Overweight and obesity as risk factors for chronic diseases

Introduction
The questions in this module measure:

- Height
- Weight
- Waist circumference
- Hip circumference

Research findings
Some research findings related to overweight and obesity are as follows:

- At least 2.6 million people die each year as a result of being overweight or obese.\(^1\)
- Overweight and obesity lead to adverse metabolic effects on blood pressure, cholesterol, triglycerides and insulin resistance. Risks of coronary heart disease, ischemic stroke and type 2 diabetes mellitus increase steadily with increasing BMI.\(^2\)
- Raised BMI also increases the risks of cancer of the breast, colon, prostate, endometrium, kidney and gall bladder.\(^2\)
- Mortality rates increase with increasing degrees of overweight, as measured by BMI.\(^3\)
- To achieve optimum health, the median BMI for an adult population should be in the range of 21 to 23 kg/m\(^2\), while the goal for individuals should be to maintain BMI in the range 18.5 to 24.9 kg/m\(^2\). There is slightly increased risk of co morbidities for BMI 25.0 to 29.9, and moderate to severe risk of co morbidities for BMI greater than 30.\(^4\)
- Waist circumference is an approximate index of intra-abdominal fat mass and total body fat. Changes in waist circumference reflect changes in risk factors for cardiovascular disease and other forms of chronic diseases.\(^3\)
- Waist circumference or waist-to-hip ratio are more powerful determinants of subsequent risk of type 2 diabetes than BMI.\(^5, 6, 7, 8, 9\)

Reference