

## Overview

- ◆ Obesity is a chronic, progressive disease medically defined as a body mass index (BMI), a ratio of height to weight, of 30 kg/m<sup>2</sup> or more<sup>1,2</sup>
- ◆ Nearly 40% of U.S. adults have obesity, the highest incidence ever recorded<sup>3</sup>
- ◆ Obesity is linked to more than 40 diseases including type 2 diabetes, hypertension, heart disease, stroke, sleep apnea, osteoarthritis and at least 13 different types of cancer<sup>4,5,6</sup>
- ◆ Severe obesity (BMI of 40 or more) affects nearly 8% of adults aged 20 and older<sup>7</sup> and is associated with a 50-100% increased risk of premature death<sup>8</sup>
- ◆ Bariatric also known as weight-loss surgery or metabolic surgery is the standard of care for treating severe obesity
- ◆ ASMBS estimates less than 1% of the 24 million U.S. adults who may qualify for a bariatric surgery have the procedure each year

## PREVALENCE – Growing Epidemic

- [According to the Centers for Disease Control and Prevention \(CDC\)](#), more than one-third (39.8%) of U.S. adults – 93.3 million people – have obesity (2015-2016)<sup>9,10</sup>
  - Prevalence among adults aged 40-59 is higher than among adults aged 20-39 (42.8% vs. 35.7%)
  - Adults aged 60 and older experience obesity at a slightly higher rate than those under 60 (41% vs. 39.3%)
  - Rates of obesity are similar among men and women, both overall and within individual age groups
  - Non-Hispanic whites have lower rates of obesity (37.9%) compared with all Hispanics (47.0%) and non-Hispanic blacks (46.8%)
- No state has a prevalence of obesity less than 20% -- 22 states have a prevalence between 25-30% and 25 states have a prevalence greater than 30% (CDC, 2016)<sup>11</sup>

## CAUSES OF OBESITY

- Obesity is no longer considered a lifestyle choice or simply the result of a lack of will power. The American Medical Association (A.M.A.), World Health Organization (W.H.O.), along with many medical societies now recognize obesity as a chronic progressive disease resulting from multiple environmental and strong genetic factors
  - Due to its progressive nature, obesity requires life-long treatment and control

- Factors contributing to obesity include genetics, metabolism, behavior, environment and economic status<sup>12,13</sup>
  - Chronic low-level inflammation associated with excess weight contributes to disruption of lipid and glucose metabolism, the consequences of which include hypertension and type 2 diabetes<sup>14</sup>
  - Behavioral factors can include dietary patterns, physical inactivity and medication use
  - Community culture, education, and food marketing are among environmental factors

## HEALTH RISKS – BMI 30 – Tipping Point for Increased Disease

- Obesity is the fifth leading risk of death around the world<sup>8</sup> and is attributed to 5% of all preventable global deaths each year<sup>9</sup>
  - BMI of 40 or more is associated with a 50-100% increased risk of premature death compared to healthy weight individuals<sup>15</sup>
  - Obesity reduces life expectancy by nine years for women and by 12 years for men<sup>12</sup>
- Obesity is associated with more than 40 diseases and causes of death including type 2 diabetes, heart disease, stroke, cancer, infertility, liver disease and high blood pressure<sup>16,17,18</sup>
- Obesity-related cancers account for 40% of all cancers diagnosed in the U.S. (CDC, 2014)<sup>19</sup>
  - Rates of 12 out of 13 obesity-related cancers increased by 7% from 2005 to 2014 while cancers not associated with overweight and obesity fell by 13%

## ECONOMIC COSTS OF OBESITY

- According to CDC, the medical costs of obesity in the U.S. are estimated to be \$147 billion<sup>20</sup>
  - Research suggest that the percentage of U.S. health spending on treatment of obesity-related illnesses in adults climbed 29% between 2001 and 2015<sup>21</sup>
- Obesity costs the global economy about \$2 trillion annually or 2.8% of global GDP, which is comparable to the costs of smoking or of armed violence, war, and terrorism combined<sup>22</sup>
- Individuals with obesity have 42% higher healthcare costs than people of normal weight; for people with severe obesity, healthcare costs are 81% higher<sup>23,24</sup>
  - Each 1-point increase in BMI leads to a 4% increase in medical costs and a 7% increase in pharmaceutical costs<sup>25</sup>

## BODY MASS INDEX (BMI)

- To calculate BMI visit:  
[asmbs.org/calculate-your-bmi/](http://asmbs.org/calculate-your-bmi/)
- To learn more about what your BMI means, visit:  
[www.nhlbi.nih.gov/health/educational/lose\\_wt/BMI/bmi\\_dis.htm](http://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmi_dis.htm)



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- <sup>4</sup> The Effectiveness and Risks of Bariatric Surgery: An Updated Systematic Review and Meta-analysis, 2003-2012. Accessed from: <https://jamanetwork.com/journals/jamasurgery/fullarticle/1790378>
- <sup>5</sup> Steele CB, Thomas CC, Henley SJ, et al. *Vital Signs: Trends in Incidence of Cancers Associated with Overweight and Obesity — United States, 2005–2014*. MMWR Morb Mortal Wkly Rep 2017;66:1052–1058. DOI: <http://dx.doi.org/10.15585/mmwr.mm6639e1>
- <sup>6</sup> Centers for Disease Control and Prevention. (2015) The Health Effects of Overweight and Obesity. Accessed from: <https://www.cdc.gov/healthyweight/effects/index.html>
- <sup>7</sup> Hales CM, Fryar CD, Carroll MD, Freedman DS, Ogden CL. Trends in Obesity and Severe Obesity Prevalence in US Youth and Adults by Sex and Age, 2007-2008 to 2015-2016. JAMA. 2018;319(16):1723–1725. doi:10.1001/jama.2018.3060
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- <sup>10</sup> Centers for Disease Control and Prevention. (2016) Adult Obesity Facts. Accessed from: <https://www.cdc.gov/obesity/data/adult.html>
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