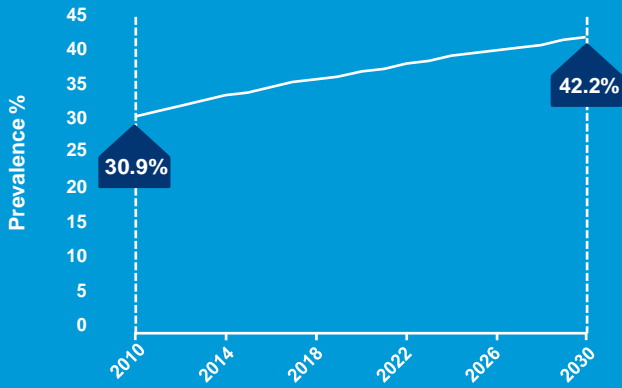




# THE ROLE OF EMPLOYERS IN TACKLING OBESITY

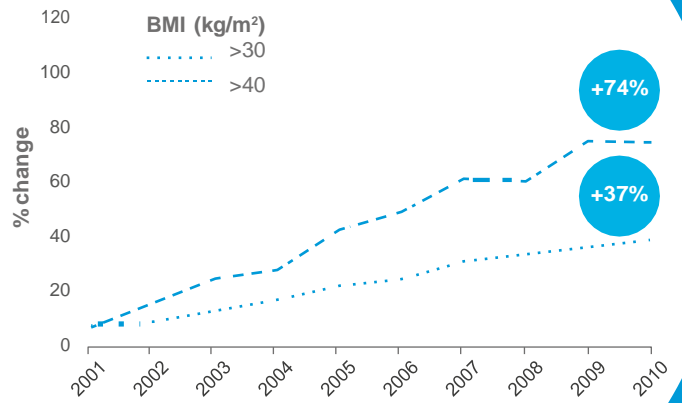
Obesity prevalence is increasing, with faster growth rates seen in higher BMI categories<sup>1,2</sup>

Figure 1: Estimated obesity prevalence among US adults, 2010–2030<sup>1</sup>



Notes: For BMI  $\geq 30$  kg/m<sup>2</sup> based on Behavioral Risk Factor Surveillance System (BRFSS) data; based on the current linear trend, prevalence could reach 51%.

Figure 2: Prevalence of higher BMI categories is increasing faster than the prevalence of lower BMI categories<sup>2</sup>



Note: Based on BRFSS data.

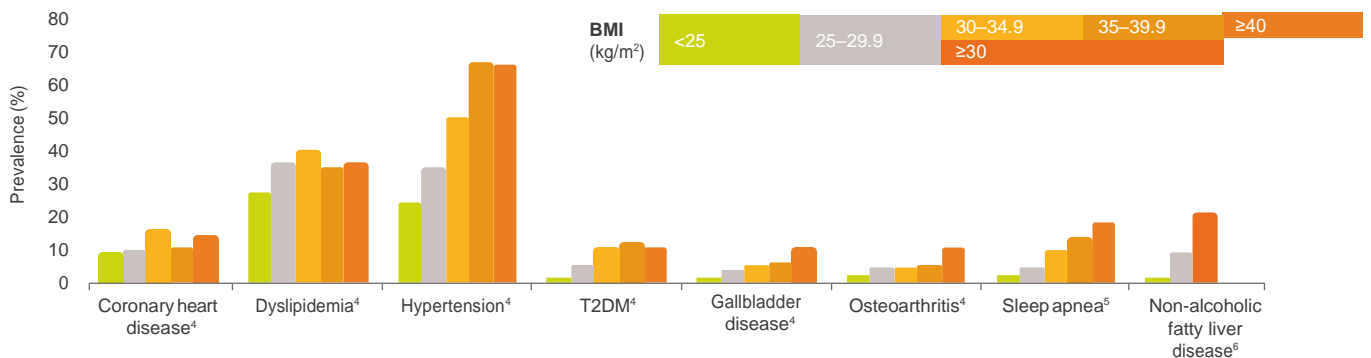
Obesity is associated with many comorbidities, which may result in substantial costs to employers<sup>3-8</sup>



46% of individuals with Class I/II obesity  
55% with Class III obesity

have  $\geq 5$  comorbidities<sup>3</sup>

Figure 3: Prevalence of obesity-related comorbidities by BMI<sup>4-6</sup>



Abbreviations: BMI, body mass index; BRFSS, Behavioral Risk Factor Surveillance System; T2DM, type 2 diabetes mellitus.

