

The best medicines are those that prevent disease and improve quality of life. You may not think of physical activity as medicine, but in fact, when taken daily, it is powerful medicine.



Physical Activity Is POWERFUL MEDICINE



Would you like to prevent cancer?

A recent report by the American Cancer Society¹ states that regular exercise may be helpful in preventing breast, colon, prostate, and endometrium cancer, some of the most common cancers today.

Interested in preventing diabetes?

It is one of the fastest growing and most serious diseases today. Researchers looked at the risk of developing diabetes in a 15-year study of 2,478 young adults² (younger than age 30). Those who were sedentary at the start of the study but became physically active during the 15-year follow-up were 60% less likely to develop diabetes compared to those who remained sedentary. Imagine the impact on the health of our nation and health care costs if every sedentary person became physically active! The Centers for Disease Control and Prevention estimate that about 27% of all health care costs are linked to a sedentary lifestyle and excess body weight.³

Want to prevent a heart attack?

In a Harvard study of 80,000 nurses,⁴ those who walked at least half an hour, 5 or more days per week, had only half as many heart attacks as those who didn't exercise regularly.

Here are other benefits shown by large research studies (comparing active or high-fit persons to inactive or low-fit persons):



- Brisk walking cut the risk of hip fracture in older women by 65%⁵
- Fit men had 68% fewer strokes⁶
- Physically active men were 57% less likely to develop high blood pressure⁷
- Fit men were 34% less likely to catch a cold or the flu bug⁸
- Fit persons have less depression and are happier⁹
- Fit persons were only half as likely to die from any cause during one large 10-year study¹⁰

People who get regular physical activity are also less likely to be overweight, have more energy, are more optimistic, sleep better, and have less arthritis and joint pain.¹¹

Active people live longer.

The Adventist Health Study¹² and the Alameda County Study,¹³ 2 landmark, large, population studies, both showed physical activity to be a top predictor of long life (even better than whether or not you were a vegetarian in most cases). The Harvard Alumni Study¹⁴ showed that for every hour you exercise, you increase your life expectancy by 2 hours. Not a bad investment!

More than 100 years ago, a pioneer in health reform wrote this statement on physical activity: "All who can possibly do so ought to walk in the open air every day, summer and winter. A walk, even in winter, would be more beneficial to the health than all the medicine the doctors may prescribe."¹⁵ Do you believe it? The research seems quite convincing.

AEROBIC MILE CHART

Activity	Minutes to equal one Aerobic Mile		
	Easy	Moderate	Vigorous
Aerobic dancing	30	20	15
Backpacking	15	12	10
Basketball	20	12	10
Bicycling (10, 12, and 15 mph)	18	14	10
Calisthenics	30	20	15
Canoeing or rowing (4, 6, and 8 METS)	20	15	12
Dancing, social	30	20	15
Elliptical trainer	20	15	12
Football, touch	20	15	12
Gardening, active	60	40	30
Golfing, pulling cart	30	25	20
Hiking, cross-country	20	15	12
Jogging or running (12, 10, 8 min/mile)	12	10	8
Karate, Judo	15	12	10
Mountain climbing	15	12	10
Racquetball, squash	20	15	10
Rope skipping	11	10	8
SCUBA diving	20	15	10
Skating	20	15	12
Skiing, cross country	17	12	8
Skiing, down hill	20	15	12
Soccer	15	12	10
Stair stepping	15	13	11
Stationary Cycling (50-100-150 watts)	16	13	11
Swimming laps	24	16	12
Table tennis	60	30	20
Tennis	20	15	11
Volleyball	20	15	12
Walking (24, 20, 15 min/mile)	24	20	15
Water aerobics	20	18	15
Water skiing	20	15	12
Weight training	30	20	15

If you haven't been exercising, aim for 6 aerobic miles per week to start. Gradually work up to 10 or 15.



To gain these health advantages, the Centers for Disease Control and Prevention¹¹ and the American College of Sport's Medicine recommend, "Every U.S. adult should accumulate 30 minutes or more of moderate-intensity physical activity on most, preferably all, days of the week." Examples include

brisk walking, biking, swimming, active gardening, and other physical activities that make you breathe deeply (but not be out of breath) and make you sweat. Younger, fit persons may enjoy more vigorous activity, including jogging and active sports.

