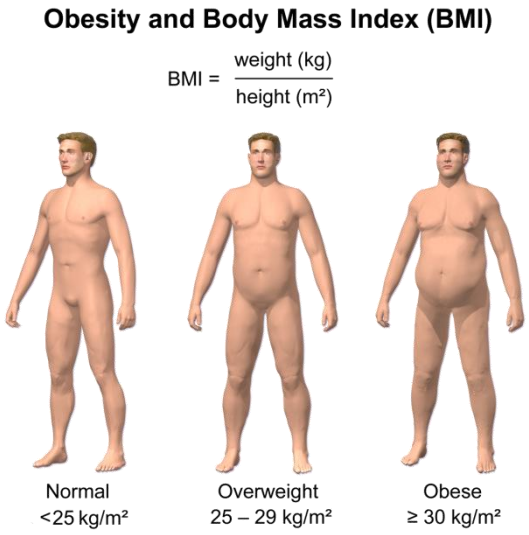
What is BMI?

According to Tsigos et al. (2008), obesity is the most prevalent metabolic disease world-wide and affecting adults, children and adolescents.

The World Health Organization (WHO) declared obesity a global epidemic that constitutes one of the biggest current health problems.

Obesity is when there is a positive balance and the diet provides more energy than necessary, the excess is stores as fat. The body fatness is assessed by the **body mass index** (BMI) defined as the weight in kilograms divided by the square of the height in metres (kg/m^2)



BMI=body weight (kg) / height squared (m^2)

More about energy balance

Example:

A man with 110 kg and 1.72 m

BMI=110/1,72^2 = 110/2.96 = 37.16 kg/m^2

Results you can see in the table 1 (WHO, 1997) The International classification of adult underweight, overweight and obesity according to BMI.

Table 1. BMI classification

Classification	BMI (kg/m^2)
Underweight	<18.50
Several thinness	<16.00
Moderate thinness	16.00-16.99
Mild thinness	17.00-18.49
Normal range	18.50-25.99
Overweight	≥25.00
Pre-obese	25.00-29.99
Obese	≥30.00
Obese class I	30.00-34.99
Obese class II	35.00-39.99
Obese class III	≥40.00

Source: Adapted from WHO, 1995, WHO, 200 and WHO 2004

Example:

Same example of man with 110 kg and 1.72 m, according to BMI=37.16 kg/m^2 have Obese class II (35.00-39.00)

If you want to weight loss, first step is **physical examination**:

1. Measure weight and height

2. Calculate BMI

3. Measure waist circumference

4.Measure blood pressure

Very important to remember the **important risk factors** for the development of obesity (James, 2008 and Branca et al. , 2007):

- Low physical activity

- Sedentary lifestyle

- High energy density diet

- Eating disorders

On the other hand, weight loss objectives should be (Tsigos et al., 2008) realistic, individualized and aimed at the long term.

More about individualized training

Recommendations suggest that people **30-60 minutes** of physical activity of **moderate intensity** (brisk walking) on most days of the week (Jakicic, JM. 2003 and Saris et al., 2003)

Our objective is reduce sedentary behavior and increase physical activity day to day

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