With an economic burden of \$1.42 trillion annually in the US<sup>7</sup>, obesity is one of the top 10 most expensive chronic diseases for healthcare payers, as are obesity-related diseases, such as CVD, T2DM, and cancers<sup>8</sup>

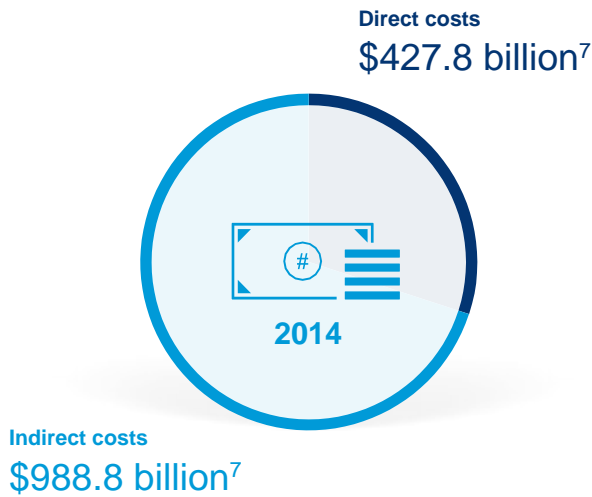
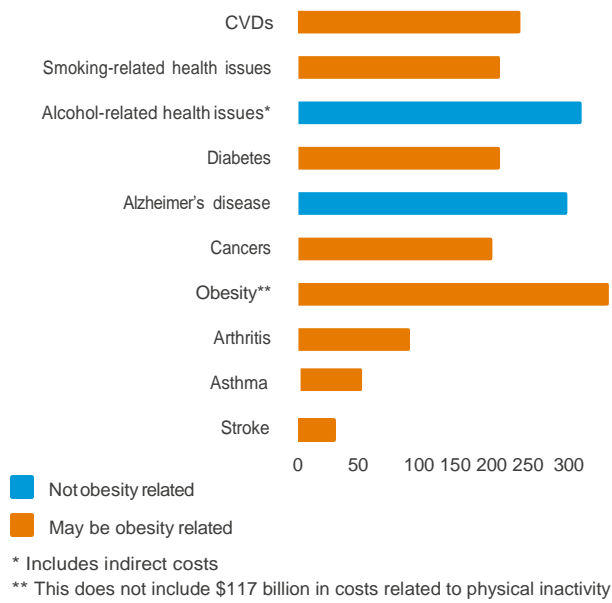
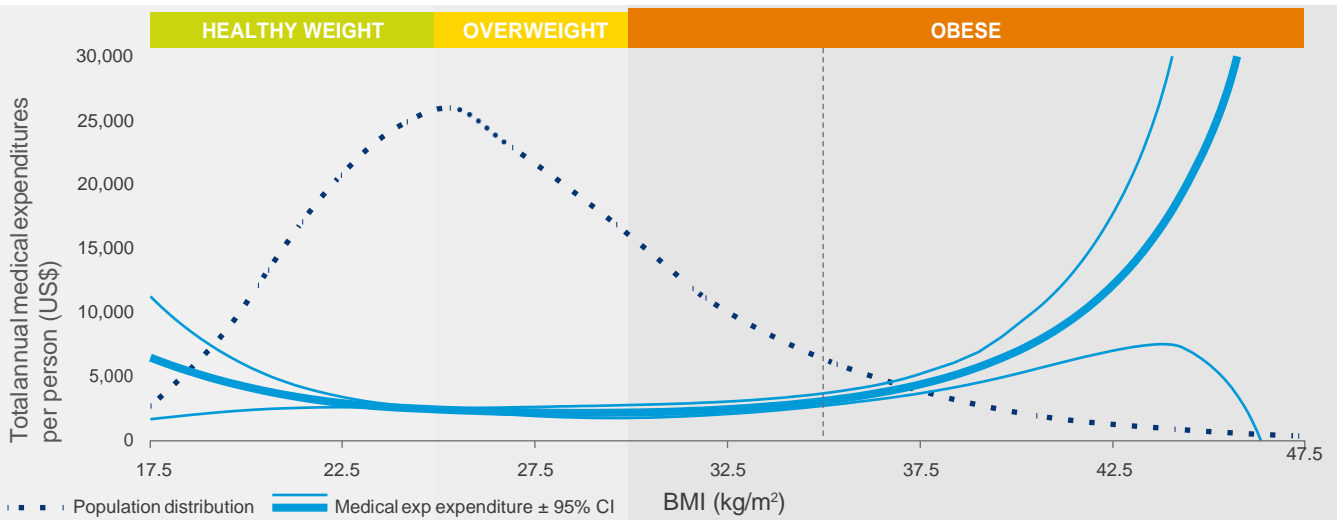


