

U4C1L1

Choosing the Right Exercise Program for You

Key Words:

Aerobic

Anaerobic

Calisthenics

Cardiorespiratory

Isometric

Isotonic

Obesity

Tone

What You Will Learn to Do

Develop a personal exercise program

Linked Core Abilities

Take responsibility for your actions and choices

Skills and Knowledge You Will Gain Along the Way

- Identify the benefits of regular exercise
- Compare the benefits of aerobic, anaerobic, isometric, and isotonic exercise
- Determine the essential components of a good exercise program
- Describe how media and technology can impact health

Introduction

What you eat and how much you exercise can directly affect how you look and feel. When it comes to your appearance, diet and exercise help you maintain proper weight, toned muscles, and healthy hair and skin. A good diet and regular exercise can also lower your risk of heart disease, high blood pressure and other health problems, including depression. In order to stay healthy, feel good and look good, it is important to follow a balanced diet and exercise regularly. This chapter discusses guidelines for a achieving a healthy lifestyle – one that will help keep you fit and feeling great – now and throughout your life!

Tone refers to the elastic tension of living muscles.

Every type of exercise has important health benefits. That's why adolescents should engage in a variety of aerobic and muscle- and bone-strengthening activities for at least 60 minutes daily. So, each week, participate in a variety of age-appropriate physical activities that you enjoy!

Guidelines of Fitness

It isn't as difficult as it may seem to get the exercise your body needs. It just takes a little determination and self-discipline. Choose activities that appeal to you, like skating or playing basketball, and enjoy them on a regular basis! Not only are there a variety of physical activities to choose from, the benefits of those activities include improved heart and lung function, muscle development and heightened self-image. In this lesson, you'll explore the benefits of exercise, what steps to include in an exercise program, and the various areas of fitness.

Benefits of Exercise

When you exercise, you do your mind and body good! Regular physical exercise in a variety of forms – from biking, hiking and swimming to lifting weights and doing crunches – helps develop a strong muscular and cardiovascular system. By working your heart, lungs and muscles on a regular basis, your body works and fights

BENEFITS OF EXERCISE

- Improves heart and lung function
- Increases muscle strength, flexibility, and endurance
- Improves reaction times
- Helps the body fight disease
- Builds self-esteem and self-confidence
- Reduces depression
- Increases the ability to relax and sleep

disease more efficiently. Regular exercise also contributes to improved self-esteem and a general sense of well-being. Exercise helps people fell better physically and mentally!

Types of Exercise

The four types of exercise covered in this lesson are **aerobic**, **anaerobic**, **isometric**,

and **isotonic**. Each of these types of exercise has different benefits. Review the following descriptions and decide which type of exercise, or combination of exercises, is best for you.

Aerobic exercise works the heart, lungs, and blood vessels. As you exercise aerobically, your heart beats faster and you breathe in more air, so your blood can supply more oxygen to your hard-working muscles. This type of physical exercise improves blood and oxygen flow to vital organs, as well as lung capacity – the ability to take in and use more air. Aerobic exercises should be constant, uninterrupted, and raise your heart rate for a sustained length of time (at least 20 minutes). Jogging, brisk walking, rollerblading, dancing, bicycling and swimming can all give you an aerobic workout that delivers great physical and mental results!

Anaerobic exercise, on the other hand, works the muscles intensely in fast bursts of movement and does not require as much oxygen as aerobic exercise. Instead of endurance, anaerobic exercise requires bursts of power and energy, and the ability to maneuver quickly. For example, a sprinter working his or her leg muscles, in a quick burst of energy to cross the finish line, is performing an anaerobic exercise. Many sports, from tennis to football, require anaerobic work to move from one point to another as quickly as possible.

Other forms of exercise concentrate specifically on firming and toning muscles and building muscle strength. Working against resistance builds muscle strength. You work against resistance when you try to open a tight lid on a jar, or push a heavy piece of furniture across a room. **Isometric** exercise builds muscle strength by using resistance without joint movement, while **isotonic** exercise uses resistance with joint movement. For example, when you try to pull your locked hands apart, you perform an isometric exercise. You contract your muscles, but do not move any joints. Most weight training, on the other hand, is isotonic. When you contract your muscles and bend your elbows to perform bicep curls, you are performing an isotonic exercise.

