

Exercises to Fight High Cholesterol

Exercise is an excellent method for improving circulation and cardiovascular function in general.

Although exercise has little effect on LDL, aerobic exercise may improve insulin sensitivity, HDL and triglyceride levels and may thus reduce your heart risk. People who exercise and control their diet appear to be more successful in long-term lifestyle modifications that improve their heart risk profile.

Furthermore, because exercise is very effective in reducing stress and because hormones (released during stress) stimulate the liver to produce "bad cholesterol", exercise helps reduce cholesterol levels through its stress-reducing action.



Getting Started

- **Start exercising:** Many exercise programmes say you should talk to your doctor before starting. Certain people with certain medical conditions may want to check with their doctor before becoming physically active, but most people can start by putting one foot in front of the other and without any problems. Even those recovering from heart attacks are encouraged to walk treadmills in cardiac rehabilitation programmes.
- **Comfortable shoes:** Only one thing is worth investing in when it comes to walking, and that's a comfortable pair of walking shoes. Even athletic shoes that are more than 6 months old may not have enough cushioning to support you. You may choose either athletic shoes for sidewalks and roads or light hiking shoes (rugged walking shoes) if you venture out on trails.
 - Select shoes specially designed for walking. They will be labelled as such. Running shoes are a second choice. Cross training shoes are a third best choice.
 - You want a shoe that bends easily through the ball of the foot but remains fairly firm. A low heel works best, which is why a running shoe with thick cushioning in the heel is not the best choice.
 - Avoid high tops unless they are specifically designed as walking or hiking styles.
- **Warm up:** Spend 30 seconds each on 5 simple warm-up moves:
 - **Ankle circles:** Stand on one foot and lift the other off the ground. Slowly flex that raised ankle through its full range of motion, making circles with the toes. Do 6-8 circles in each direction. Switch feet and repeat.



- Leg swings: Stand on one leg and swing the other loosely from the hip, front to back, in a relaxed, unforced motion. Your foot should swing no higher than a foot or so off the ground. Do 15-20 swings on each leg.
- Pelvic loops: Place your hands on your hips with your knees gently bent and feet shoulder-width apart. Keep your body upright and make 10 slow circles with your hips, pushing them gently forward, left, back, and right. Reverse directions and repeat.
- Arm circles: Hold both arms straight out from your sides, palms down, making yourself into the letter T. Make 10-12 slow backward circles with your hands, starting small and finishing with large circles using your entire arm. Shake your arms out and repeat with 10-12 forward circles.



Technique Counts

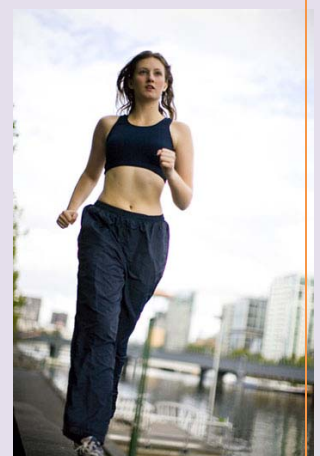
As you walk, add to the benefits of your walk with 4 important ways to improve your walking technique.

- Stand tall. Posture matters. Focus on the horizon, keep your shoulders back, and tuck your abs to avoid arching your lower back.
- Take quicker steps, not longer. Your stride will lengthen as you speed up, but don't force yourself to take longer steps.
- Bend your arms. Bring them up to a 90-degree angle, no more. Keep your elbow fixed. Your hands come to the center line in front of your body but do not cross. Faster arms will make faster feet.
- Push off with your back foot for power. Generate push at the end of each step as your leg prepares to swing forward. You should feel as if you're showing the sole of your shoe to someone behind you.

Speed Matters

Here's a quick way to figure out how fast you walk. Instead of timing yourself on a measured track, you can calculate your walking speed by counting your steps. Once you're warmed up, count how many steps you take in a minute of walking (or count your steps for 20 seconds and multiply by 3).

- If you're walking for your health, a pace of about 3 miles per hour (or about 120 steps per minute; fewer if you're tall) is about right. That's a 20 minute mile.
- To walk for weight loss, you'll have to pick up the pace to 4 miles per



hour (or 135 steps per minute), a 15-minute mile.

- Aerobic fitness comes at 4.5 miles per hour (you're moving along at 150 steps per minute).

Types of Resistance Training

Free weights: Free weights, in various forms, have been around for a long time. The advantages include their flexibility (many different exercises for many different muscle groups can be performed with a simple pair of dumbbells), and they are relatively inexpensive. A disadvantage of free weights is that their improper use is more associated with injury than many other modes of strength training. If not used properly, weights can slide off bars in the middle of an exercise, and bars or weights can be dropped. However, a little common sense and correct usage of locks and collars make free weights quite safe.

Most free weight exercises are performed with either a barbell, which is a single, long bar that is handled using both hands and loaded with weights on each end, or with 1 or 2 dumbbells, which are short bars designed to be held in 1 hand, also loaded with weights on each end. A variety of weight plates are used with barbells and dumbbells. Weight denominations of 45, 25, 10, 5 and 2.5 pounds are most common.



Machines: Strength training machines come in an almost infinite variety. Machines are safe (they greatly limit the chance of injury to the user, assuming that it is properly maintained). They're easy to use, and adjustments can be made quickly to fit the user. There are no bars to load and unload. Instead, a pin is simply placed into the desired location in a weight stack. The most obvious disadvantages are their cost and space requirements. Each machine is designed for just 1 or 2 exercises. So to work your entire body and all muscle groups, you would need many different machines. For these reasons, most machines are found in commercial settings (health clubs, corporate fitness centres, YMCAs).

Bands/tubes: Resistance bands and tubes are a safe and non-intimidating alternative for strength training. They nearly eliminate the chance of injury and are highly portable, flexible, and inexpensive. However, stronger people find it difficult to get a good strength-training stimulus in larger, stronger muscle groups (specifically in their legs, chest, and back). In addition, bands and tubing typically come in relatively few resistance ranges (typically 3-5).

Resistance bands and tubing are often used in therapy and rehabilitation settings. Their safety and light resistance make them ideal for such situations. Because they are light in weight and portable, they are ideal for the busy traveller who wants to continue some strength training while on the road.

Bodyweight movements: Sometimes called calisthenics, these movements have been performed for many years by many people. Push-ups, pull-ups, knee-bends and sit-ups are examples. No expensive equipment is required, and all except pull-ups can be performed anywhere. The major drawback with these kinds of exercises, however, is that the load is quite fixed. The load is your body weight. That means that the only way to alter the intensity of the workout is to modify the number of repetitions performed (more push-ups, for example) or the amount of time between sets.



For some people, even a single pull-up is impossible. Likewise, many people can do more than 50 consecutive push-ups, so adding additional repetitions at that point probably won't enhance the strength stimulus very much. Still, when it's not possible to use weights, your own body makes a great alternative.

Variations: Many fitness centres and health clubs offer fitness programmes and classes that address strength training. The trademarked programme called Body Pump is one example. In those sessions, a weighted bar is used and a variety of exercises performed in relatively rapid succession with music. Other classes incorporate some floor work with bodyweight movements or resistance bands into sessions that are primarily designed to be aerobic in nature.