Figure 4: Centers for Disease Control (CDC) most expensive diseases for US payers (direct healthcare costs, \$ billion)<sup>8</sup>



## Healthcare costs rise rapidly with BMI in the range of Class II and Class III obesity (BMI >35 kg/m<sup>2</sup>)<sup>9</sup>

Figure 5: Obesity-related healthcare costs rise exponentially with BMI >35 kg/m<sup>2</sup><sup>9,10</sup>



In the US, obesity is associated with indirect costs of \$988 billion from premature mortality, disability, workers' compensation, and work absenteeism or presenteeism<sup>11-14</sup>

Figure 6: Per-employee annual sick leave and short-term disability costs in a study of US workers<sup>11</sup>

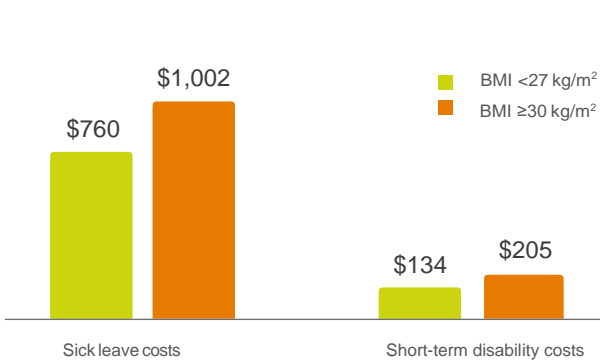
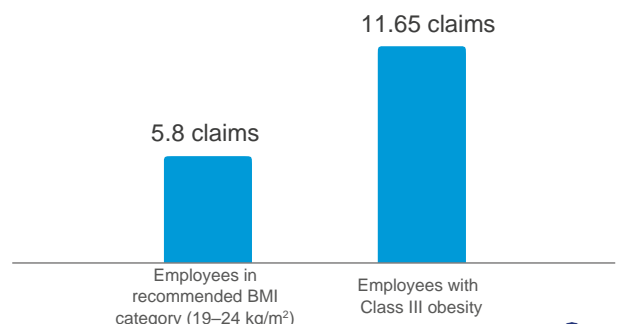


Figure 7: Annual workers' compensation claims per 100 full-time employee<sup>12</sup>



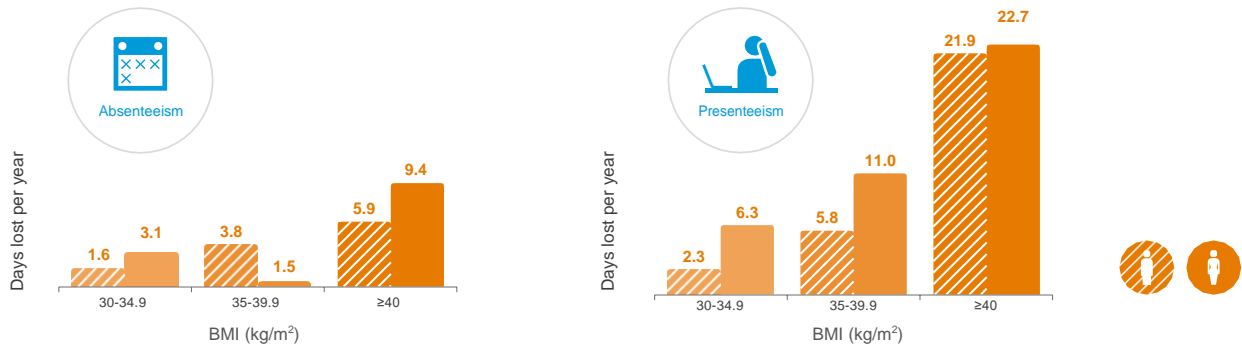
Abbreviations: BMI, body mass index; CI, confidence interval; CVD, cardiovascular disease; T2DM, type 2 diabetes mellitus.

