

# Training for weight loss

## Why is exercise a vital part of any weight loss program?

Dieting alone is not an effective long-term solution to managing overweight. This is because exercise significantly increases the energy expended each day, helping to create a larger calorie deficit and thus more effective fat loss. In addition, when dietary intake is decreased (as occurs on a diet), as well as body fat stores, muscle glucose and muscle protein may be used to provide the fuel not being taken in through the diet. This is undesirable as muscle tissue is metabolically active (burns energy) even at rest so maintaining muscle tissue is necessary to stimulate the metabolic rate (and thus fat loss). Ultimately, loss of muscle tissue may be slowed through including physical activity in the weight reduction plan.

## What type of exercise should I do?

The best type of exercise for weight loss is aerobic (or 'cardio') activity. Some examples include brisk walking, swimming, rowing and cycling. You should accumulate 30-60 minutes of aerobic exercise each day to promote fat loss. Note that exercise does not have to be completed in a single 'bout' – it can be accumulated over the day, as long as each of the 'bouts' is at least 10 minutes in duration. Furthermore, the benefit of being active in 'mini bouts' distributed over the day has been demonstrated by the results of recent studies<sup>1</sup>. It was shown that those with the highest levels of incidental activity (e.g. taking the stairs instead of the lift) maintained their weight loss in the long term better than those who only undertook their planned aerobic activity.

The appropriate intensity of this cardio depends on your current fitness levels. As a very rough guide, you should be able to carry out a conversation (pausing between words / sentences), but not 'sing an opera' in order to ensure you are efficiently burning fat through your workout. In addition, as mentioned above, you should be able to maintain the exercise for 30-60 minutes. If you are prone to orthopedic injury due to overweight, rotating the type of activities you undertake, or undertaking non-weight bearing activities only, may be necessary.

Secondly, resistance (or weights) training is excellent to undertake to improve the efficiency of your fat-loss program. Again, this is because it

assists with maintaining lean body mass (LBM, muscle mass), subsequently stimulating the metabolic rate (and assisting with fat loss). Undertaking resistance training up to three times per week, including 8-12 exercises (i.e. all the major muscle groups) will dramatically assist the fat-loss process.

## What weight should I aim for?

A person's stature, bone density and muscularity all affect what their ideal weight should be. Hence, there is no one magic number or range of numbers that all men or all women should aim for. Rather, reducing your body fat levels should be your goal. However, measuring the proportion of body fat generally requires expensive equipment and / or the services of a professional anthropometrist. Given that most people do not have access to either of these, the next best (and also simplest) way to determine whether you are carrying excess body fat is to measure your waist circumference. Measuring waist circumference also has the additional benefits of telling you whether your extra weight is posing a health risk as opposed to being a cosmetic 'problem'. This is because it is now known that the excess body fat stored around the abdomen dramatically increases the risk of certain diseases (as opposed to that around the hips and thighs which is more of a cosmetic issue). Men should aim for a waist of 102cm or less, and for women, the goal should be a measurement of 88cm or less.

## What's the best way to measure weight loss?

One of the simplest ways to determine whether you have lost weight is simply to note whether your clothes are becoming looser, or to compare your waist measurements over time. More precisely, you can also ask your Healthwise consultant to take your 'girth measurements' at the end of your consultation. Compare these to the measurements taken at the next consult to see if you have decreased in size. Avoid relying on the scales to determine if you have lost weight. This is because if you have been exercising you may have gained muscle as well as lost body fat. As muscle has a high water content it will weigh more than an identical volume of fat tissue. Further, this may be reflected on the scales as a net maintenance of weight or a net weight gain. As such, it is easy to see why one can be quickly discouraged from continuing their efforts if they are relying on feedback from the scales only.