Each type of exercise may work on one or more areas of the body to strengthen, tone, and develop your muscles, heart, and lungs. Some exercises can be classified as more than one type. Try to develop a balanced exercise program. If you jog, do push-ups as well for upper body strength. If you lift weights, add an aerobic exercise for your heart and lungs. No matter which type of exercise you decide to participate in, you will find it very beneficial. Remember, people who engage in regular exercise are less likely to become obese. **Obesity** is when excess body fat has accumulated to the extent that it may have a negative effect on health, leading to reduced life expectancy and/or increased health problems.

Activity Level Guidelines for Children and Adolescents

Children and adolescents should engage in 60 minutes (1 hour) or more of physical activity daily.

Aerobic: Most of the 60 or more minutes a day should be either moderate or vigorous aerobic physical activity. People should include vigorous physical activity at least three days a week. Muscle strengthening:
As part of their 60 or more minutes of daily physical activity, children and adolescents should include musclestrengthening physical activity at least three days a week.

Bone strengthening: As part of their 60 or more minutes of daily physical activity, children and adolescents should include bone-strengthening physical activity at least three days a week.

It is important to encourage young people to participate in physical activities that are age appropriate, enjoyable, and offer variety.

Courtesy of Army JROTC

Examples of Moderate- and Vigorous-Intensity Aerobic Physical Activities and Muscle- and Bone-Strengthening Activities for Children and Adolescents

		Age Group Children	Age Group Adults		
Type of Physical Activity	Vigorous-intensity aerobic Moderate-intensity	 Active recreation, such as hiking, skateboarding, rollerblading Bicycle riding Brisk walking Active games involving running and chasing, such as tag Bicycle riding Jumping rope Martial arts, such as karate 	 Age Group Adults Active recreation, such as canoeing, hiking, skateboarding, rollerblading Brisk walking Bicycle riding (stationary or road bike) Housework and yard work, such as sweeping or pushing a lawn mower Games that require catching and throwing, such as baseball and softball Active games involving running and chasing, such as flag football Bicycle riding Jumping rope Martial arts, such as karate 		
		 Running Sports such as soccer, ice or field hockey, basketball, swimming, tennis Cross-country skiing 	 Running Sports such as soccer, ice or field hockey, basketball, swimming, tennis Vigorous dancing Cross-country skiing 		
	Muscle strengthening	 Games such as tug-of-war Modified push-ups (with knees on the floor) Resistance exercises using body weight or resistance bands Rope or tree climbing Sit-ups (curl-ups or crunches) Swinging on playground equipment/bars 	 Games such as tug-of-war Push-ups and pull-ups Resistance exercises with exercise bands, weight machines, hand-held weights Climbing wall Sit-ups (curl-ups or crunches) 		
	Bone strengthening	 Games such as hopscotch Hopping, skipping, jumping Jumping rope Running Sports such as gymnastics, basketball, volleyball, tennis 	 Hopping, skipping, jumping Jumping rope Running Sports such as gymnastics, basketball, volleyball, tennis 		

Note: Some activities, such as bicycling, can be moderate or vigorous intensity, depending upon level of effort. Chart by www.hhs.gov. Courtesy of Army JROTC

Choosing the Right Exercise Program

The type of exercise program you choose should include three components: warm-up, conditioning, and cool-down.

Warm-up

The warm-up period allows for a slow increase in heart rate and sends extra blood through muscles to warm them up. Your warm-up could include slow walking, mild stretching, or **calisthenics**, which are light exercises designed to promote general fitness. Warm-up for 5 to 7 minutes.

Condition

The conditioning period brings you into **cardio-respiratory** endurance and/or muscle strengthening activities. This is where most of your exercising occurs. These exercises should push your body to its normal limit, and when you are feeling strong, a little beyond. As exercising becomes easier, your normal limit should change. Walk or jog a little farther; do a few more sit-ups or push-ups. When weight training to gain bulk, increase to heavier weights; to build strength without bulk, keep weights lighter and increase repetitions. Be sure to give your muscles a day off between muscle strengthening workouts to rest. Or, work your upper body one day and your lower body the next. The conditioning period generally lasts 20 minutes.