Overall lost work time associated with obesity includes:<sup>13</sup>

 Absenteeism  
3.1 days

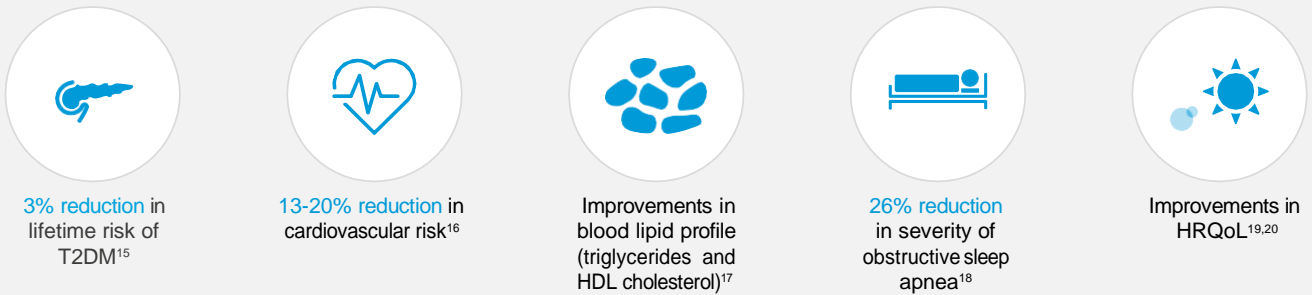
 Presenteeism  
5.1 days

Figure 8: Obesity is associated with increased absenteeism and presenteeism<sup>14</sup>

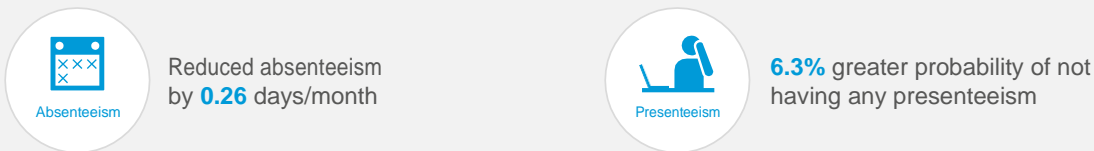


## Weight loss is beneficial for reducing obesity-related comorbidities and improving employee quality of life (QoL) and productivity

### Benefits of 5–10% weight loss<sup>15-21</sup>



Compared with those without weight loss, people with obesity who lost ≥5% of their body weight had:<sup>19</sup>



## Interventions that reduce BMI among people with obesity can reduce healthcare expenditures for obesity and obesity-related complications<sup>9,21</sup>

Figure 9: Estimated savings in annual medical care costs for adult US workers due to 5% and 10% reductions in BMI<sup>9</sup>

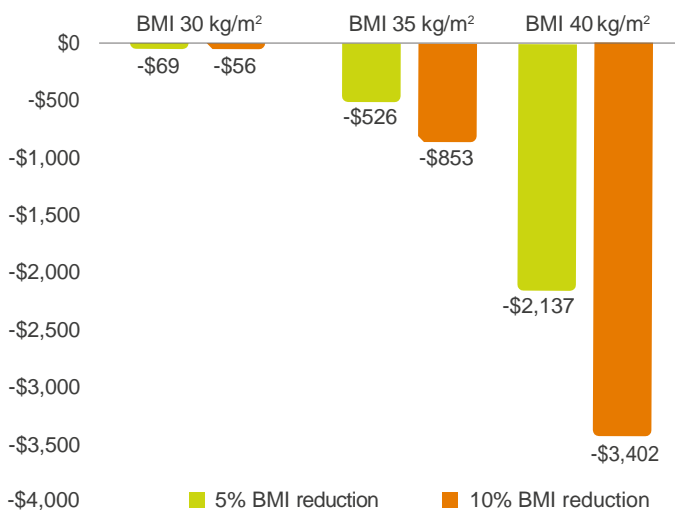
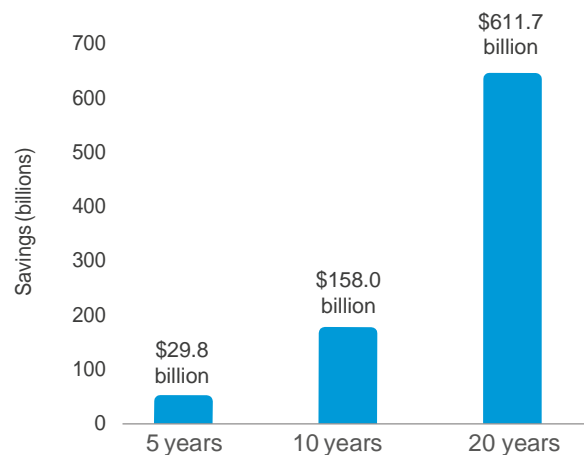


