

Chapter X

The Redeeming Power of Exercise

Before you read this you have a right to know my prejudices. After caring for thousands of patients over long continuous periods of time, I've affirmed many times that fit people stay healthier and can do things that unfit people can't.

My prejudice is this. We were born to be active, born for the field, you might say, with a fabulous machine that can repair itself. All you have to do is exercise and your machine gets healthier. I believe exercise prevents many illnesses and cures almost anything.

When I was a young doctor I was overworked, 20 pounds too heavy, and I smoked. One day a patient of mine came into the hospital having chest pain. I sent him to the coronary unit, which required an elevator ride from first to second floor. As the nurse wheeled my patient's stretcher into the elevator, I noticed that his color was changing to a deadly gray. He had suffered a cardiac arrest. I raced up the stairs to alert the nurses in the coronary unit to get ready.

The run almost killed me. After we resuscitated my patient I laid down my cigarettes and took up jogging, which I have continued these 35 years. Exercise cured me.

The Goal of Exercise Today

A good deal has changed since the days when women were afraid to break a sweat and men predominated on the tennis courts and golf courses. Today they may pursue physical activity side by side but differences still persist. Women are usually more flexible and men are stronger, a fact that emphasizes a goal to shoot for, having men become more flexible through stretching and having women become stronger through strength-building exercises.

Every exercise program should be a blend of activities, incorporating strength, flexibility, endurance, and aerobic work.

But, the bottom line is "keep moving." The payoffs of exercise are big and happen fast.

When I was in medical school, I was taught that you couldn't increase muscle mass after age 60. We now know that it's possible to build muscle mass in nursing home patients who are in their 80s and 90s.

Multiple studies suggest that the golden rule of fitness — that it takes 30 minutes of exercise to make a difference — is anything but rigid. Three quick, 10-minute activity breaks (walking, biking, whatever) a day may deliver almost the same benefits as one 30-minute workout.

A Purdue University study found improvements in reasoning ability in middle-aged men who did aerobic exercise just three days a week.

A Tufts University study of men and women ages 72 to 98 enrolled in a weight-training program showed big gains in muscle strength and mobility in just 10 weeks. The exercisers also became more active overall in their daily lives.

And — the real kicker — studies show a balanced exercise program could take 15 years off your physiological age.

Here is a list of exercise benefits:

- You are stronger because of the power in your hips and legs.
- You have more spring in your step because your muscles and joints are more flexible and your bones are stronger.
- Your body will be more attractive and streamlined.
- When you are fit your heart slows down to a healthier rate.
- Your heart will be stronger and less likely to have a heart attack.
- Your good cholesterol will increase.
- Your digestion and bowel action will improve.
- You will have less anxiety.
- Your attitude will improve.
- You will be less prone to depression.
- You will think more clearly.
- You will sleep better.
- You will build muscle and replace fat.
- If you take insulin, less will be required.

As you see, exercise has a lot going for it. Everyone who is able to should exercise. There are no exceptions. There are, however, decisions about exercise that must be made individually, depending on your circumstances.

Four Decisions to Make About Exercise

Decide what kind of exercise to do. All exercise is not the same. There is the fast paced kind such as brisk walking, swimming, jogging, skiing, and bike riding. These strengthen the heart and lungs so that you can do more and do it longer without tiring. Then, there is

weight lifting. This builds muscles. Most people don't realize it but larger and stronger muscles give you at least 9 great advantages:

1. The more muscle you carry, the less fat you have.
2. The more muscle you have, the stronger you are.
3. The more muscle you have, the faster your body metabolism will run.
4. The more muscle the better your body uses oxygen.
5. The more muscle the better your body burns sugar.
6. The more muscle the lower your cholesterol will be.
7. The more muscle the better your blood pressure will be.
8. The more muscle the stronger your bones.
9. The more muscle the better your body regulates its internal temperature.

That's a lot of pluses for the decision to build more muscles! The point is, both types of exercise are very beneficial and your decision should be to include both in a plan.

Decide how often to exercise. Three to five workouts each week are required to keep the heart muscle strong. If you haven't been exercising, you may want to begin by working out every other day. Without resting a day between sessions, your muscles may get sore and when you get sore you may quit. Don't quit. It is very important that you keep on until your exercise pattern becomes a habit that you won't give up for anything. Five workouts a week should be a goal to shoot for.

Decide how long to exercise. If your goal is to slim down, choose moderate fitness activities such as walking, water aerobics or swimming, and do them at a pace you can sustain for 30 minutes at a time, five days a week.

