



# Adult Obesity in Riverside County

**O**besity threatens quality and longevity of life putting individuals at risk for developing many chronic diseases such as heart disease, stroke, diabetes and cancer.<sup>1</sup> Understanding the risk factors for obesity provides a foundation to develop solutions. The most effective tool to combat obesity is prevention. Among both adults and children, risk behaviors such as unhealthy food consumption and overeating, physical inactivity, increased sedentary time, lack of sleep and increased stress levels are influenced by environmental and socioeconomic factors. Being obese also carries significant economic costs due to increased health care spending and lost earnings. This brief focuses on adult obesity rates in Riverside County along with associated risk factors.

## Defining Obesity

The percentage of adults who are overweight or obese is calculated based on Body Mass Index (BMI). The BMI is calculated by taking a person's weight and dividing it by their height squared in metric units ( $BMI = \text{Weight (Kg)} / [\text{Height (m)}^2]$ ). A BMI of 25.0 to 29.9 is categorized as overweight. A BMI of 30.0 or higher is categorized as obese.<sup>2</sup>

## Costs and Consequences of Obesity

The burden of chronic disease and obesity as a risk factor for heart disease and stroke is of great global concern.<sup>3</sup> Obesity increases the risk of many other diseases including, Type 2 diabetes, cancer, hypertension, liver and gallbladder disease, respiratory problems and osteoarthritis. Achieving and maintaining a healthier weight helps prevent and control these chronic diseases and decreases economic costs.<sup>1</sup> It is estimated that the annual medical cost of obesity in the U.S. was \$147 billion in 2008, with those who were obese costing \$1,429 more in annual medical costs than those of normal weight.<sup>4</sup> Looking at the annual nationwide cost, obesity-related absenteeism costs between \$3.38 billion (\$79 per obese person) and \$6.38 billion (\$132 per obese person).<sup>5</sup> In Riverside County, the annual cost of obesity is about \$567 million.



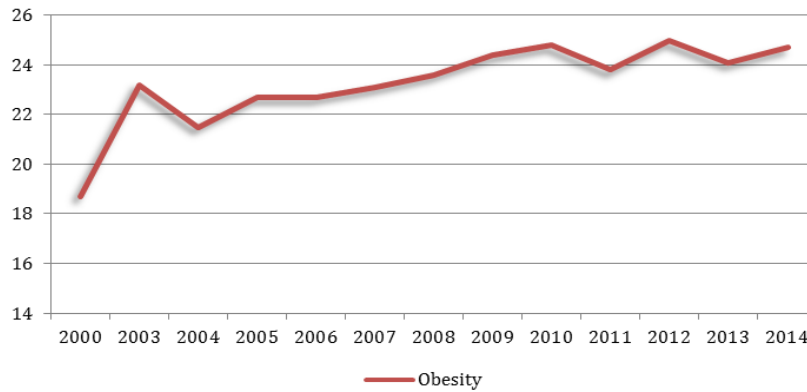
## Key findings

- 29.1% of Riverside County adults are obese.
- Annual cost of obesity in Riverside County is about \$567 million.
- Physical inactivity, unhealthy food consumption, overeating, increased sedentary time and lack of sleep are risk factors for obesity.
- Obesity rates are highest among males (36.3%) vs females (23.1%).
- Highest rates of obesity are among adults 45-64 years of age.

## National and Statewide Obesity

Nationally, two out of three adults are considered obese.<sup>12</sup> In California, adult obesity rates have increased from 18.7% in 2000 to 24.7% in 2015.<sup>6</sup> Statewide obesity rates are highest in adults 45-64 years of age. The highest rates of obesity can also be seen among African Americans (32.8%) and males (26.2%).<sup>6</sup>

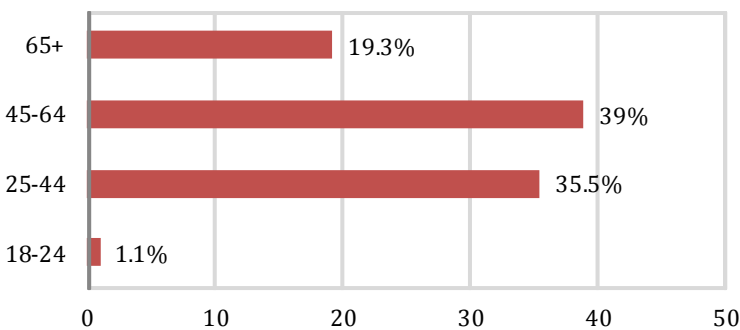
**Adult Obesity Rate in California (2000-2014)**