Figure 10: US healthcare savings with an average 5% BMI reduction over 5, 10, and 15 years<sup>21</sup>



Abbreviations: BMI, body mass index; HRQoL, health-related quality of life; QoL, quality of life; T2DM, type 2 diabetes mellitus.

# Biological mechanisms undermine weight loss effects and promote weight regain in individuals attempting even modest weight loss<sup>22,23</sup>

Figure 11: Physiological factors drive weight regain when people with obesity lose weight through lifestyle interventions<sup>22,23</sup>

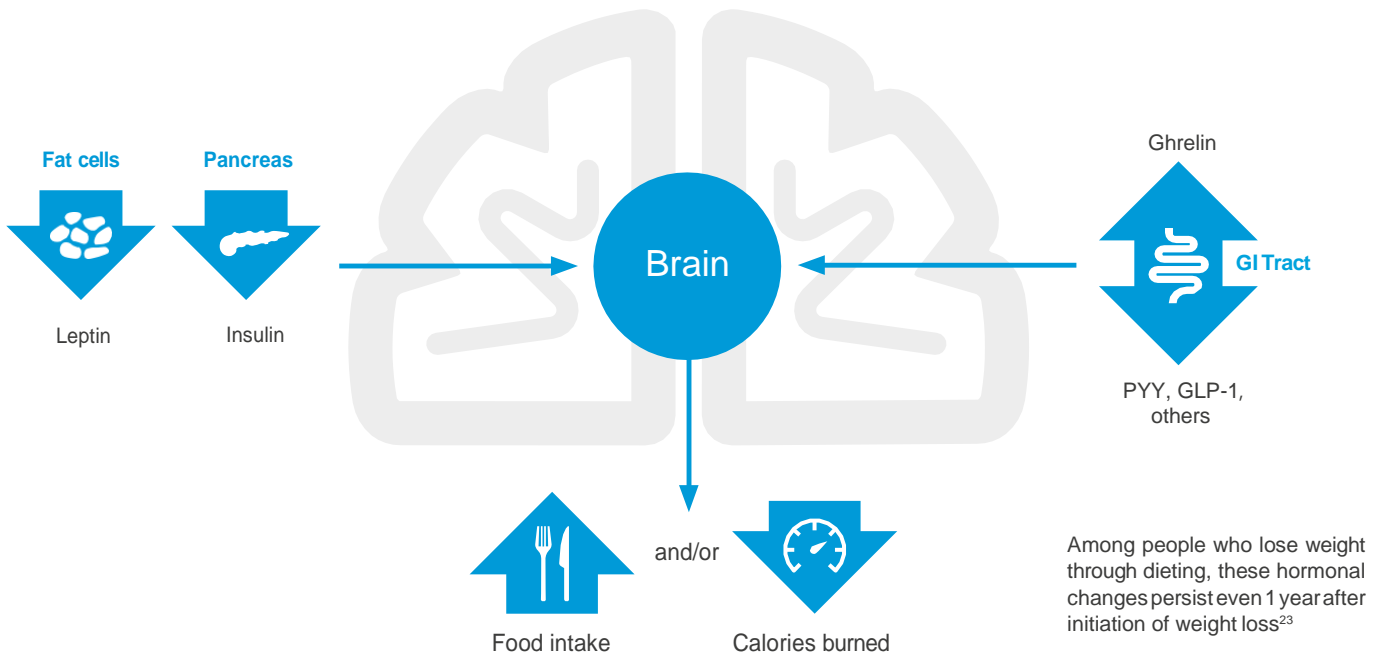
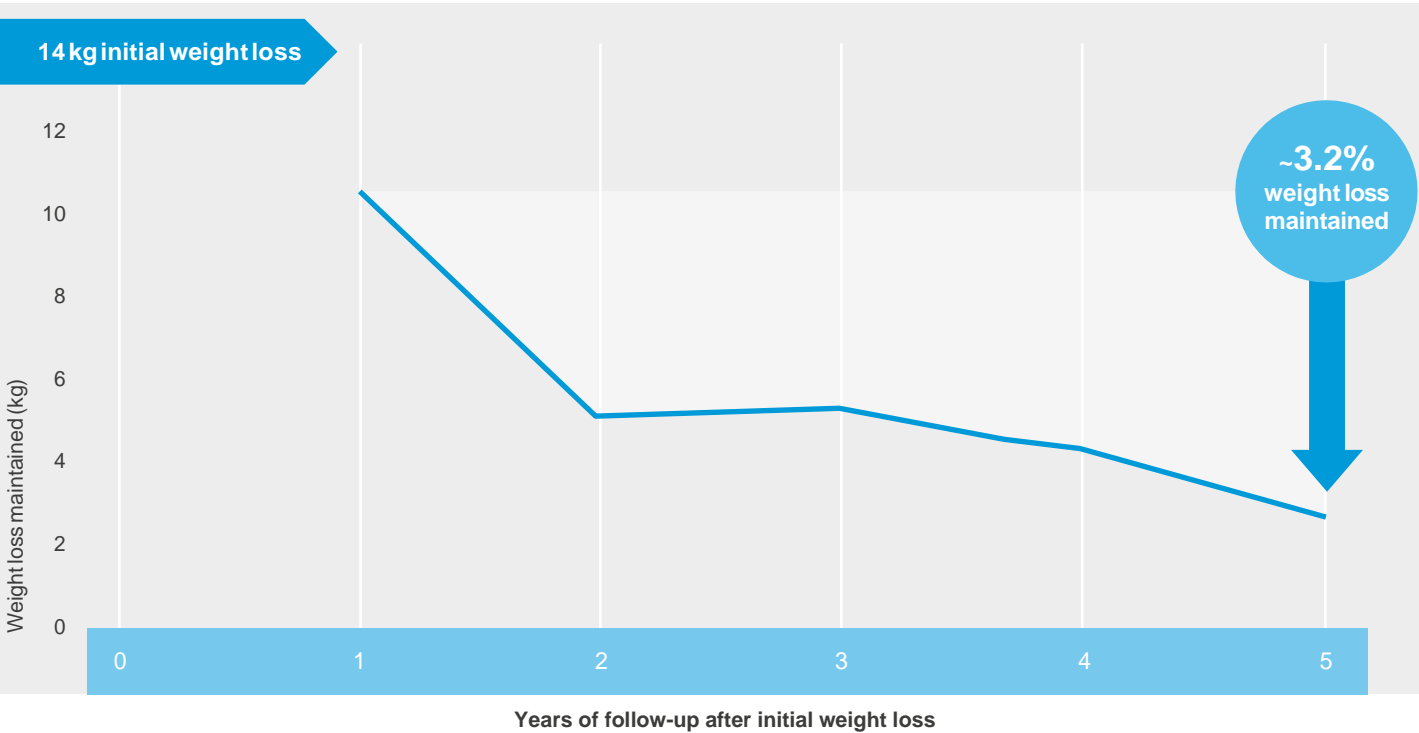


