
Introduction to Managing Personal Health

HOW FITNESS AFFECTS YOU

When you were a child, your “work” was play. You likely were expected to “go outside and play,” participate on a sports team, and run around at recess. No matter what part of the world you grew up in, you were probably encouraged to “get physical” for some portion of the day. In Japan, teachers traditionally led their young students in morning calisthenics; in India, yoga was the first activity of the day; in Norway, brisk indoor exercises helped chase away some of the gloom of polar night (nearly six months of the year with barely any sun!). Parents and teachers knew that fitness was an important part of healthy physical and mental development (Figure 1).

However, before you knew it, you were on your own. As an adult, you began to sleep until the last minute, gulp down coffee and a vitamin tablet in the morning, slouch through the school day or workday, and spend evenings on the couch. You started off so well, so what happened? Sure, you can say there’s no time to exercise or the gym is too crowded or you’re too tired to exercise. They’re great excuses, but how do you feel? More than likely you’re sluggish, moody, tired, and just a little grouchy—feelings that often result from poor fitness (Figure 2).



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FIGURE 1—When you were a child, you probably played outside after school and on weekends.



FIGURE 2—Too often, people get stressed out at work, come home and eat a heavy dinner with a few drinks, fall into bed to catch a few hours of sleep, wake to an alarm, and rush through our morning to do it all over again.

The Benefits of Fitness

You're probably all too aware of the effects of poor fitness, but do you know the real benefit of *good* fitness? Most exercise and physical fitness experts will agree that good fitness benefits you both physically and mentally.

Let's take a quick look at the physical benefits of exercise.

Regular exercise can lower your resting heart rate. Your heart is a muscle, and muscles get stronger and more efficient with exercise. In fitness terms, *cardiovascular* exercise can improve the efficiency of your cardiovascular system. The average resting heart rate is about 72 beats per minute. In comparison, marathon runners and many aerobically fit athletes report resting heart rates as low as 40 beats per minute.

Think of your body as a smooth-running car. If the engine is properly tuned and burning gas efficiently and all of the mechanical parts are in working order, the car will cover the most distance with the least amount of work. Similarly, if your muscles (including your heart) are healthy and strong, your body will operate more efficiently with the least amount of work. Just as a car engine is most efficient when it operates at the lowest RPM (revolutions per minute), your heart is most efficient when it's beating as few times per minute as needed. Exercise strengthens the heart muscle and promotes cardiovascular efficiency.

Regular exercise and a healthy diet keep veins and arteries elastic and free from obstruction. Think of the veins and arteries in your body as the hoses in a car. Just as regular maintenance keeps those hoses strong and clear, cardiovascular exercise keeps your veins and arteries healthy and clear. Healthy veins and arteries help the heart to work properly and keep blood pressure within normal limits.

Regular exercise is good for your lungs. What do you need most when you exercise? More oxygen! The more you use your lungs, the easier it is for them to absorb oxygen and remove waste products. When you don't exercise regularly, your lungs are like a dusty old storeroom with all of the windows shut. When your lungs get regular exercise, it's like opening up those windows and filling that storeroom with clean, fresh air. As you probably already know, it's very important to keep your "storeroom" clean by avoiding tobacco products.

Regular exercise burns more calories. When you stick to a regular exercise program, your body burns calories more efficiently. You'll learn much more later in this study unit about how to naturally increase your *metabolism*, which will help you increase your muscle mass, burn more calories, and reduce the percentage of fat in your body.

Weight-bearing exercise strengthens bones and joints. Everyone should strive to maintain strong bones and flexible joints throughout their lives. Regular weight-bearing exercises such as walking, running, and aerobics help to keep bones and joints strong (Figure 3).

Cardiovascular refers to the heart and blood vessels.

Metabolism refers to all of the physical and chemical processes within the body that create and use energy. These processes include digestion, elimination, respiration, circulation, and temperature regulation.



FIGURE 3—In addition to the aerobic benefits, walking helps maintain strong bones and flexible joints at any age.

Endorphins are pain-killing chemicals that occur naturally in your body.

Regular exercise strengthens muscles.

Muscles will become stronger, firmer, and toned with proper exercise. Firm, well-toned muscles can also improve your physical appearance.

Regular exercise can reduce the risk of disease.

Along with a healthy lifestyle, exercise can help reduce the risk of diabetes and heart disease—two chronic and often deadly diseases.

Regular exercise can help to alleviate the harmful effects of stress.

Stress can take a large toll on your body. Exercise can reduce the harmful effects prolonged distress can have on your body. We'll cover many stressors and their effects on the body, as well as identify ways to reduce or eliminate "bad" stress, later in your program.

After learning just a few of the benefits of physical activity, you might be motivated to get up, get moving, and have your recliner carted away. But wait, there's even more good news about exercise.

Let's take a quick look at the mental benefits of exercise.

Exercise produces endorphins, which are naturally produced hormones that create feelings of happiness and well-being.

