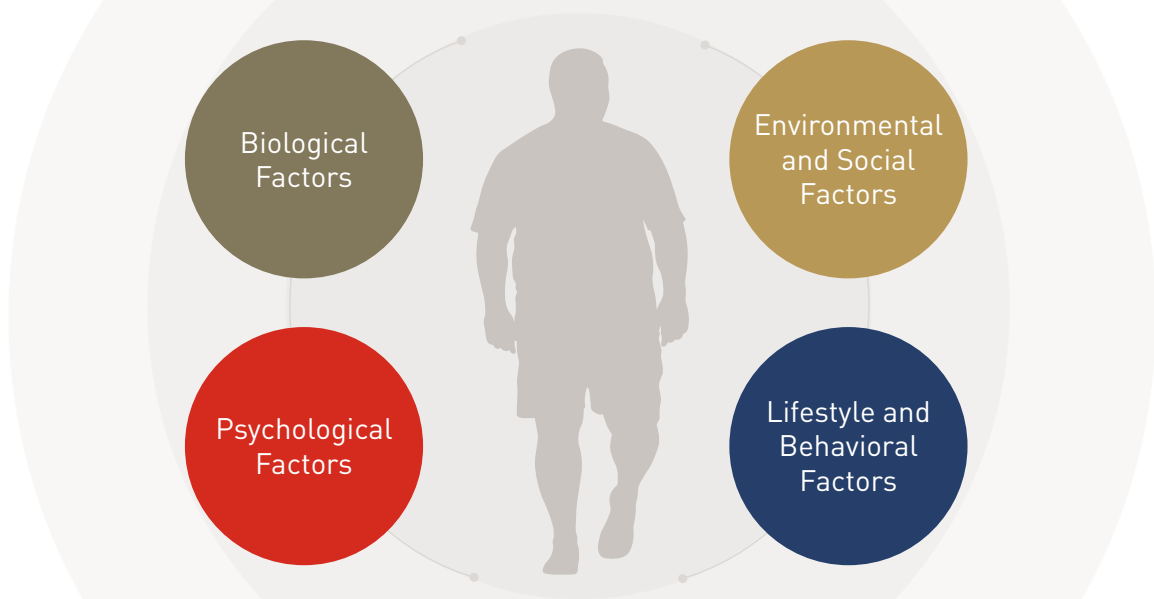
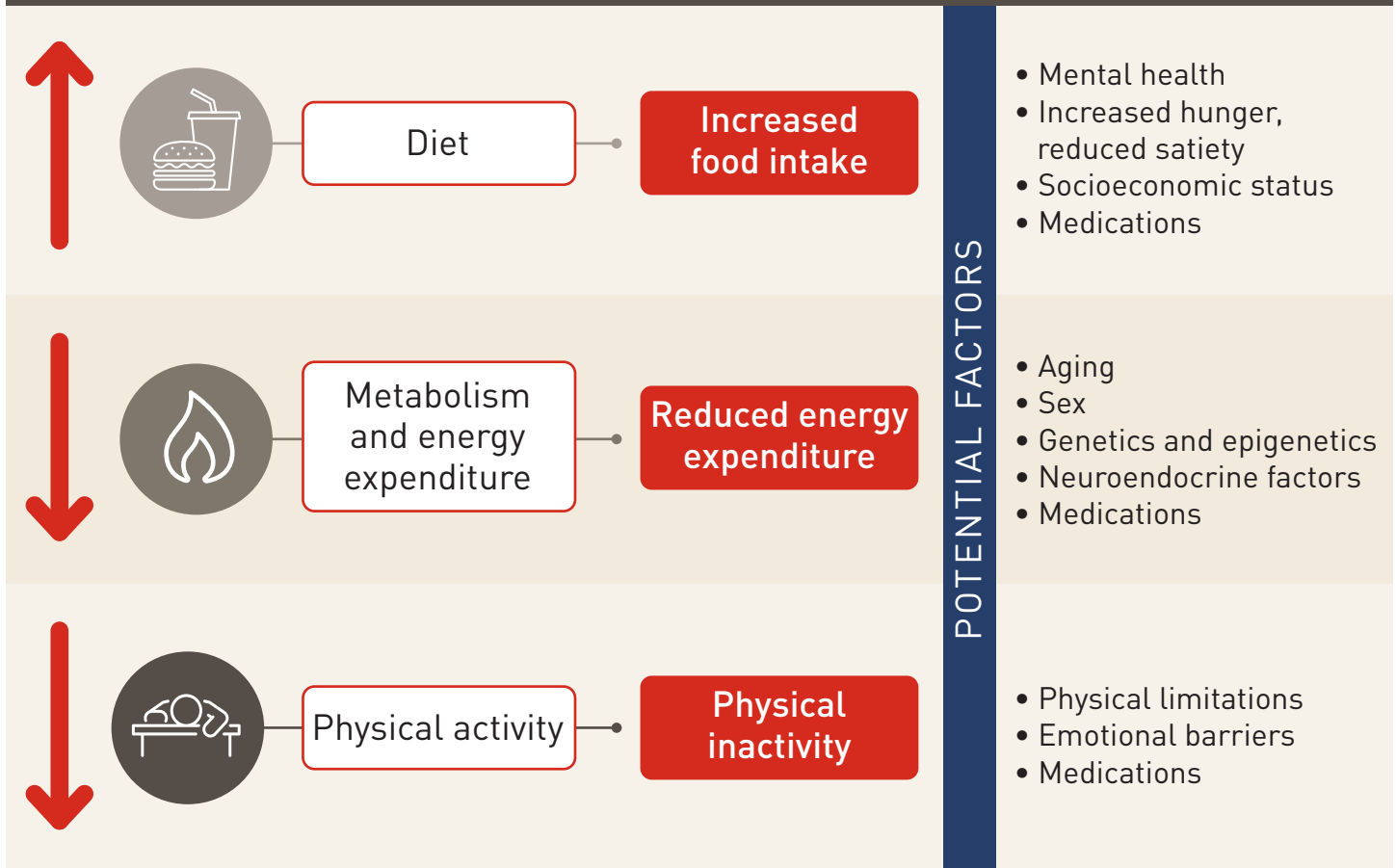