Figure 12: Weight reduction maintained over 5 years among people who achieved an initial weight loss of 14 kg after completing short-term, structured weight loss programs<sup>24</sup>

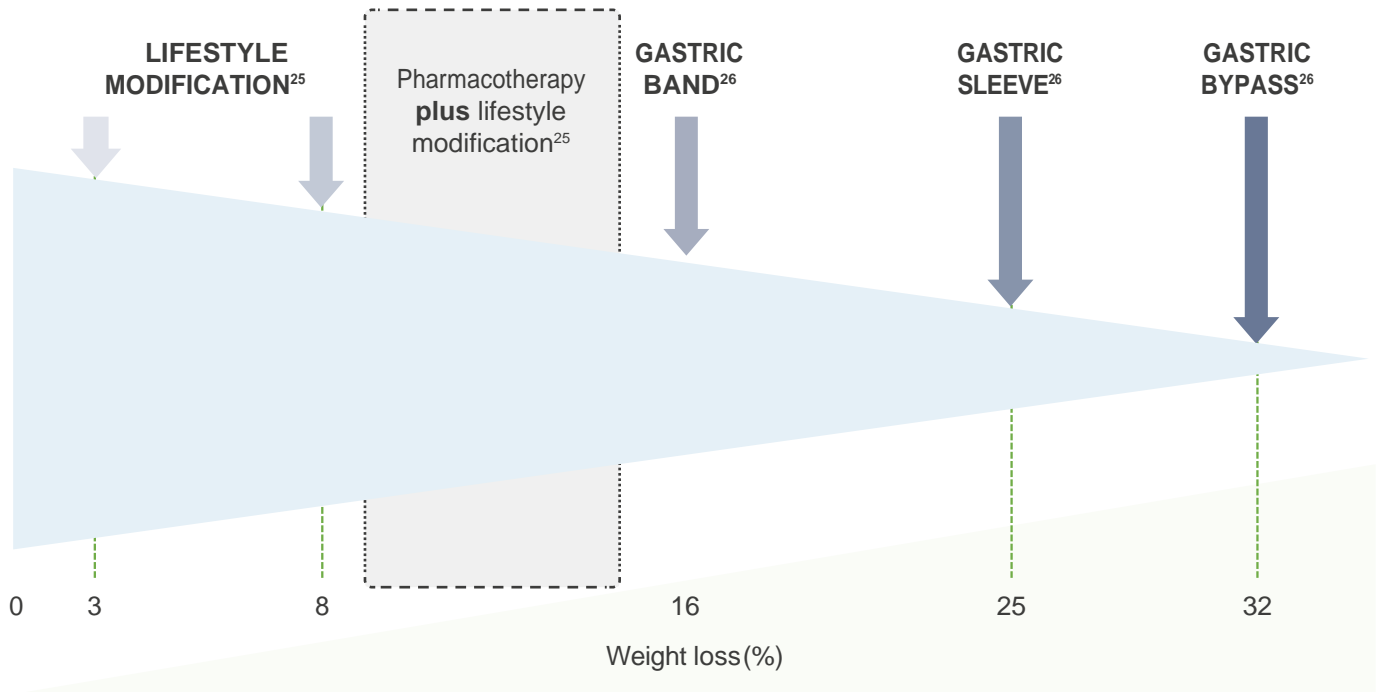


Abbreviations: GLP-1, glucagon-like peptide-1; GI, gastrointestinal; PYY, peptide YY.

Used alongside lifestyle interventions, AOMs may help people to achieve sustained, clinically meaningful weight loss and reduce weight-related comorbidities<sup>25-29</sup>

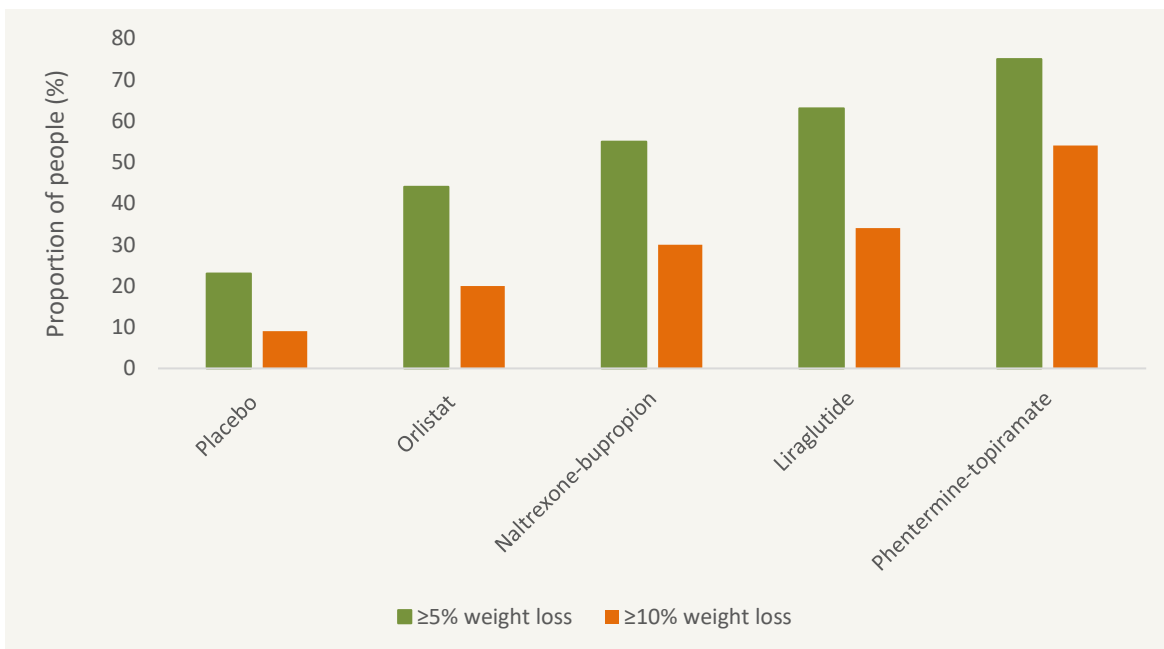
AOMs may provide a means of ‘closing the gap’ between lifestyle interventions and bariatric surgery<sup>25,26</sup>

