



Al-Mustaqbal University  
College of Science



جامعة المستقبل  
AL MUSTAQBAL UNIVERSITY

كلية العلوم

قسم علوم الانظمة الطبية الذكية

Subject: Obesity and overweight

Level: first

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Overweight is a condition of excessive fat deposits.

Obesity is a chronic complex disease defined by excessive fat deposits that can impair health , Obesity can lead to

- 1- increased risk of type 2 diabetes
- 2- heart disease
- 3- it can affect bone health and reproduction
- 4- it increases the risk of certain cancers.
- 5- Obesity influences the quality of living, such as sleeping or moving.

Overweight and obesity result from an imbalance of energy intake (diet) and energy expenditure (physical activity).

For adults, overweight and obesity as follows:

- 1- overweight is a BMI greater than or equal to 25
- 2- obesity is a BMI greater than or equal to 30.

**Diagnoses of overweight and obesity :**

**By Body Mass Index (BMI)** :is a tool used to assess whether your weight is within a healthy range or if you are underweight or



overweight. It examines the relationship between your height and weight. The formula for calculating BMI is as follows:

**The formula for calculating BMI is as follows**

**You can determine your (BMI) Body Mass Index as follows:....**

$$\text{BMI} = \frac{\text{WEIGHT(Kg)}}{\text{Height (metre)}^2}$$

If below 20...underweight.  
20-25.Ideal weight  
26-30.Overweight  
31-40moderate obesity.  
above 40=severe obesity.

For example: weight = 60kg

Height = 1.2m

$$\text{BMI} = \frac{60}{(1.2)^2} = \frac{60}{1.44} = 41$$



## BMI

**<16 Severe underweight**

**16-18.5 Underweight**

**18.5-25 Norm**

**25-30 Overweight**

**30—35 Obesity 1 degree**

**>35 Obesity 2 degrees**



## **Causes of overweight and obesity**

In most cases obesity is a multifactorial disease due to causes like :

- 1-psycho-social factors and genetic variants
- 2-medications, diseases, immobilization, monogenic disease.

## **Prevention and management**

- 1- exercises practicing
- 2- Diet: Decrease intake of high calorie foods and drinks
- 3- Adequate Sleep.
- 4- Medications. Identify and modify medications that may contribute to weight gain