

The burden of obesity

Obesity-related complications include **type 2 diabetes** and **cardiovascular disease.**³

Obesity can also have an impact on a person's **mental health** and **quality of life.**^{4,5}

Annually, obesity accounts for **USD 2 trillion** (DKK 12 trillion) in global healthcare costs.⁶

Outside of healthcare, obesity is also costly in the form of lost productivity including **sick days, reduced efficiency** at work and permanent **disability.**⁷

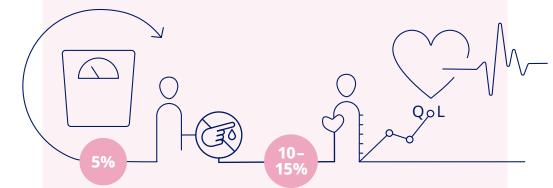


Obesity is a multifactorial disease, but there remains an underlying societal belief that obesity is a result of lack of willpower, which can lead to people with obesity being subjected to blame and stigma in the family, at work or in society at large.^{4,5} The majority of people with obesity also believe weight management is their own responsibility and that they have to change their lifestyle.

Preventing obesity is a priority as obesity is linked to many complications – some of which may impact life expectancy and health-related quality of life.⁸ In addition, children and adolescents living with obesity are at a higher risk of developing serious health problems at a younger age and are more likely to live with obesity into adulthood.⁹

Losing excessive weight has a positive impact on health

The health benefits of losing weight and keeping it off can be substantial:



5% weight loss has significant health benefits, including reduced blood pressure and blood sugar¹⁰

Further improvements are seen with weight loss of 10–15%¹¹

in prediabetes, 12 cardiovascular disease and related risk factors, 13 osteoarthritis, 14 and health-related quality of life 15

For more information on obesity and Novo Nordisk's commitment to driving change in obesity, visit:

novonordisk.com/disease-areas/obesity.html

References: 1. World Health Organization. Obesity and Overweight Factsheet no. 311. Available at: http://www.who.int/mediacentre/factsheets/fs311/ en/. Last accessed: December 2020. 2. World Obesity Federation. Atlas of Childhood Obesity. Available at: http://s3-eu-west-1.amazonaws.com/wof-files/ WOF Childhood Obesity Atlas Report Oct19 V2.pdf. Last accessed: December 2020. **3.** Grover SA, Kaouache M, Rempel P, et al. Years of life lost and healthy life-years lost from diabetes and cardiovascular disease in overweight and obese people: a modelling study. The Lancet Diabetes & Endocrinology. 2015; 3:114–122. 4. Phelan S, Burgess DJ, Yeazel MW, et al. Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. Obesity Reviews. 2015; 16:319–326. 5. Puhl RM and Brownell KD. Confronting and coping with weight stigma: an investigation of overweight and obese adults. Obesity. 2006; 14:1802-1815. 6. Kishore M, Gadde MD, Corby KM et al. Obesity: Pathophysiology and Management. J Am Coll Cardiol. 2018;71:69-84; 7. Heymsfield SB and Wadden TA. Mechanisms, Pathophysiology, and Management of Obesity. N Engl J Med. 2017;376:1492. 8. Yuen M, Earle R, Kadambi N, et al. A systematic review and evaluation of current evidence reveals 195 obesity-associated disorders. Poster abstract presentation at: The Obesity Society Annual Meeting at ObesityWeek 2016; Oct. 31 - Nov. 4, 2016; New Orleans. 9. WHO. Childhood overweight and obesity. Available at: https:// www.who.int/dietphysicalactivity/childhood/en/. Last accessed: December 2020. **10.** Garvey WT et al. American Association of Clinical Endocrinologists and American College of Endocrinology Comprehensive Clinical Practice Guidelines for Medical Care of Patients with Obesity. Endocr Pract. 2016 Jul;22 Suppl 3:1-203. 11. Haase C, Lopes S, and Olsen A et al., Weight loss and risk reduction of obesity-related conditions in 0.5 million people: evidence from a UK primary care database. Abstract presented at ECO-ICO Online, 1–4 September 2020. 12. Le Roux CW, Astrup A, Fujioka K, et al. 3 years of liraglutide versus placebo for type 2 diabetes risk reduction and weight management in individuals with prediabetes: a randomised, double-blind trial. Lancet. 2017; 389:1399-1409. 13. Dattilo AM and Kris-Etherton PM. Effects of weight reduction on blood lipids and lipoproteins: a meta-analysis. Am J Clin Nutr. 1992; 56:320–328. **14.** Mahil SK, McSweeney SM, Kloczko E, et al. Does weight loss reduce the severity and incidence of psoriasis or psoriatic arthritis? A Critically Appraised Topic. Br J Dermatol. 2019; 181:946–953. 15. Warkentin LM, Das D, Majumdar SR, et al. The effect of weight loss on health-related quality of life: systematic review and meta-analysis of randomized trials. Obes Rev. 2014:15:169-182.