Figure 13: Weight loss (%) with different interventions<sup>25,26</sup>



Higher proportions of people with obesity achieve  $\geq 5\%$  and  $\geq 10\%$  weight loss with AOMs vs placebo at 1 year<sup>27</sup>

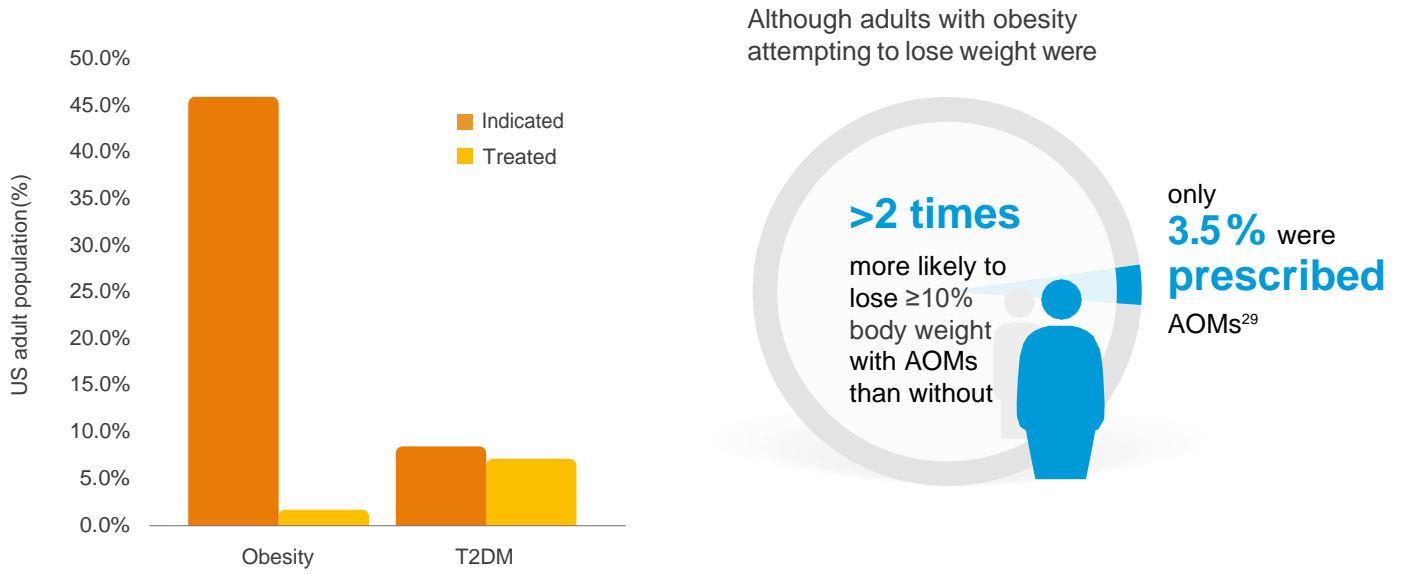
Figure 14: Median rates of achieving  $\geq 5\%$  and  $\geq 10\%$  weight loss in a meta-analysis of 28 RCTs<sup>27</sup>



Abbreviations: AOM, anti-obesity medication; RCT, randomized controlled trial.

# AOMs remain underutilized, despite evidence of their effectiveness in obesity treatment<sup>28,29</sup>

Figure 15: Only 2% of people indicated to receive AOMs received a prescription in 2015, compared with 86% of people indicated to receive medication for T2DM<sup>28</sup>



Comprehensive weight management programs, in addition to AOMs, may therefore be needed to provide sustainable weight loss benefits

Abbreviations: AOM, anti-obesity medication; CI, confidence interval; OR, odds ratio; T2DM, type 2 diabetes mellitus.

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