When you exercise regularly, your lungs become more efficient. More efficient lungs take in more oxygen. Oxygen activates endorphins. When you put it together, being physically fit and mentally satisfied creates happy people who look and feel great (Figure 4).

Exercise increases the ability to better handle stress and tension.

People who exercise regularly say they feel less tired, which makes it easier to cope with everyday whims and whines. The connection between body and mind becomes more apparent day by day. What might be old news to people



FIGURE 4—Exercise not only helps to tone and strengthen your body, it's great for your emotional health as well.

from Eastern cultures is just now being explored in the West. Throughout your program, you'll see how your physical and mental well-being are inextricably entwined.

Exercise reduces stress-related ailments. At one time or another, you've probably felt you've suffered from a stress or tension headache or stomach upset. With any luck, you haven't developed stress-related *hypertension* (high blood pressure) or elevated cholesterol, with resulting heart disease. If not controlled, your body's reactions to stress can be damaging. Regular exercise can help lesson the physical damage caused by stress.

In just these few examples, you can see both the physical and mental benefits of routine, physical exercise. Regular physical exercise can reduce stress, as well as reduce the risks of many diseases and conditions that harm the body. As you develop a physical fitness routine, you'll have more energy, be better able to handle stress, and start to feel great about yourself.

After taking the Fitness and Lifestyle Quiz that follows, put on the ol' sneakers—or fitness footwear—and go for a short walk before continuing with your reading. Your mind and body will thank you!

Fitness and Lifestyle Quiz

The following quiz will help you to become aware of your fitness level and lifestyle health. Awareness is the first step to making changes that will increase your fitness level and help you to live a healthy life.

Put a checkmark to the left of each of the statements that best describe you. You may select as many statements as you like.

STRESS

- I can easily relax anywhere.
- I very rarely feel anxious or tense.
- I cope well with day-to-day stresses, such as traffic jams, delays, and long checkout lines.

AUTO SAFETY

- I haven't had an auto accident in the last two years.
- I always use a seat belt when I drive, no matter how short the trip.
- I very, very rarely exceed the speed limit.

SLEEP AND REST

- I get seven to eight hours sleep every night.
- I fall asleep easily (within 15 minutes).
- I don't wake up during the night.

PLAYING WITH OTHERS

- I have a great relationship with my spouse/significant other.
- I have a few close friends who are an important part of my life.
- My family provides good support.

ALCOHOL, TOBACCO, AND DRUG USE

- _____ I have fewer than two drinks per day.
- _____ I never get drunk.
- _____ I would never drink and drive.
- _____ I've never smoked cigarettes, pipes, or cigars.
- _____ I don't live or work in an environment with second-hand smoke.
- _____ I never use illegal drugs.

DIET AND EATING

- _____ I eat a balanced diet every day.
- _____ I eat five servings of fruits and vegetables a day.
- _____ I very rarely overeat.
- _____ I stick to low-fat foods.
- _____ I avoid a lot of sweet foods like soda and candy.

BODY COMPOSITION

- _____ There's no place on my body where I can pinch more than an inch of fat.
- _____ I'm fairly satisfied with how my body looks.

PHYSICAL FITNESS

- _____ I have good posture and don't stoop or slouch.
- _____ I exercise for at least 30 minutes at least three times per week (weight training, swimming, aerobics class, etc.).
- _____ During my daily schedule, either at work or school or during an exercise session, I walk at least 15 minutes six to seven days per week.
- _____ I participate in team sports (soccer, tennis, softball) or in active sports (cycling, running) two to three times per week.

How did you do? Add your checkmarks for all sections. If your total is

- 23–29: Congratulations! Keep on doing what you're doing! You lead a very healthy and fit lifestyle.
- 17–22: Good job, so far. You lead an average healthy and fit lifestyle that leaves just a little room for improvement.
- 16–0: You need to get off the couch, throw out the potato chips, or both! Your lifestyle needs to be better. By beginning your fitness and nutrition program now, you've already taken the first step in becoming a healthy, new you!

Before you move on, take a look at the individual topics in the quiz. Are there topics with no checkmarks? If so, you need to work at incorporating one or more of those statements into your lifestyle to be healthy and fit in all areas of your life.



Self-Check 1

At the end of each section of *Introduction to Managing Personal Health*, you'll be asked to pause and check your understanding of what you've just read by completing a "Self-Check" exercise. Answering these questions will help you review what you've studied so far. Please complete *Self-Check 1* now.

Indicate whether the following statements are True or False.

- _____ 1. Regular exercise does *not* help to keep the veins and arteries elastic.
- _____ 2. Your heart is a muscle and benefits when you exercise regularly.
- _____ 3. Diet and exercise can help decrease the risk of diabetes.
- _____ 4. Physical exercise has no effect on mental stress.
- _____ 5. Mental stress can affect you physically.
- _____ 6. It's healthy to have a lowered heart rate.
- _____ 7. Exercise has a negative effect on veins and arteries.
- _____ 8. Regular weight-bearing exercise helps to maintain strong bones.
- _____ 9. A detrimental effect of exercise on the body is that it produces stress.

Check your answers with those on page 53.
