

## Overweight, Physical Activity and Exercise

### Introduction

Obesity rates have trebled in the UK in the last 20 years, with no sign of this upward trend moderating. By 2010 it is estimated that 1 in 4 women and 1 in 5 men will be obese (*Tackling Obesity in England*, Feb 2001).

Obesity can be defined as a Body Mass Index (BMI) of  $\geq 30\text{kg}\cdot\text{m}^{-2}$  and overweight as a BMI of  $\geq 25\text{kg}\cdot\text{m}^{-2}$  (only relevant for non-athlete). A waist measurement greater than 35" (88cm) for women, 40" (102cm) for men can also be used as a measure for obesity.

The American College of Sports Medicine (ACSM, 2001) recommend a reduction in energy intake and an increase in energy expenditure to promote weight loss and combat this public health problem, such that an energy deficit of  $500\text{-}1000\text{kcal}\cdot\text{day}^{-1}$  is achieved.

For individuals classified as either obese or overweight, long-term weight loss and prevention of weight regain is even more important in reducing the risk of obesity-related disorders such as high blood pressure, Type II Diabetes, angina, certain cancers and other metabolic disorders.

### How Much Physical Activity?

ACSM (2001) recommend the following targets for obese and overweight individuals:

- **Goal 1: Initial Target**

Accumulate a minimum of 150min (2.5h) of moderate intensity exercise per week.

- **Goal 2: Long-Term Goal (important for prevention of weight regain)**

Progress to 200-300min (3.3-5h) of exercise per week at a moderate intensity equivalent to working at a RPE (Rate of Perceived Exertion) of 6 on a scale of 1 (light) to 10 (hard). *An individual should be able to speak during exercise but not have a long-winded discussion!*

Strength-training exercises should be incorporated (8-10 exercises working all major muscles), performing 10-15 repetitions 2-3 times a week.

### What Type of Physical Activity?

**Everyday chores** – gardening, climbing the stairs, doing the housework, walking (use a pedometer and aim to increase your daily step count).

**Non-weight-bearing activities** – because of the stress placed on the joints through increased body weight, non-weight-bearing activities may be a safer and more comfortable way of burning calories (eg exercise bike, swimming, rowing machine)

**Strength training** – it is important to preserve and even increase your muscle mass as this is what burns calories. This can be achieved through a suitable strength training programme or by participating in exercise classes that have a strong strength training emphasis, such as some circuit classes and "body toning" classes.