Decide how hard to exercise. Here's where confusion sets in. The "less is more" idea of exercise that says you can count gardening, walking the stairs, a 15 minute walk to work, and walking from your car to the office, is meant to get you started doing something if you've been doing practically nothing. And it's true. Your general health will be improved and your risk of life-threatening illness will be lowered. The point is this, you don't have to kill yourself to get into better physical shape. The level at which you begin, however, should not be the level you're aiming for. You can begin with a stroll in the park, but after a few weeks you'll reach a point where the body is ready for a fast hike. Then, you need to pick up the pace of your walking.

Most adults who get heart disease have too much body fat. They weigh more than they should for their height.

If that is your case your exercise program should demand effort that is slow and steady. Your body will burn both fat and sugar for fuel when you're exercising, but low intensity exercise, like brisk walking, will burn more fat, while a high-intensity activity, like racquet ball, burns more sugar. The fuel from fat cells will burn better at a lower level of activity because you can keep at the activity longer.

Don't carry the idea too far, though. Working at a desk and lounging in a hammock are low levels of activity and you could easily do them for hours. But, such activities won't burn a significant number of calories simply because the body isn't doing enough.

To slim down, choose moderate fitness activities such as walking, aerobic dancing, hiking, and swimming. And do them at a pace you can keep up for 30 to 60 minutes at a time, five days a week. These burn plenty of calories and they involve all the large muscles of the body.

For example, a 150-pound person uses almost nine calories a minute doing a slow crawl in the pool. This isn't as calorie consuming as running but it will accomplish the job of losing weight. And there's little risk of being sidelined by injury.

Figuring out how hard to exercise needn't become a reason for getting discouraged. Take heart in this fact: there's an unexpected dividend in exercise. Your metabolism revs up and continues to burn fat at a higher rate for hours afterward—no matter how much you did or didn't sweat. This means that when you get your weight where you want it, you can eat more without putting on weight.

Only You Can Choose How Fit You Want To Be

How much exercise do you need? Depends on what you want. To cut the risk of heart disease, stroke, diabetes, and even cancer, you barely need to work up a sweat. But if you want to trim your waist and shed a few pounds, get ready to push harder. Here's what the latest studies say exercise has to offer.

1. For a longer life

Every hour you're active, the experts say, adds one and a half hours to your life. To ward off most of the major killers and possibly osteoporosis, you don't have to kill yourself.

What it takes: You can walk, garden, climb stairs, play with the kids, lift the groceries, or exercise formally, doing about 30 minutes worth each day, enough to burn 200 calories.

The point is: Do enough to make your regular life a physically active life.

The payoff: nothing immediate. Over time you may thin down. But, you will have less risk of a heart attack and of getting many chronic diseases.

2. For better health now

Regular workouts, research shows, will help you rack up immediate benefits: increased energy, a more robust immune system, a more relaxed outlook, and healthier blood pressure and cholesterol levels.

What it takes: You'll have to get your heart thumping hard enough to be winded 20 minutes at a stretch three times a week. Brisk walking, especially while working your arms with light hand weights, aerobics, running, swimming, or any other aerobic exercise will qualify.

Tile payoff: Fewer colds and bouts of flu. A better ratio of good to bad cholesterol. An average drop of ten points in blood pressure if your pressure is elevated. Most important — you'll feel better, be more optimistic, and suffer less from stress.

3. For an adventurous life into your eighties

More vigorous exercise, when you're 50, 60, or 70 will help stave off disability, disease, and even death, according to an important study from Stanford University.

What it takes: The Stanford exercisers ran, swam, bicycled, walked briskly, played racquet sports, and / or participated in aerobic dancing for three and a half to four hours a week. Those who ran were averaging 26 miles a week. As well, the participants were doing stretching exercises, yoga and weight lifting to get their arms, abdomens, and legs shaped up, two times a week.

The payoff: greater strength, balance, flexibility, and endurance. Improved athletic performance. The ability to be more adventuresome outdoors with fewer injuries and less soreness. The beginnings of a better body. And, for those who stay this fit throughout life, a slower decline in the immune system, which could further help ward off infection and even cancer.

4. To slim down

An effective weight loss program must include both exercise and healthy eating. The formula — cut the calories you take in and increase the calories you burn — sounds simple but the practice of it is difficult.

What it takes: Set a goal of 60 minutes of brisk walking, running, swimming, biking, or other aerobic workout five days a week. Go for activities you can stick with. Then, to tighten sagging muscles, put your whole body through a full round of floor exercises, weight lifting, or resistance exercises three times a week.

The payoff: Exercise builds muscle, which is denser and heavier than fat, so some exercisers actually gain weight at first. But by adding muscle and speeding up your metabolism, you'll lose inches around your waist before you shed pounds. Keep at it, eat right, and weight loss will follow.

