

THE BENEFITS OF EXERCISE

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Although it has long been assumed that exercise was beneficial to one's health, only recently have well-controlled scientific studies shown this to be the case. It is now generally accepted that aerobic exercise such as walking, biking, and swimming retards the development of hardening of the arteries. Further, the amount of exercise needed is being defined in scientific studies.

What type of exercise? How much?

Most of your time should be spent with aerobic exercise – the type that uses large muscle groups with relatively low resistance. Think of this type of exercise as *rhythmic and continuous*. Examples include walking, biking (including a stationary bike), an elliptical machine or swimming. This is the type of exercise most likely to help confer many of the health benefits we will discuss, including weight control and improved aerobic conditioning. The types that include weight-bearing are most helpful in promoting bone health.

Three hours a week of moderate exercise should be your goal. Spread this through the week – an example might be 45 minutes at a time, four times a week.

Light weights (less than 15 pounds) will be helpful in maintaining and improving muscular tone and bone strength. In general, lifting heavy weights raises blood pressure and does little to improve aerobic capacity.

All that said, though, **any** physical activity is good for you. And this includes even activities that are brief, such as walking up a flight or two of stairs, the long way in from the parking lot, etc. Every little bit of activity *burns calories*, and is thus helpful.

How hard should I exercise?

As we said, any exercise is better than none, in terms of burning calories and providing some benefit. However, in order to improve cardiovascular conditioning, you need to reach a “threshold” of intensity. The simple heart rate tables that are published in many health clubs should not be used because they do not take into consideration significant individual variations in heart rate response, medication use that alters the heart rate, and other factors. Also, it is difficult to measure your heart rate during exercise without a special monitor.

So . . . you'll be happy to know that it's really rather simple to tell if you are in the “aerobic” zone (that is, exercising hard enough for actual conditioning to take place). If

you can talk in normal conversation without strain, you're not there yet. On the other hand, if you can only speak a word or two before needing to pause for a breath, you're pushing yourself a bit too hard, and will not be able to sustain that pace. So you should be able to speak in "sentences" but not "paragraphs" while exercising. That will place you in an aerobic zone, during which you will be improving your cardiac conditioning and burning lots of calories. This is called, if you will, "conversational exercise."

If you're compulsive and need to know what your individual heart rate zone should be, we can determine that by doing an exercise stress test in the office. Again, remember that everyone's heart rate is different for a given exercise level.

Also, keep in mind that if you're in an older age group, goals may not be the same as they were, say, 20 years ago. Easy does it. The main thing is to get moving!

What are the benefits of exercise?

In a word: lots! Let us count some of the ways.

Weight control. Exercise burns calories and promotes weight loss. A brisk mile walk (or its equivalent), taking 15-20 minutes, will burn close to 100 calories. There is much individual variation here, but this means that if you walk 3 miles, 5 times a week, you will burn enough calories to lose 1 to 2 pounds over a month. That may sound like a lot of walking for not much weight loss, but consider that if this regimen becomes part of your routine, it can reduce your weight by 15-25 pounds over a year! (*This assumes that you won't simply make up for the burned calories with a snack when you finish your walk.*)

Hardening of the arteries. Aerobic exercise retards the progression of hardening of the arteries. You need to reach the 1500 calorie per week threshold before this happens, and granted, it doesn't happen predictably to everyone, but studies have confirmed that, in conjunction with other risk factor control (maintaining an optimal blood pressure, smoking cessation, reducing your cholesterol level), exercise is beneficial in this regard, and can even cause plaque buildup to regress (shrink) in some cases. Because of these effects, exercise lowers the risk of heart attack and stroke.

Bones, diabetes, blood pressure, fats in the blood. Exercise promotes bone strength and slows the progression of osteoporosis, lowers blood pressure and blood sugar, and helps normalize blood lipid levels (cholesterol and triglycerides).

Mood, mind and cancer. Exercise improves your mood and helps you rest better at night. Regular exercise has been linked to a reduced risk of colon and breast cancer. It has also been shown to improve cognitive function, and possibly reduces the risk of, or at least delays the onset of, Alzheimer's Disease.