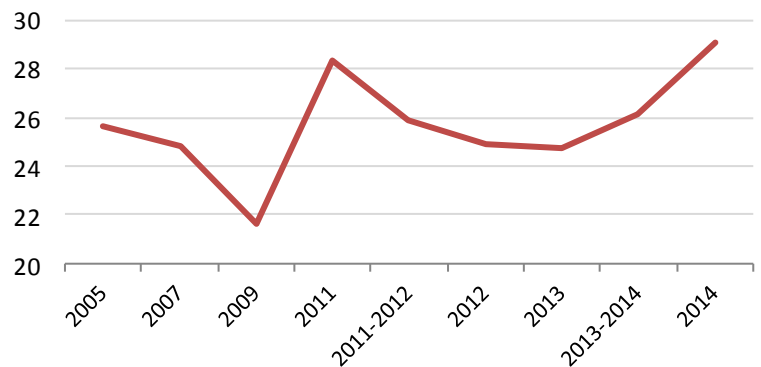
## Riverside County Obesity

The percentage of obese adults reflects the overall health and lifestyle of a community. With 29.1% of adults who are obese, Riverside County has cause for concern. When comparing obesity rates by gender in Riverside County, males (36.3%) have significantly higher rates than females (23.1%). Latinos in Riverside County have the highest rates (39%), followed by African Americans (26.5%) and whites (25.4%). The highest rates of obesity are among adults 45-64 years of age (39%) followed by 25-44 year olds (35.5%).

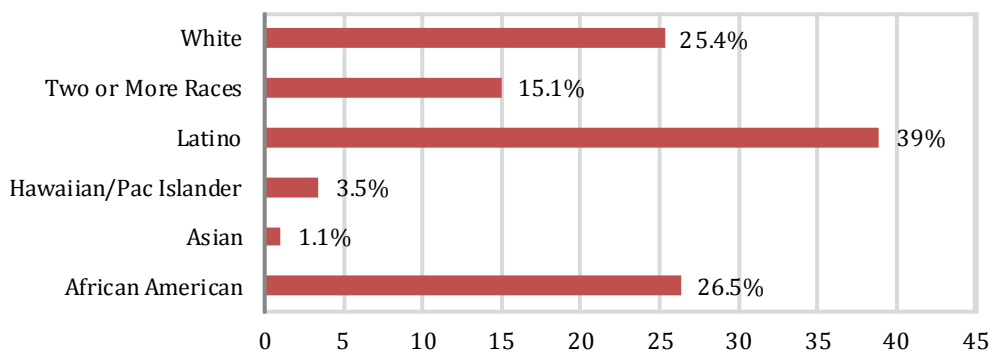
**Riverside County Adults who are Obese by Age**



**Riverside County Adults who are Obese- Change over Time**



**Riverside County Adults who are Obese by Race/Ethnicity**



## Risk Factors for Obesity

Risk factors for obesity include genetics, family lifestyle, physical inactivity, unhealthy diet, portion sizes, other medical conditions, certain medications, social and economic status, age, pregnancy, smoking cessation, stress and lack of sleep. The environment as well as cultural norms surrounding food, eating, physical appearance and lifestyle, also affect obesity. An individual's genetics can affect susceptibility, however an unhealthy environment is required to result in obesity. When comparing obesity rates, annual income and race/ethnicity may be contributing factors. Individuals living in counties with poverty levels greater than 35%, were at 145% greater risk for being obese than those living in high-income counties.<sup>7</sup> Although only 16.9% of people are living below poverty level in Riverside County, certain communities such as Mecca exhibit higher poverty rates placing these individuals at greater risk for obesity.

A strong contributing factor suggesting a link between poverty and obesity is lower access to fresh foods. Limited access to affordable, nutritious foods, whether due to transportation barriers or inadequate supply of healthy foods, plays a strong role in the association between lower socio-economic status and obesity.<sup>8</sup> A decrease in fast food density and convenience stores as well as increased access to locally grown foods sold at farmers' markets will improve access to and consumption of healthy foods. Additionally, links between poverty and violence, lack of parks and open spaces, and inability to access gyms and exercise equipment<sup>9</sup> limit an individual's ability to regularly exercise and live an active lifestyle. Poor nutrition combined with low physical activity places individuals at a greater risk of being overweight or obese.

## Farmers' Market Density

Farmers' markets provide more convenient access for community members to purchase fresh, affordable and locally grown foods while supporting local farmers. These markets often emphasize good nutrition and support consumers in cooking healthier meals and maintaining healthier eating habits. Healthy food consumption combined with an active lifestyle, can reduce the incidence of several chronic diseases such as heart disease, cancer and diabetes while maintaining healthy body weight and preventing obesity.

