

COVID-19 & Obesity



WHO (World Health Organization) has declared COVID-19 as an international public health emergency and a global economic crisis that affects the world's most vulnerable population. Coronaviruses can cause more severe symptoms and complications for people with obesity-related conditions.

CDC (Centers for Disease Control and Prevention, 2020) reported that people of any age with severe obesity with body mass index of ≥ 40 or certain underlying medical conditions (particularly if not well controlled) such as those with diabetes, renal failure or liver disease might also be at risk. It seems like obesity-related conditions worsen the effect of COVID-19.



The existing pandemic might contribute to an increase in obesity rate as most of affected countries are introducing measures of staying at home which will have an impact on mobility and enforced physical inactivity. The current crisis and the need for self-isolation are prompting many to rely on processed food with longer shelf life and canned food with higher quantities of sodium intake. An increased intake of energy-dense foods that are high in fat and sugars also leads to an increase in weight if this persists for a longer period of time.

Data revealed in UK as of 20 March 2020

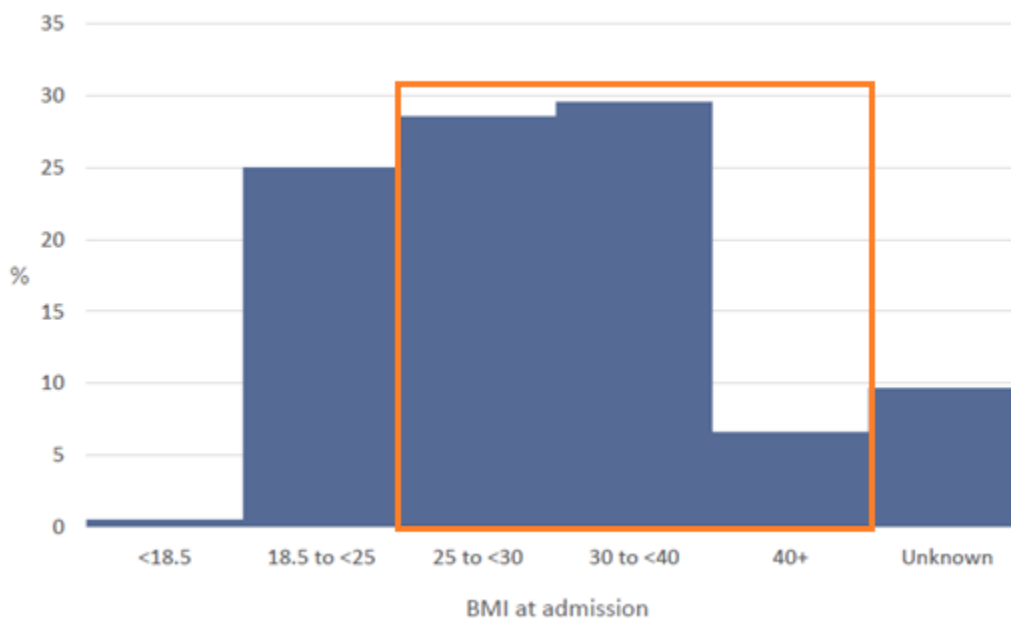
Based on the emerging data and patterns of infection, overweight and obesity are most likely to be the risk factors for worse outcomes for those who are infected by COVID-19. A report suggests that two thirds of people who have fallen seriously ill with Coronavirus are overweight or obese in UK (ICNARC, 2020). This report is from the London-based Intensive Care National Audit and Research Center after looking at the data of 196 patients admitted to critical care with confirmed COVID-19. Out of the 196 patients in critical care, 56 patients have a BMI of 25-30 (overweight), 58 with a BMI of 30-40 (obese) and 13 with a BMI of 40 or higher (extreme obese). Obesity is always associated with numerous underlying health problems such as diabetes, cardiovascular issues and hypertension (Csige et al., 2018).

Characteristics of patients admitted to critical care with confirmed COVID-19

Demographics	Patients with confirmed COVID-19 (N=196)
Body mass index, n (%)	
<18.5	1 (0.6)
18.5-<25	49 (27.7)
25-<30	56 (31.6)
30-<40	58 (32.8)
40+	13 (7.3)

Source: ICNARC, 2020.

BMI distribution of critical care patients with confirmed COVID-19



Source: ICNARC, 2020.

Global Obesity & Overweight

Overweight and obesity are worldwide health concern associated with having abnormal or excessive fat accumulation that may impair our health. According to the latest data from WOF (World Obesity Federation, 2020), 1 in 5 adults worldwide are expected to be affected by obesity by 2025. One-third of these will be living with severe obesity (BMI above 35 kg/m²) and at high risk of other NCDs (Non-communicable Diseases) requiring medical intervention.

How to Calculate Your BMI (Body Mass Index)?

BMI is a simple index of weight for height which is commonly used to classify overweight and obesity in adults. It is defined as a person's weight in kilograms divided by the square of his/her height in meters (kg/m²) (WHO, 2020).

WHO: Definition of Overweight & Obesity

- BMI for Overweight ≥ 25
- BMI for Obesity ≥ 30

So, let's keep yourself fit at home by:-

- cutting down energy-dense foods with high in fat and sugars
- increasing consumption of fruits and vegetables
- be more physically active

References

CDC (Centers for Disease Control and Prevention). (2020). Coronavirus Disease 2019 (COVID-19). Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/underlying-conditions.html>

Csige, I., Ujvárosy, D., Szabo, Z., Lőrincz, I., Paragh, G., Harangi, M. & Somodi, S. (2018). The Impact of Obesity on the Cardiovascular System. Journal of Diabetes Research, 1-12. <https://doi.org/10.1155/2018/3407306>

ICNARC (Intensive Care National Audit and Research Centre). (2020). ICNARC report on COVID-19 in critical care. Retrieved from <https://www.icnarc.org/About/Latest-News/2020/03/22/Report-On-196-Patients-Critically-Ill-With-Covid-19>

WOF (World Obesity Federation). (2020). Obesity: missing the 2025 global targets. Trends, Costs and Country Reports.

WHO (World Health Organization). (2020). Obesity and overweight. Fact Sheet. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>