How to Stick with Your Exercise Program

Exercise should be something you enjoy. Here are 12 ways you can make it appealing enough to stay with it.

- Choose activities you enjoy.
- Plan regular times to exercise. Don't just choose to use your "spare time." That isn't good enough.
- Add variety, don't get into a rut.
- Exercise with a friend.
- Join a fitness class.
- Exercise to music.
- Join a group that hikes, bikes, runs, canoes, etc.
- Climb stairs rather than use the elevator. Set short-term goals and reward yourself when you meet them.
- Buy sport clothes to fit your sport. Look and feel the part.
- In poor weather areas, join a fitness club.

Help another person start their fitness program. Once you begin your exercise program, give yourself 12 weeks to notice the improvements in your body.

An Exercise Plan to Live With:

Safe Stretching

It is important to start each exercise session by stretching. The importance of stretching is twofold:

1. It helps prevent the loss of flexibility that comes with aging.
2. It builds muscles to protect your joints from injury.

Here are four guides for safe stretching:

1. Hold your stretch for 10 to 30 seconds. Relax. Repeat.
2. Don't bounce into a stretch. Slow and easy is the rule.
3. Stretch until you feel tension, not pain.
4. Start stretching only after you've warmed up with a 5 minute walk.

The Stretching Routine

Step One – Lying flat on your back, raise your right knee up toward your chest, holding it tight into the chest for a count of five.

Step Two – Straighten your right leg. Now, repeat the routine, using the left leg.

Step Three – Pull both knees to the chest, hold tight for a count of five. Straighten both legs and relax.

Step Four – Lying flat, push your lower back into the floor, thereby eliminating the back's normal curvature. Again, hold for a count of at least five. Repeat these exercises for 3-4 minutes. With each exercise, keep your head flat on the floor.

Muscle Building Without Weights

The rule of muscle is "use it or lose it." These muscle builders can be done anywhere. They are excellent when you travel. They require no equipment; they use the weight of the body to build muscle.

Lower Body

Half-knee bends. Stand with your feet apart and your hands on your hips. Keep your back straight and your feet flat on the floor. Half-bend at the knees. Hold for a second or two. Straighten up. Repeat 10 times.

Side-leg lifts. Lie on your right side. Stretch your right arm out straight. Balance yourself by placing your left hand flat on the floor. Raise your left leg about a foot from the floor. Hold for a second or two. Slowly let your leg down. Repeat 10 times. Reverse sides and repeat.

Middle Body

Crunches. Lie on your back. Cross your arms over your chest. Bend your knees. Lift your head and shoulders off the floor. Ease back to the floor. Repeat 10 times.

Upper Body.

Modified pushups. Lie on your stomach. Place your hands on the floor at shoulder level. Straighten your arms. Push yourself up. Raise your head, shoulders, chest, belly and hips off the floor, but not your knees. Hold for 12 seconds. Ease down. Repeat 10 times.

The 12-Week Program of Walking and Muscle Building

Weeks One through Three

1. Walk for 20 minutes on a flat surface in a traffic-free area every other day. Walk slow for 5 minutes. Stretch for 5 minutes. Then walk fast for 10 minutes. Finally, cool down with a slow walk for 5 minutes.

2. On the days you do the muscle building exercises, warm up with a slow walk for 5 minutes, stretch for 5 minutes and then do one set each of the muscle builders.

Weeks Four and Five. Fast walk for 15 minutes each time. Don't change anything else.

Weeks Six through Ten. Fast walk 25 minutes each session. Increase your walking to 4 days a week. Increase your muscle building to 2 sets three days a week. Continue the warm-up, stretching, and cool down unchanged.

Week Eleven. Fast walk for 28 minutes each session. Leave everything else the same.

Week Twelve. Fast walk for 30 minutes five days a week. Do muscle building two days a week. Do three sets each session. Continue the warm-up, stretching and cool down as before.

A Three Step Method to Keep Your Exercise Within Safe Limits

1. Watch your breathing. You shouldn't be so winded that you can't talk. Nor, should you be so out of breath that you have to stop to get your breath.

2. Notice whether you're sweating. Toward the end, you will usually have a light sweat.

3. Be aware of your comfort. Don't continue to exercise if you develop chest pain, shortness of breath or muscle aches and pains.

Don't Give Up

There you have it. Now, it's up to you. Get started and like Churchill said, "Don't give up. Never, never give up." If you faithfully continue for 12 weeks your routines will be ingrained into your daily living and be automatic. Then, exercise becomes a way of life for you. One last thing. The evening before your walking days, lay out your clothes and at the appointed time go exercise whether you feel like it or not.