

machine. Discuss appropriate lubrication and maintenance with the sales people at the store where you purchased your treadmill.

Your treadmill should come equipped with arm grips, siderails, or safety bars. These are excellent for defining the running/walking area for your exercise bout. They allow you to catch yourself if you trip or fall. When stepping off a treadmill while the belt is moving it is advisable to use these rails for safety.

The treadmill should come equipped with an emergency shut-off key, clip or tether. These are a safety must, especially with young children around. The tether feature is preferred, since an automatic stop button may not be in reach as you fall.

Many treadmills come with sophisticated electronic displays that allow you to design workouts to your needs. For some, this programming is basically a motivation and selling point. All you need is enough variety to keep your workouts motivating and interesting. The bare minimum display and programming features should include distance, speed, time, incline and possibly calories expended. It is important that you be able to use the treadmill in the manual mode.

Important Points to Remember:

Before you get on: Before you get on the treadmill, experiment with the controls. Speed it up, slow it down, increase and decrease the incline and test the emergency off button.

Posture when walking or running: Shoulders back, head up and slightly forward, chin up and abdominals tight. Look forward, not down at your feet.

Stride length: Relax and maintain the normal stride you would use when walking on the ground. Don't chop your steps.

Where you are: It is important to pay attention to where you are on the treadmill. Don't drift sideways or allow yourself to go to the back of the belt.

Make it a habit: A treadmill 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.

A Complete Physical Activity Program

A well rounded program of physical activity includes aerobic exercise and strength training exercise, but not necessarily in the same session. This blend helps to maintain or improve cardiorespiratory and muscular fitness and overall health and function. Regular physical activity will provide more health benefits than sporadic, high-intensity workouts, so choose exercises you are likely to enjoy and that you can incorporate into your schedule.

ACSM's physical activity recommendations for healthy adults, updated in 2007, recommend at least 30 minutes of moderate-intensity physical activity (working hard enough to break a sweat, but still able to carry on a conversation) five days per week, or 20 minutes of more vigorous activity three days per week. Combinations of moderate- and vigorous-intensity activity can be performed to meet this recommendation. Typical aerobic exercises include walking and running, stair climbing, cycling on a stationary or moving bike, rowing, cross-country skiing, and swimming.

In addition, strength training should be performed a minimum of two days each week, with 8-12 repetitions of 8-10 different exercises that target all major muscle groups. This type of training can be accomplished using body weight, resistance bands, free weights, medicine balls or weight machines.

This brochure was written by Michael Bracko, Ed.D., FACSM. ACSM grants permission to reproduce this brochure, if it is reproduced in its entirety without alteration. The text may be reproduced in another publication if it is used in its entirety without alteration and the following statement added: Reprinted with permission of the American College of Sports Medicine. Copyright © 2005 American College of Sports Medicine. This brochure is a product of ACSM's Consumer Information Committee.

Prior to beginning any exercise program, including the activities depicted in this brochure, individuals should seek medical evaluation and clearance to engage in activity. Not all exercise programs are suitable for everyone and some programs may in fact result in injury. Activities should be carried out at a pace that is comfortable for the user. Users should discontinue participation in any exercise activity that causes pain or discomfort. In such event, medical consultation should be immediately obtained.

Selecting and Effectively Using

A Home Treadmill



ACSM... Advancing Health through
Science, Fitness and Medicine

Staying Active Pays Off!

Those who are physically active tend to live longer, healthier lives. Research shows that even moderate physical activity—such as 30 minutes a day of brisk walking—significantly contributes to longevity. A physically active person with such risk factors as high blood pressure, diabetes or even a smoking habit can get real benefits from regular physical activity as part of daily life.

As many dieters have found, exercise can help you stay on a diet and lose weight. What's more, regular exercise can help lower blood pressure, control blood sugar, improve cholesterol levels and build stronger, denser bones.

