

ASSESSMENT OF OVERWEIGHT AND OBESITY

Defining risk

An individual's absolute risk of obesity-related disease should be assessed by determining the degree of overweight or obesity based on body mass index (BMI), the degree of abdominal obesity based on waist circumference (WC) and the presence of other risk factors.

Body mass index

Body mass index (BMI) measures weight in relation to height. The BMI ranges shown below are for adults over 18 years of age.

Calculations: BMI = weight (Kg) divided by height in metres squared (m²). Example of BMI calculation - A person who weighs 78 kg and is 1.77m tall has a BMI of 24.9 (78/1.77²).

Table 1. Proposed classification of weight by BMI in different adult ethnic groups

	BMI			Risk of co-morbidities
	New Zealand European people	Māori and Pacific Island peoples	Asian and Indian people	
Underweight	< 18.5	< 18.5	< 18.5	Low
Healthy	18.5 - 25	18.5 - 26	18.5 - 23	Average
Overweight	25 - 30	26 - 32	23 - 25	High
Obese	> 30	> 32	> 25	Very high

Waist circumference

Waist circumference is used to assess abdominal obesity when BMI is " 35. The subject stands with feet 25-30cm apart, weight evenly distributed. Measurement is taken midway between the inferior margin of the last rib and the crest of the ilium in a horizontal plane. The measurement is made at a normal minimal expiration to the nearest 0.1 cm.

Table 2. Proposed waist circumference measures in different adult ethnic groups

	Men	Women
New Zealand European people	< 102 cm	< 88 cm
Pacific Islands and Māori people	< 102 cm	< 88 cm
Asian and Indian people	< 90 cm	< 80 cm