

Exercise and Obesity

Obesity is one of the largest health problems afflicting our country, and a growing concern, especially among our children. In fact, 33 percent of adults and 20 percent of children in the United States are considered obese.

Obesity is defined as having excessive amounts of body fat. Body fat (adipose tissue) is necessary for certain bodily functions, but when it accumulates in excessive amounts, it can lead to a wide array of ailments, including:

- Heart disease
- High blood pressure
- Increased cholesterol
- Diabetes
- Certain types of cancer
- Orthopaedic problems
- Musculo-skeletal diseases
- Decreased flexibility
- Difficulty breathing



Your body fat amount is usually expressed as a percentage of your weight relative to your lean weight (muscles, bones, organs, etc.). For example, an individual weighing 200 pounds with a body fat percentage of 15 percent has 30 pounds of body fat and 170 pounds of lean weight.

By medical definition, a male is considered obese when he has more than 25 percent body fat, and a female is considered obese when she has more than 32 percent. It is more accurate, therefore, to describe someone who is obese as being "overly fat" rather than "overweight."

Several methods are available for determining your percentage of body fat (skin-fold calipers are the most practical). Each method does have its limitations, however, so consult with your physician to find the appropriate method for you.

Genetics plays a role in how prone someone is to obesity; however, the condition occurs as more calories are consumed than are expended. The excess calories are converted to fat and gradually an individual becomes obese over time. Without resorting to surgery, you must exercise and eat right to reduce body fat.

Regular exercise (combined with proper nutrition) can conquer the battle against obesity as well as safeguard against the health risks associated with obesity. In fact, research has shown that regular exercise is the common denominator for formerly obese individuals who have kept the weight off for a long period of time.



Exercise Benefits

A comprehensive exercise programme also gives you more stamina, strength and mobility. It can even bolster a positive body image and raise self-esteem. As a result, your quality of life is improved significantly.

Before beginning any exercise programme, you should discuss your plans with your physician. A thorough medical examination and an exercise tolerance testing (stress test) are advised. Be sure your doctor reviews your medications to avoid drug-associated complications during exercise.

Starting an Exercise Programme

Once you have received medical clearance from your physician, it is important to get sound advice from a Physiotherapist who can help prescribe a safe, effective exercise programme.

Be sure to complement your exercise programme with a proper diet. Your goal should be to significantly increase your caloric expenditure while decreasing your caloric intake.

Exercise Guidelines

In addition to aerobic activity, you should engage in a weight training routine. Weight training or resistance training not only strengthens the muscles and bones, but also raises metabolism by increasing the muscle-to-fat ratio. As a result, you will burn more calories at rest. Finally, your exercise programme should include stretching exercises for enhanced flexibility and mobility.

Focus on the quantity and quality of the exercise and not on the amount of weight lost. Upon initiation of an exercise programme, the body has a tendency to gain lean weight (muscle) so don't rely on the bathroom scale in the beginning to measure your progress. If exercise is regularly performed, the excess fat will definitely come off!

Cardiovascular (aerobic) exercise should be the focus of your exercise programme because it provides overall health benefits, including fat loss, an increase in daily energy levels and a reduction of health risks.

Endurance and Stamina Building

Perform cardiovascular activity that places minimal stress on the joints and produces minimal muscle fatigue. Good choices include walking, swimming and water exercises, as well as recumbent or stationary bicycling.



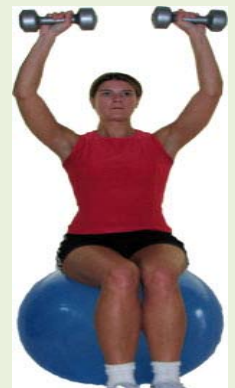
If you are obese, your exercise programme should be based on low-intensity aerobic activity where the duration is progressively increased. Duration and frequency are more important than intensity.

Duration of exercises

- Exercise four to five times per week, 30 to 60 minutes per session at a low to moderate intensity. Be sure to stay within 40 percent to 70 percent of your target heart rate.
- Start slowly! The first five minutes should be your "warm-up" to give your body the necessary time it needs to get used to the activity.
- Continue at a comfortable pace that allows you to talk without difficulty and not perspire profusely.
- Always slow down for the last five minutes of your workout to allow blood to return from the working muscles to the heart and for your body to return to its resting state. Never skip this "cool-down."
- Finish with stretching exercises.
- Focus on increasing duration first, and then increasing intensity.
- If you were previously sedentary, you may want to start with two or three 10 minute moderately-paced walks per day. If possible, try to exercise in the morning. This will help boost your energy level for the day and increase your metabolism, thereby burning more fat.
- A conservative resistance-training programme is recommended for the obese.
- Simple, basic movements are best and can be performed by most beginners using weight machines and lighter dumbbells. These exercises will help strengthen your bones and muscles by improving functional fitness - the ability to perform everyday tasks and activities with greater ease.
- Furthermore, a higher muscle-to-fat ratio increases metabolism for greater caloric expenditure.

Muscular/Skeletal Fitness

- Perform exercises that target the major muscles groups, such as your chest, back and shoulders. In addition to weight machines and dumbbells, you can use rubber tubing or elastic bands to provide the resistance.
- Aquatic exercises/swimming offer resistance for your muscles while placing little impact on the joints. Perform these exercises twice a week and gradually increase to three times per week. Be sure to train on nonconsecutive days.
- Begin with one set of 12 to 15 repetitions per exercise and gradually progress to two sets per exercise using enough resistance so that it's a slight struggle to complete the last couple of repetitions.
- Slowly warm up your body before resistance training. For example, walk or do light calisthenics for at least 10 minutes.
- Always perform exercises in a slow and controlled manner to ensure the targeted muscle performs the work.
- These exercises focus on enhancing posture and flexibility, and minimizing stiffness, as well as helping gain confidence in balance and mobility, which reduce the risk of injury.



Flexibility, Balance and Mobility...

- Only do stretches after the body has warmed up, such as after a walk.

- Perform stretches for all major muscles, such as legs, chest, back and shoulders. This exercise can be performed daily or at least four times per week.
- Perform all stretches in a slow and controlled manner. Hold all of the stretches for 10 to 30 seconds without bouncing/jerking.
- Do stretches while standing, modifying the stretches to suit your comfort level.

Special Precautions

- Gradually increase the duration and intensity of the exercises.
- Because jogging may overstress the knees and hips, it is not typically recommended for the obese.
- Obese people are very susceptible to dehydration and should frequently drink fluids before, during and after exercise.
- Because they are less adaptable to temperature changes, obese people should wear light clothing that allows for heat exchange.
- Slow down or stop if you experience any of the following health warning signs - chest pains, shortness of breath, pain in the neck or jaw, palpitations, major muscle or joint pain, nausea or vomiting or excess fatigue.

Please consult your physician on questions or concerns you may have regarding your condition.