Selecting and Effectively Using an Elliptical Trainer



The Importance and Benefits of Physical Activity

It has been firmly established that individuals who engage in some form of physical activity, either by lifestyle or occupation, are likely to live longer and healthier lives. Research shows that even moderate caloric expenditure from physical activity has a significant impact on longevity. A physically active person who possesses such risk factors as hypertension, diabetes and even a smoking habit can derive significant gains from incorporating regular physical activity into his/her daily activities.

Regular physical activity is also likely to help modify a number of risk factors. As an adjunct to weight loss, exercise is likely to help you stay on a diet and lose weight. Additionally, regular exercise is associated with reduction in blood pressure, improved glucose regulation, promotion of better lipid profiles and stronger/denser bones.

The First Step!

Before you begin an exercise program, take a fitness test, or substantially increase your level of activity, answer the questions below. This physical activity readiness questionnaire (PAR-Q) will help determine your suitability for beginning an exercise routine or program.

- Has your doctor ever said that you have a heart condition and that you should only participate in physical activity recommended by a doctor?
- •Do you feel pain in your chest during physical activity?
- •In the past month, have you had chest pain when you were not doing physical activity?
- Do you lose your balance because of dizziness, or do you ever lose consciousness?
- •Do you have a bone or joint problem that could be made worse by a change in your physical activity?
- •Is your doctor currently prescribing drugs for your blood pressure or heart condition?
- •Do you know of any reason you should not participate in physical activity?

If you answered yes to one or more questions, if you are over 40 years of age and have been inactive, or if you are concerned about your health, consult a physician before taking a fitness test or substantially increasing your physical activity. If you answered no to each question, you have reasonable assurance of your suitability for fitness testing and training.

Selecting a Home Elliptical Trainer

Elliptical trainers have become one of the most popular machines for cardiovascular exercise. These trainers engage the legs in a movement pattern that combines the motion of stair stepping with cross-country skiing, providing a low-impact workout. Some elliptical devices also include poles that can be maneuvered with the arms while the legs are in motion, similar to cross-country machines. This option increases the amount of muscle mass used to perform the exercise.

Following are guidelines that should be considered when purchasing an elliptical trainer. These recommendations will help you select a trainer that suits your specific needs. Before making any purchases, always be sure to try out the machine so that you can familiarize yourself with its options.

Safety

Make sure the equipment is properly fitted to your size and movement range. If the machine is motorized, there should be a safety turn-off control.

When in use, the machine should be very sturdy and should neither move nor have the tendency to tip over. The side rails should also be sturdy and provide for adequate balance.

Check the area around the machine for adequate headroom and space for leg and arm motion.

Maintenance and Durability

- •Is the machine manufacturer reputable and reliable?
- •Does the trainer come with a warranty?
- •What does the warranty cover and how long is the warranty period?
- •Is the machine durable, easily assembled, and easily maintained?
- •Elliptical machines tend to be rather large is the space in which it is to be used large enough?

- •If it is to be stored between use, is there adequate space for storage?
- •Are local technicians available for service?

Power, Performance, and Operation

- •Is the trainer motorized or non-motorized?
- •Does your home have the proper power supply? (Motorized machines may require 120 to 220 volts)
- •Does the trainer require calibration?
- •How often does the trainer have to be serviced?
- •Is the noise level acceptable?
- •Is the trainer sturdy and stable?
- •Is there a control panel/read-out? Is it easy to read? Is it accurate?
- Does the control panel offer the information that is important for your needs (time, distance, resistance level, calories expended, etc.)?
- •Is the instruction manual easy to read and follow?

Other Considerations

Make certain the pedals will comfortably accommodate the size of your feet. Pedals with a textured "non-slip" surface and high curved ridges will also prevent your feet from sliding around or even off the pedal when exercising.

The stride length permitted by the trainer is also an important factor. Avoid purchasing a trainer if the stride length is too limited for your leg movement range. Some machines allow you to adjust the stride length.

Overall fit is very important. A good fit should allow you to move comfortably and smoothly, with a good upright posture and without the chance of your knees bumping into the console. The fixed hand-support rails should also allow you to maintain a comfortable upright posture versus a tendency to lean too far forward (which can be stressful to the back).

If the machine provides upper body handles or poles, make sure that the handles are sturdy, easy to reach, and that the handgrips are comfortable. Avoid trainers with upper body poles that infringe on your range of motion or cause contact with your knees.

A Complete Physical Activity Program

There are three principal components to a rounded program of physical activity: aerobic exercise, strength training exercise and flexibility training. It is not essential that all three components be performed during the same workout session. Try to create a pattern that fits into your schedule and one to which you can adhere. Commitment to a regular physical activity program is more important than intensity of the workouts. Therefore, choose exercises you believe you are likely to pursue and enjoy.

ACSM's Position Stand "The Recommended Quantity and Quality of Exercise for... Healthy Adults" @1998 states that aerobic training should be performed three to five days per week with a minimum of 20 minutes per day. Remember, if your schedule is tight, it is better to exercise for a shorter period of time than not at all. Typical forms of aerobic exercise are walking and running (treadmills), stair climbing, bicycling (bicycle ergometers), rowing, cross-country skiing, and swimming. Many devices offer a combination of these motions. For general purposes, strength training should be done two to three times per week. Strength training is performed with free weights or weight machines. For the purposes of general training, two to three upper body and lower body exercises should be done. Additionally, abdominal exercises are an important part of strength training. Flexibility training is important and frequently neglected, resulting in increased tightness as we age and become less active. Stretching is most safely done with sustained gradual movements lasting a minimum of 15 seconds per stretch. At a minimum, strive to stretch every day.

Familiarize yourself with the options that increase the intensity of the workout. Some machines have elevating ramps under each pedal. Others increase the intensity through faster movement or by changing the resistance of the pedals with a tension control.

Using an Elliptical Trainer

Follow the manual regarding directions for proper set-up and use of the machine. Make certain the trainer operates properly and be sure that adequate space is available and that the power supply is nearby. Adjust the machine to suit your size and range of movement. Get comfortable with any programming features such as exercise time, distance goal, resistance level, speed level and caloric expenditure.

When exercising, maintain the correct posture by keeping your shoulder back, head up, chin straight, abdominals tight, and arms relaxed. Do not lean forward or grab and grip the balance bars tightly. The participant's weight should be supported by the lower body.

Important Points to Remember:

Before you start exercising on the elliptical trainer, make sure that you are familiar with the controls that increase speed and/or resistance. Make sure that the emergency shut-off switch or button works.

Maintain a good posture: Shoulders should be back, head up and slightly forward, chin up and abdominals tight. Look forward, not down at your feet. Do not grip the handrails too tightly. Make sure that your weight is evenly distributed and that your lower body supports the majority of your weight.

Stride: Relax and maintain a good stride going through your normal range of motion.

Make it a habit: An elliptical trainer is only as good for your health as the frequency with which you use it. Set a specific time of day, set a specific number of minutes and make it routine.

Start out slowly and make sure that you have checked with your doctor before beginning any exercise program.

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