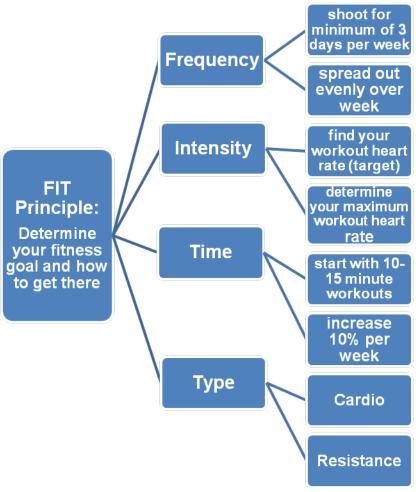
Cool-down

Below is a sample of a weekly physical fitness training schedule. Notice how it includes the warm-up and conditioning periods, as well as a cool-down period. The cool-down period allows your heart rate to slow down, relaxes muscles, and cools the body. Slow walking, simple calisthenics and mild stretching are good ways to cool down. Stretching during cool-down can prevent muscle cramps and soreness, as well. A quality cool-down should last 4 to 6 minutes.

	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Warm-up 5-7 mins	Stretch	Calisthenics	Walk	Calisthenics	Stretch	Calisthenics	OFF
Condition 20-60 mins	Run	Lift Weights	Bike	Push-ups Sit-ups	Swim	Lift Weights	OFF
Cool-down 4-6 mins	Walk	Stretch	Stretch	Stretch	Walk	Stretch	OFF

The FITT Model

There are certain factors that should be present in every physical training session for it to be successful. These factors are frequency, intensity, time, and type, which are also referred to as FITT. The diagram displays how to utilize FITT factors with each component of fitness.



Courtesy of Army JROTC

Sticking With An Exercise Program

Even though many people know how important exercise is to a healthy lifestyle, they sometimes have trouble sticking with an exercise program. Follow these tips and you will find it easier to keep your resolution to become or remain physically fit.

- Think of fitness as part of your daily routine, just like brushing your teeth, going to class, or eating dinner.
- Set realistic and specific goals for yourself. If you have never jogged before, do not
 expect to jog three miles your first time out. You may become discouraged. Plan to
 jog one mile and stick with it, even if you have to walk part of the way. You will find
 that you progress quickly, building your self-confidence.

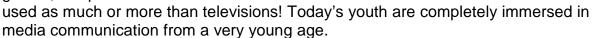
- Exercise at least three times a week. If you exercise less than this, you probably will not see much progress, giving you an easy excuse to give up.
- Keep track of your progress in a journal. It is motivating to look back at where you started and see how far you have come.
- If you are a routine person who likes for things to remain the same, keep the same
 exercise routine from week to week. If you get bored easily and like change,
 develop several exercise routines that you can alternate from week to week.
- Exercise with a friend or group. You will get support from others and feel more committed to stick with it.
- Choose a place to exercise that is convenient for you. If the place you plan to exercise is far from home or school, you may not get there as often as you should.
- Wear comfortable clothing and shoes to make your exercise experience as pleasant as possible.
- Stay positive and have fun. Remember that you are doing something good for yourself. Be serious and consistent with your exercise routine, but enjoy it as well.

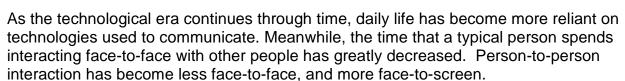
If you choose an exercise program that you just cannot learn to enjoy, try something else. There is an exercise program for everyone!

Media's Impact on Your Health

Today, American youth spend almost 6 hours a day with various types of media, including watching television, listening to the radio and surfing the Internet on computers. It's true that the potentially negative consequences of media consumption receive a lot of attention. Yet media's unique power and reach can also be used to educate and enrich the lives of youth.

Media consumption habits were historically dominated by television usage. Now, usage of computers, video games, cell phones and other connected devices are





Although this change is happening, it is not all bad. With the use of various computer products, the time used planning arrangements, meetings and parties could be minimized, allowing more time for participating in things such as playing sports and exercising. However, that is often not the case. According to the U.S. Centers for Disease Control and Prevention, over the last decade, students spend more time playing video games than viewing television or participating in sports or exercises.



Conclusion

Regular exercise is important to maintaining your health. It can make you feel and look better and help your body fight disease. Different exercise programs have different benefits, like aerobic dancing for a strong heart and weight lifting for strong muscles. No matter what exercise program you choose, remember that the most important thing is to stay active. So much in life today makes things easy for us — elevators, escalators, cars, and appliances — that it's easy to get out of shape. In addition to an exercise program, take the stairs, walk or bike to the store, or go biking or bowling with friends instead of watching television. It can be fun, and it's all to your benefit!



Lesson Check-up

- 1. How much aerobic exercise does a person need each day?
- 2. What are the three components of any exercise program?
- 3. Explain the difference between aerobic and anaerobic exercise?
- 4. What are the benefits of a regular exercise program?