If you do not currently engage in regular physical activity, you should begin by incorporating a few minutes of physical activity into each day and gradually build up to 30 minutes or more of moderate-intensity activity. For maintaining an optimal weight, the Institute of Medicine recommends 60 minutes of moderate activity daily or 30 minutes of vigorous daily activity.¹⁶ If you have any health problems, check with your doctor for specific guidance.



Here are some principles that can help you maintain an active lifestyle:

- Choose activities you enjoy. If you don't like what you do, you won't keep it up for long.
- Ask someone to go with you. An exercise buddy helps you be more faithful to regular activity.
- Exercise in the cool of the day (morning or late in the day) and drink plenty of fluids.
- Add variety by doing different activities on different days or choosing new walking routes.

FITT Formula for Fitness

F Frequency of participation
Aim for most, preferably all, days of the week

I Intensity of exercise (moderate, vigorous)

Start with an easy to moderate intensity, and work your way up to a moderate to vigorous intensity (as your health allows). Consult your doctor if you have health problems or concerns. You need to sweat and breathe deeply, but not be out of breath. The "Talk Test" is an easy way to monitor your approximate intensity during physical activity. If you cannot carry on a conversation, you are exercising too hard. Slow down.

Source: The Centers for Disease Control and Prevention (CDC)

T Type of activity – Participate in activities you enjoy

Start with moderate activities such as:

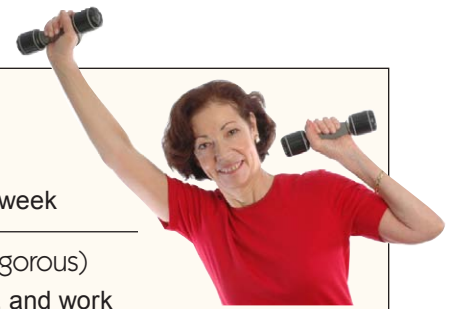
- Walking (2 miles in 35-40 mins.)
- Swimming laps (20-30 mins.)
- Bicycling (9-10 mph)
- Playing volleyball (45-60 mins.)
- Low-impact aerobics (30 mins.)
- Dancing (30-60 mins.)
- Active gardening (30-60 mins.)
- Golf, walking (9 holes)
- Water aerobics (30-40 mins.)

Ease into vigorous activities such as:

- Walking fast (2 miles in 25 mins.)
- Jogging/running
- Backpacking
- Hill climbing/stair climbing
- Rollerblading or ice skating
- Bicycling (12-15 mph)
- Step aerobics
- Playing competitive sports (e.g., tennis or racquetball)
- Downhill/cross-country skiing
- Canoeing/kayaking
- Heavy gardening (e.g., shoveling/hoeing)

T Time of physical activity

Aim for 30–60 minutes of physical activity each day. Start with 15–20 minutes and work up to at least 30 minutes daily. More time is recommended for those who want to lose weight or achieve a higher level of fitness. It's OK to break sessions into 2 or 3 shorter sessions.

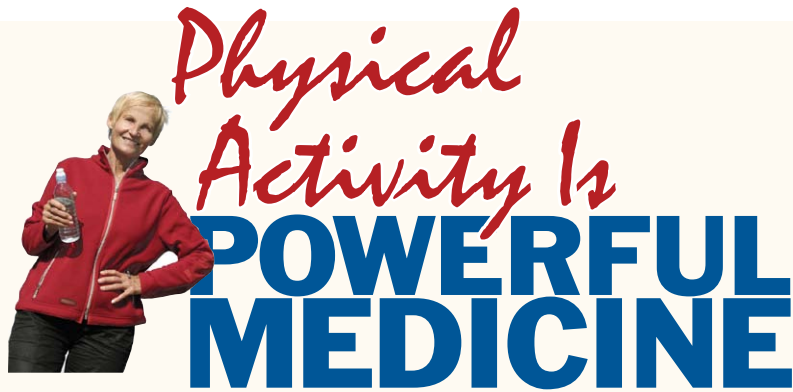


- Get good walking shoes and wear comfortable exercise clothing.
- Set goals and keep records. You may want to record minutes, miles, or steps per day.
- Look for ways to be more active daily: take the steps instead of the elevator, walk to the store, walk the dog, walk some during your lunch hour, take breaks frequently, and take active vacations.
- Join a gym or fitness class. If needed, ask a fitness trainer to help you get started.

- Do some stretching and strengthening exercise 2-3 times weekly as well as regular aerobic exercise.

As you begin to be more active, your strength, health, and mental outlook will improve, and your spirit will soar!





References & Further Reading

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