.

Overweight & obesity varies significantly by race and ethnicity. In 2007 58.2% of Caucasians, 80.1% of African Americans and 61.5% of Hispanics were overweight or obese.
Overweight and obesity vary significantly by gender. The overweight/obesity problem is notably greater in males than in females, with Johnson County reflecting overweight or obesity in 68.5% of males versus 48.6% in females in 2007. The prevalence of obesity increased from 19% to 26.4% among Johnson County males in the years from 2001 to 2007. However, there was a downward trend in the overweight category. There was more than a 7% increase in obesity among females, from 12.0% to 19.8% respectively, in the same time frame.
Overweight and obesity vary moderately by income level.

On the state and national, prevalence of overweight and obesity tends to increase with higher income levels. In contrast, the burden of overweight and obesity in the Johnson County population is disproportionately high among the most economically disadvantaged, those individuals living in the lowest income bracket with annual incomes below $15,000.

There has been a dramatic increase in overweight youth nationwide.

In the last 25 years, the percent of children (6-11 years of age) that are overweight has more than doubled, going from 6.5% in 1976-1980 to 17.5% in 2001-2004.

The percent of adolescents overweight has more than tripled in that same time frame, going from 5.0% to 17.0%.

Overweight adolescents have a 70% chance of becoming overweight or obese adults. This increases to 80% if one or more parent is overweight or obese.

Risk factors for diabetes and heart disease, such as high cholesterol and high blood pressure, occur with increased frequency in overweight children and adolescents compared to those with a healthy weight.
A substantial percent of Johnson County youth are overweight.

Overweight prevalence in youth is generally due to a combination of lack of physical activity and unhealthy eating patterns, as well as genetic factors.

Children, especially girls, become less active as they move through adolescence.¹

In 2007, a representation of Johnson County’s youth took the Youth Risk Behavior Survey with 14.4% of respondents identified as at risk for becoming overweight (>85th percentile for BMI, but < the 95th percentile), and 28.9% describing themselves as slightly or very overweight.

PHYSICAL EXERCISE in Johnson County

Regular physical activity is good for overall health. Physical activity decreases the risk of colon cancer, diabetes, depression, heart disease, and high blood pressure. It also helps to control weight; contributes to healthy bones, muscles, and joints; reduces falls among the elderly; and helps to relieve the pain of arthritis.

Research has demonstrated that even short periods of physical activity can make a difference in improving health, particularly if periods of activity are accumulated throughout the day.⁷ Physical activity does not have to be strenuous to be beneficial. Moderate physical activity, such as 30 minutes of brisk walking five or more times a week, also has significant health benefits.²
Definitions of Levels of Physical Activity:

Adult Recommended Level of Physical Activity:
- Moderate-intensity physical activity for at least 30 minutes on 5 or more days of the week;
  -- OR --
- Vigorous-intensity physical activity for at least 20 minutes on 3 or more days per week.

Youth Recommended Level of Physical Activity:
- Moderate-intensity physical activity of at least 60 minutes on most days of the week.

Level of physical activity for almost half of Johnson County residents does not meet CDC recommendations.

![Figure 8. Adult Who Meet the Currently Recommended Levels of Physical Activity Johnson County, Kansas, and U.S., 2007](image)

Only half, 53.2%, of Johnson County adults met the CDC recommendations for physical activity.

Although eight out of ten, 84.6%, of Johnson County adults had participated in some form of leisure time physical activity (other than at work) the previous month, it was not enough to meet the CDC guidelines.

Just over four out of ten, or 48.5%, of Kansas high school students met the currently recommended levels of physical activity, as reported in the Youth Risk Behavior Survey results for 2007.

**NUTRITION in Johnson County**

Choosing a variety of healthy foods in the correct portion size is helpful for achieving and maintaining a healthy weight. The United States Department of Agriculture (USDA) recommends eating at least two servings of fruit and at least three servings of vegetables each day.
Johnson County adults and youth are not eating enough fruits and vegetables.

By 2002, about 81% of Johnson County adults were not eating five servings of fruits and vegetables a day.

In 2007, 78.2% of Johnson County residents were not eating five servings a day.

For comparison, in 2007, 81.2% of Kansas residents and 75.7% of people in the United States were not getting five servings of fruits and vegetables a day.

In 2007, 4 out of 5 youth who took the Youth Risk Behavior Survey reported not eating five servings a day.

