

# Ways to measure body composition

## What is body composition?

Body composition is the percentage of fat, muscle and bone in the body. During the healthy weight program, we aim to decrease the percentage of body fat. To determine this, we use a variety of methods.

## Body mass index

Body mass index is calculated using weight and height measurements and provides an indication of body composition. As muscular tissue is denser than fat tissue, two people of equal body mass index can have different fat percentages and a different risk of diabetes and heart disease.

## Bioimpedance

Bioimpedance uses the resistance of electrical flow through the body to estimate body fat. It is a safe and quick way of measuring body fat.

## BOD POD – Air displacement plethysmography

The BOD POD measures body mass (weight) and volume using a very precise scale. Body density is calculated by sitting inside the BOD POD. Once the overall density of the body is determined, the relative proportions of body fat and lean body mass are calculated.

## Dual energy X-ray absorptiometry (DEXA)

DEXA measures body composition, including bone mineral content (BMC), bone mineral density (BMD), lean tissue mass and fat tissue mass. DEXA involves a small amount of radiation, however it is on average approximately 1/200 of the dose of the radiation used in a chest X-ray.



## Healthy Weight Service

As part of the Healthy Weight Program - weight, height and bioimpedance is routinely used to measure body fat and body fat changes over time. This is done at regular intervals throughout the course of the program. You or your child may also request extra measurements at any time. Please discuss this with clinical staff during review.

**This document can be made available in alternative formats on request for a person with a disability.**

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