

Body Mass Index (BMI)

is a measure of body fat based on height and weight that applies to adult men and women. Body mass index calculated as the body mass(weight) divided by the square of the body height, and is expressed in units of kg/m², resulting from mass in kilograms and height in meters.

$$\text{BMI} = \text{weight kg} / \text{height meters}^2$$

For example : if the weight of the person was (90)kg and his height was (1.8) meters what is his BMI?

Solution:

$$\text{BMI} = \text{Weight kg} / \text{height meters}^2$$

$$= 90 \text{ kg} / (1.8)^2 \text{ meters}$$

$$= 27.8 \text{ kg/m}^2 \text{ compare with normal value of BMI}$$

The result is overweight.

BMI Categories:

Underweight = <18.5

Normal weight = 18.5–24.9

Overweight = 25–29.9

Obesity = BMI of 30 or greater

Risk Factors for Health Topics Associated With Obesity

Along with being overweight or obese, the following conditions will put you at greater risk for heart disease and other conditions:

- High blood pressure (hypertension)
- High LDL cholesterol ("bad" cholesterol)
- Low HDL cholesterol ("good" cholesterol)
- High triglycerides

- High blood glucose (sugar)
- Family history of premature heart disease
- Physical inactivity
- Cigarette smoking

Increase BMI cause:

Increase the heart's works , blood pressure ,high cholesterol and triglyceride levels .

It can make diabetes more likely to develop

Decrease BMI cause:

The Pearson susceptible to infection , the effectiveness of the immune system decrease , decrease muscle mass , hair loss , irregular hormone regulator , osteoporosis , anemia , complications of pregnancy or inability to become pregnant , menstrual disorders and idle خمول

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