The First Step

Before you begin an exercise program, take a fitness test, or substantially increase your level of activity, make sure to answer the following questions. 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 or that you should participate in physical activity only as 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? 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 a 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, then it's likely that you can safely begin fitness testing and training.

Selecting a Home Treadmill

Treadmills are a popular choice of equipment for those who want to engage in physical activity. Below are useful guidelines for you to consider before making a purchase.

Be sure to try it out before you buy. Doing so will allow you to find a treadmill that meets your specific needs. A treadmill may be either motorized or human-powered. Manual treadmills are less expensive and safer because the running belt stops moving when you do. However, manual treadmills usually have smaller running belts, making it difficult to jog or run, let alone maintain a brisk walk. Often, the difficulty in getting the belt to move smoothly on a non-motorized treadmill increases the likelihood of holding on to the handrail in an effort to generate power, causing an inconsistent pace. This inconsistent pace may cause muscle strain or difficulty in elevating your heart rate. Additionally, the holding on may elevate blood pressure from breathholding. Exercise at home should be easy and something to look forward to. If it is difficult to get the machine to work, you are less likely to exercise. For these reasons, you may want to consider a motorized treadmill.

Safety

- Stability of platform when level and with elevation: feels solid, not wobbly.
- Doesn't have parts that hit you or cramp your movements in an unnatural fashion.
- Automatic emergency shut-off key, clip or tether.
- Side rails or safety bars for balance: They should be reachable and sturdy, but out of the way of swinging arms.

Maintenance and Durability

- Is the company reliable and reputable?
- Can the treadmill be easily assembled and maintained?
- Cost of maintenance?
- Does the treadmill come with a warranty? What does the warranty cover and for how long?
- Are local technicians available for service?

Power and Performance

- Treadmill motor: should have a minimum continuous duty rating of 1.5 h.p. motor (2.5 to 3.0 h.p. is preferred). To test the motor, plant your feet firmly on the belt while the machine is running at its lowest speed, checking for any hesitation, groaning or grinding.
- Power supply: Does the treadmill require 110 or 220v? 220v will probably require circuit alterations in the room where it will be used.
- Belt size: Should be at least 18 to 20 inches wide and 48 inches long. Narrow, short running belts make it more difficult and less enjoyable because the chances of tripping or falling off of the belt increase with a narrow belt. The

platform should be low to the floor and have ample space to straddle the treadmill belt.

- Speed range should be 0.1 to a minimum of 8 mph. This speed range should satisfy most walkers as well as runners. Low starting speed is an important issue. We recommend a safe starting speed of 0.1 mph with slow incremental increase in belt speed. The stop should be smooth stop (not sudden). The motor should be able to maintain speed regardless of treadmill elevation and weight of user.
- Incline should range from 0 percent to at least 10 percent. Incline mechanisms can be either electric or manual. Manual cranks are found generally on lower end treadmills to keep the price down. The treadmill should not wobble at high elevations.

Operation

- Is the control panel accessible and easy to read?
- Does the control panel have the capacity for manual use separate from software used for automated programming?
- Is the noise level acceptable?
- Is the belt heavy duty as to not stretch with extended use?

Other Considerations

- Weight of treadmill
- Space available and height of ceiling
- Aesthetics
- Storage potential
- How accurate is the calibration?

Using a Home Treadmill

Treadmills should be positioned away from walls to avoid injury due to falls. Be sure that the back of the treadmill has at least six to eight feet of clearance from a ledge, wall or window. The power supply and wiring should be located away from walking paths or taped to prevent tripping when stepping on or off of the running belt.

Make sure the running belt is properly adjusted before use. Belts that are too loose or too tight will cause wear and tear on the treadmill, which result in expensive repair or replacement costs. The deck beneath the belt should be laminated to protect it from friction wear and tear. This deck absorbs the hundreds of pounds of force from each step.

Make sure that you follow the directions included with purchase for maintaining the belt deck connection. Increased friction and heat will cause "amp draw," which pulls power away from the electrical components of your