**Why have rates of overweight and obesity been rising?**

The genetic composition of a population changes slowly over time. Therefore, it is doubtful that the recent significant increase in overweight and obesity was caused by genetic alterations in the population. It is more likely this problem is due to changes in non-genetic factors such as a decrease (or leveling off) of physical activity, an increase in calorie intake, and environments that encourage unhealthy lifestyle choices.

1. **Physical activity is not adequate to balance increased calorie consumption.**

   There has been an increase in the amount of time spent watching television, playing video games, and using the computer. The use of automobiles for short trips and commuting to work has also increased, whereas walking and biking for these purposes has decreased. All these activities contribute to a sedentary lifestyle, which may increase a person’s chances of becoming overweight or obese.

2. **There has been an increase in calorie intake and a shift toward more calorie dense foods.**

   The Center for Weight and Health at UC Berkeley, states that sugared beverage consumption has increased 500 percent over the past five decades, a rate that roughly corresponds with the increase in overweight children.

According to the Gallop Poll, seventy billion “meal and snack occasions” were served at 900,000 locations across the United States in 2005. That works out to 233 restaurant stops for every man, woman, and child in this country of nearly 300 million residents.
Portion sizes of prepackaged foods as well as those served in restaurants have increased dramatically.\textsuperscript{10}

3. \textbf{Environmental influences make it difficult to make healthy choices.}

Residential development and zoning favor cul-de-sac housing and discourage mixed business- and residential development, which in turn, increases distances traveled and reliance on automobiles.\textsuperscript{7}

Time spent in meal preparation has declined by nearly half since 1950 due largely to increased time spent at work and an increased proportion of either single parent families or families in which both parents work.\textsuperscript{7}

\section*{Proactive Steps}

Solutions to the problem of overweight and obesity need to be multifaceted; and recognizing the true complexity of the issue, must address environmental as well as individual factors; and must be designed to bring about long-term, sustainable lifestyle change, rather than promising overnight results. It is vital to ensure that the public are fully aware of the dangers of overweight and obesity and the importance of healthy eating, and that they also have the practical skills and information they need to implement these behaviors in their daily lives.

It is readily recognized that individuals have a key role to play in determining their own health and lifestyles; however, as the main factors contributing to the rapid rises in overweight and obesity seen in recent years are societal, it is critical that overweight and obesity are tackled foremost at a societal rather than an individual level.\textsuperscript{11}

\section*{Conclusion}

Overweight and obesity are the result of a complex variety of genetic, metabolic, behavioral, environmental, cultural, and socioeconomic factors. Efforts to maintain a healthy weight should start early in childhood and continue throughout adulthood, as this is likely to be more successful than efforts to lose substantial amounts of weight and maintain weight loss once obesity is established.\textsuperscript{14}

Healthy eating combined with regular physical activity are important for maintaining a healthy weight -- and this healthy life formula does not require strict commercial diets or intense exercise regimens. At the end of the day, even a small decrease in calories eaten and a small increase in physical activity can help prevent weight gain and facilitate weight loss that can be sustained over a lifetime.\textsuperscript{14}
Data Sources

All adult (18 and older) data in this report come from the Behavioral Risk Factor Surveillance System (BRFSS) developed by the Centers for Disease Control and Prevention, and annually conducted in Kansas by the Kansas Department of Health and Environment, Office of Health Promotion. The BRFSS is a randomized telephone interview designed to gather information about health status, behaviors that influence health, and the use of health care services. Although the BRFSS data is self-limiting and acquired of only English speaking residents, it is currently the best available source of data on health trends in states. Go to www.cdc.gov/brfss/index.htm for more information. Data for this report was delineated from Johnson County Health Department BRFSS 2001, 2004, and 2005; and Centers for Disease Control and Prevention S.M.A.R.T. BRFSS data 2005. Youth data in this report are from the Youth Risk Behavior Survey (YRBS), a survey tool developed in 1999 to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability, and social problems among youth in the United States. The YRBS is conducted every two years to include national, state, and local school-based surveys of representative samples of 9th through 12th grade students. The national survey, conducted by CDC, provides data representative of high school students in public and private schools in the United States. The state and local surveys, conducted by departments of health and education, provide data representative of public high school students in each state or local school district. Data for this report was delineated from Kansas Coordinated School Health, 2005 Youth Risk Behavior Survey Results. http://ksweb.ksde.org/cshp/html/ksspecificdata.htm.


REFERENCES


Prepared by:
Johnson County Health Department
Disease Containment Division & Health Education Division
11875 S. Sunset Drive
Olathe, KS 66061
913-894-2525
http://health.jocogov.org

Special thanks to:
Kansas Department of Health and Environment
Office of Health Promotion