Contributing Factors to Obesity

Obesity Is a Complex, Multifactorial Disease^{1,2}



Multiple Factors Contribute to the Development of Obesity³



The heritability of obesity has been estimated to be 40%-70%.⁴ Polygenic obesity is most common and occurs due to a mix of genetic and environmental influences.^{4,5}

Weight bias involves negative attitudes and judgments toward individuals based on their weight.⁶



Weight stigma is the social devaluation of people because of their body weight that is rooted in negative weight-based stereotypes and may lead to discrimination.^{7,8}

Weight bias and weight stigma have adverse consequences on physical and mental health.^{6,7}

- Associated with unhealthy eating behaviors and exercise avoidance
- Associated with anxiety, depression, low self-esteem, and body image issues
- Associated with poorer educational outcomes and disadvantages in healthcare
- Associated with elevated biomarkers of physiologic stress (eg, cortisol, C-reactive protein, and blood pressure)
- Associated with reduced quality of life

Body weight “setpoint” has been described as the midpoint or average of the range of body weight at a certain point in a person’s life. It can be influenced by¹:

- Dietary patterns and nutritional status
- Physical activity
- Behavioral patterns
- Environmental factors
- Physical and mental health
- Biological/hormonal responses

Educating patients about alterable and unalterable factors influencing body weight can help reframe their mindset around weight management and mitigate internal weight bias.^{1,9}

Key Takeaways

- Obesity is a complex disease with many contributing factors¹⁻⁵
- Weight bias and stigma can have negative impacts on the physical and mental health of people with obesity⁶⁻⁸
- Educating patients about factors influencing body weight can help them to mediate their expectations and reduce bias¹

References

1. Bays H, Golden A, Tondt J. Thirty obesity myths, misunderstandings, and/or oversimplifications: an Obesity Medicine Association (OMA) clinical practice statement (CPS) 2022. *Obesity Pillars*. 2022;3:100034.
2. Safaei M, Sundarajan EA, Driss M, et al. A systematic literature review on obesity: understanding the causes & consequences of obesity and reviewing various machine learning approaches used to predict obesity. *Comput Biol Med*. 2021;136:e104754.
3. Sharma AM, Padwal R. Obesity is a sign - over-eating is a symptom: an aetiological framework for the assessment and management of obesity. *Obes Rev*. 2010;11(5):362-370.
4. Loos RJF, Yeo GSH. The genetics of obesity: from discovery to biology. *Nat Rev Genet*. 2022;23(2):120-133.
5. Loos RJF. The genetics of adiposity. *Curr Opin Genet Dev*. 2018;50:86-95.
6. Alberga AS, Russell-Mayhew S, von Ranson KM, McLaren L. Weight bias: a call to action. *J Eat Disord*. 2016;4:34.
7. Puhl RM, Himmelstein MS, Pearl RL. Weight stigma as a psychosocial contributor to obesity. *Am Psychol*. 2020;75(2):274-289.
8. Auckburally S, Davies E, Logue J. The use of effective language and communication in the management of obesity: the challenge for healthcare professionals. *Curr Obes Rep*. 2021;10(3):274-281.
9. Salas XR, Forhan M, Caulfield T, Sharma AM, Raine KD. Addressing internalized weight bias and changing damaged social identities for people living with obesity. *Front Psychol*. 2019;10:1409.