

## Health Promotion

### Obesity and Flying

#### **Body Mass Index**

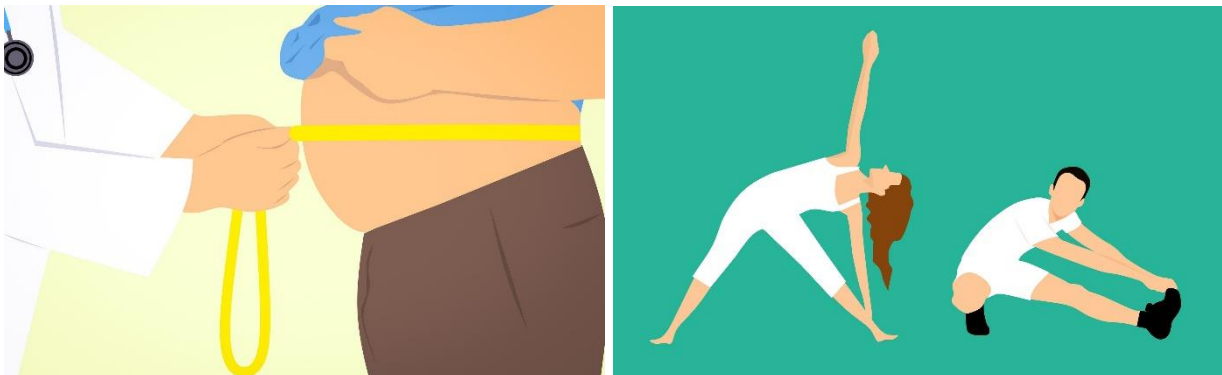
Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health. Body Mass Index (BMI) is a simple index of weight-for-height that is commonly used to classify overweight and obesity in adults. It is defined as a person's weight in kilograms divided by the square of his height in metres (kg/m<sup>2</sup>).

The general reference below are recommended by the World Health Organization (WHO) for adults worldwide:

- BMI greater than or equal to 25 is overweight; and
- BMI greater than or equal to 30 is obesity.

Meanwhile for Asian adults, the following specific reference is recommended by the WHO Western Pacific Region, while it is not applicable to children under age 18 or women who are pregnant:

- BMI equal or above 25 is obese;
- BMI between 23 and 24.9 is overweight;
- BMI between 18.5 and 22.9 is normal range;
- BMI less than 18.5 is underweight



## Health Risks Associated with Obesity

Obesity will greatly increase the risk of various diseases such as Type 2 diabetes mellitus, insulin resistance, gallbladder disease, dyslipidemia, breathlessness and sleep apnoea etc. It will moderately increase the risk of coronary disease, hypertension, stroke, osteoarthritis and gout, etc. The increased risks of health problems will have an impact on flight safety.

## Advice for Pilots

Obese pilots may be assessed as fit only if the excess weight is not likely to interfere with the safe exercise of their licence privileges, and the results of risk assessment, including evaluation of the cardiovascular system and the possibility of sleep apnoea, are satisfactory.

Pilots should also discuss their medications for obesity treatment with their Approved Medical Examiner (AME) in advance, because some medications may affect their fitness for flying. For example, appetite suppressants are disqualifying for medical certification. Also, pilots who commence taking Orlistat or other medication reducing the absorption of dietary fat should ground themselves for two weeks to see whether there is any adverse effect, such as flatulence, abdominal pain, bloating, headache and anxiety etc. Furthermore, they need to notify their AME if they decide to undergo bariatric surgery and a detailed report on the recovery from the procedure with no incapacitating side effects for treatment is required for medical clearance.

Pilots are encouraged to communicate with their AME openly and timely if they have any questions regarding obesity and related medical problems.

## References:

- <https://www.who.int/westernpacific/health-topics/obesity>
- [https://www.chp.gov.hk/en/resources/e\\_health\\_topics/pdfwav\\_11012.html](https://www.chp.gov.hk/en/resources/e_health_topics/pdfwav_11012.html)
- [https://www.caa.co.uk/Aeromedical-Examiners/Medical-standards/Pilots-\(EASA\)/Conditions/Metabolic-and-endocrinology/Metabolic-and-endocrinology-guidance-material-GM/](https://www.caa.co.uk/Aeromedical-Examiners/Medical-standards/Pilots-(EASA)/Conditions/Metabolic-and-endocrinology/Metabolic-and-endocrinology-guidance-material-GM/)