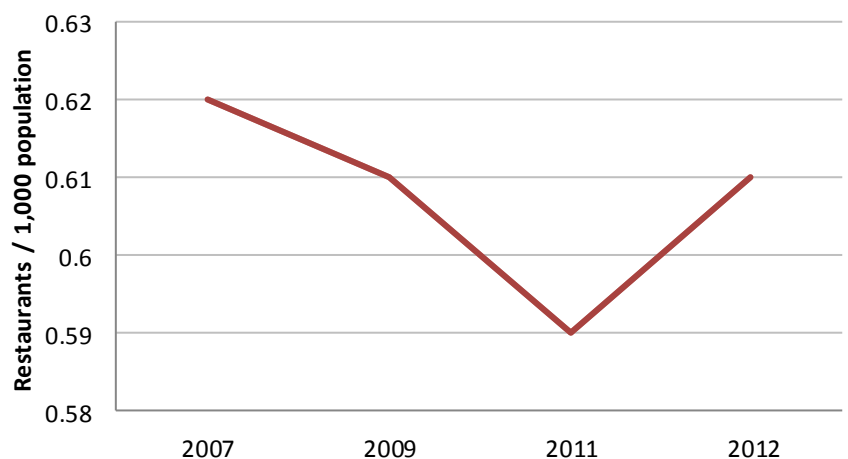
Since 2009, there has been an increase in farmers' markets in Riverside County. Working to increase the number of farmers' markets is beneficial to improving the overall health of community members countywide. In an effort to increase access to local fresh foods, the Healthy Riverside County Initiative has implemented two regular and permanent County-sponsored farmers' markets since 2014.

## Fast Food Density

Fast food is often high in unhealthy fats and calories, lacking recommended nutrients. Frequent consumption of these foods and an insufficient consumption of fresh fruits and vegetables increases the risk of obesity. Individuals who are obese are at increased risk for serious health conditions including coronary heart disease, Type 2 diabetes, multiple cancers, hypertension, stroke, premature death and other chronic conditions. Fast food outlets are more common in low-income neighborhoods with strong contributions to higher incidences of obesity and obesity-related health problems in these communities.

In Riverside County fast food density is significantly higher in comparison to farmers' market density. With 67.2% of adults consuming fast food at least one time in the last week and 13.3% of adults reporting that sometimes they are able find fresh fruit/vegetables in their neighborhoods<sup>1</sup>, this indicates a need for more fresh and affordable food sources.

## Fast Food Restaurant Density



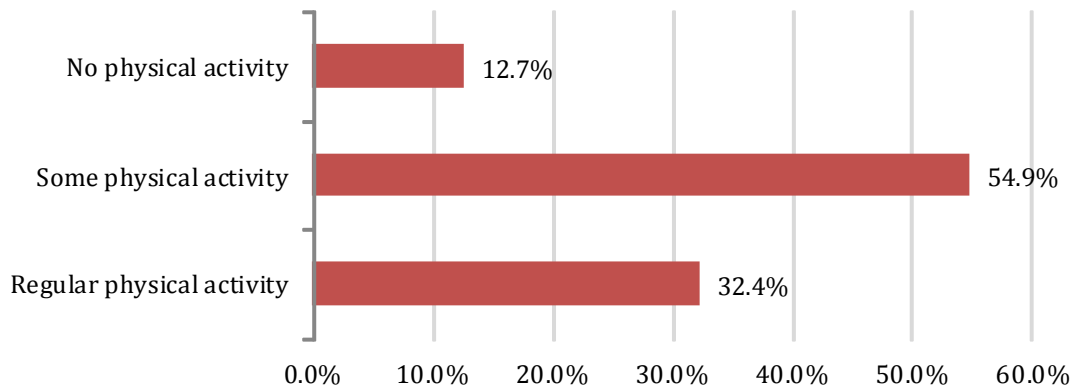
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## Physical Activity

Adults who are sedentary are at an increased risk of many serious health conditions. Participating in routine physical activity is not only beneficial for weight management and stress reduction but also decreases chances of heart disease, Type 2 diabetes, obesity, depression, hypertension and premature death. In 2009, 54.9% of Riverside County adults reported participating in some physical activity (including walking), while 32.4% reported regular physical activity and 12.7% reported sedentary or no physical activity.<sup>1</sup> When comparing physical activity by gender, more females (14.6%) reported no physical activity compared to 10.7% of males reported no physical activity.<sup>1</sup>

Proximity to exercise opportunities, such as parks and recreational facilities, have been linked to an increase in physical activity. In 2014, only 6.94 per 100,000 population had access to a recreation or fitness facility.<sup>11</sup> Physical activity can come in many forms and can be built into an everyday lifestyle such as walking. It can also be done inexpensively through the use of local parks and open spaces. 78.7% of adults who visited a park were physically active.<sup>1</sup>

### Regular, some, or no physical activity



## Insufficient Sleep

Sleep is an important part of a healthy lifestyle. It plays a key role in maintaining proper growth and repair of the body. Chronic sleep deficiency has been linked to health conditions including heart disease, kidney disease, hypertension, stroke, obesity and psychiatric disorders such as depression and anxiety. 36.6% of adults in Riverside County report fewer than the recommended seven hours of sleep on average.<sup>11</sup>

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