### Diet for weight loss

Firstly, eating the right food for weight loss means sticking to a healthy, well-balanced diet (see the NHMRC's 'Food for Health – Dietary Guidelines for Australians' publication for general information on nutrition – <http://www7.health.gov.au/nhmrc/publications>). This will help to ensure that nutrient intakes (including vitamins and minerals) are sufficient to maintain an active and healthy life. This is something that many fad diets fail to provide because oftentimes, vital food groups are 'banned' (e.g. the Atkins diet). In addition to making good food choices, it will be necessary to reduce the quantity or portion sizes of what goes into ones mouth. This is necessary because one of the basic premises required for weight loss is that 'what goes in' must be less than what is burned off – this way the body is forced to break down some of its stored fat for energy.

#### Some basic principles to remember...

- Aim to lose body fat rather than simply decreasing the 'number' on the scales
- Aim for slow fat loss through gradual adjustment of your diet, activity and lifestyle. You are more likely to be able to maintain lifestyle changes if they are gradual than if you implement them all overnight. This is because as soon as a stressful period in your life occurs, you are likely to revert back to old habits for 'comfort' if you have made too many dramatic changes at once.
- Aerobic exercise should be completed daily at an intensity that can be maintained for 30-60 minutes (this maximizes energy expenditure more than high-intensity, short-duration exercise).
- Examples of aerobic exercise (or 'cardio') include brisk walking, jogging, cycling and rowing. These exercises help to burn calories / kilojoules (energy), creating a deficit between intake and expenditure. Thus, your body will draw on its fat reserves to provide energy needed for all your activities of daily living. Your metabolic rate will also remain elevated for 30 minutes or longer after exercise.
- Resistance training (weights training) is excellent for maintaining lean body mass (LBM, or muscle mass) while you lose fat. Maintaining LBM is beneficial as muscle is metabolically active (i.e. burns calories or energy) even at rest. Fat mass on the other hand, is not as metabolically active.
- Avoid using labour-saving devices like remote controls etc. at home and work in order to increase caloric expenditure during activities of daily living.

### Training myths

*"I should do tricep exercises to get rid of my flabby arms"* – Unfortunately, spot-reduction exercises will not preferentially burn fat stored near the exercising muscles. Good muscle tone is achieved through a combination of muscle-specific exercises (to make the underlying muscles more prominent [e.g. the triceps in this case]), as well as reducing the body fat covering the given area so the muscles are easier to see. The latter can only be achieved through diet modification and regular exercise to decrease the overall level of body fat.

*"I can use gadgets and pills and melt away excess fat"* – Passive exercise equipment like sauna belts and vibrations devices will not 'melt away' excess fat<sup>2</sup>. Neither will so-called diet / fat-burning pills. If fat loss were this effortless, everybody would be skinny! Once again, the only thing that will reduce body fat levels (aside from surgical intervention) is dietary modification and physical activity.

*"Exercise increases appetite"* – this statement is incorrect<sup>2</sup>. Regular physical activity actually normalises the appetite.

*"Weights training makes females get big"* – Unless following a very high protein diet, unlike men, females will not significantly increase the physical size of their muscles through weight training. This is because they do not possess the hormonal profile (e.g. growth hormone and testosterone levels) necessary for large quantities of muscle-tissue synthesis. On the other hand, muscular strength and endurance are likely to make significant improvements with training, as will muscle tone (especially if the female is concurrently undertaking a process of body-fat loss).

#### Further Reading

National Health and Medical Research Council  
<http://www7.health.gov.au/nhmrc/publications>

The publication 'Food for Health - Dietary Guidelines for Australians' provides sensible general information on nutrition  
 Commonwealth Department of Health & Ageing  
<http://www.health.gov.au>

The Australian 'Physical Activity Guidelines for Adults' in the publications section provides information for the general public on exercising to promote health.

<sup>1</sup>Wagner, L. (2003). *Weight Loss: Diet Management*. Queensland University of Technology PUB541 Medical Nutrition Therapy—Course Notes.

<sup>2</sup>Heyward, V.J. (2002). *Advanced Fitness Assessment & Exercise Prescription*. Human Kinetics: USA.

