



**For  
individuals  
with obesity**

# How obesity affects you

## **Mechanical consequences:**

Osteoarthritis, sleep apnoea, gastro-oesophageal reflux disease etc.

## **Metabolic health:**

Diabetes mellitus, gout, fatty liver, certain cancers etc.

## **Mental health:**

Self-esteem, body image etc.

## **Monetary health:**

Cost from treatment



# Effects of weight loss on diabetes & pre-diabetes

## For individuals with pre-diabetes or at high risk of developing diabetes:

A 5-7% weight loss is recommended to prevent or delay the onset of Type 2 diabetes.

## For individuals with Type 2 diabetes:

A  $\geq 5\%$  weight loss improves glucose, lipids and blood pressure control



# Types of interventions and expected weight loss

Type of intervention	Expected weight loss
Exercise only*	0 to 3%
Diet + exercise	3 to 10%
Weight loss medications, very low calorie diet	5 to 10%
Endoscopic bariatric procedures	15 to 20%
Bariatric surgery	25 to 30%

(SGH Obesity Centre; Swift et al., 2018\*)



# General considerations for individuals with obesity

**Lower physical activity levels are prevalent in adults who are overweight and obese**

This is likely due to low exercise capacity and being easily fatigued

## Modifications:



### **Start slow**

E.g., If you are starting a walking programme, start with leisure walking instead of brisk walking.



### **Take breaks in between**

E.g., Instead of doing 20 mins of physical activity continuously, aim for 2 x 10 mins with a break in between.



### **Progress gradually**

Monitor your overall energy and fatigue levels during and the day after exercise. Ensure that you do not feel excessively fatigued, such that you can't carry out your normal daily routine.

[\(Source: Cassidy et al., 2017\)](#)