Revised Edition

Teacher's Guide Written by
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WHY EXERCISE?

Running Time: 14½ minutes

PROGRAM OVERVIEW

Intended Audience and Uses

Recent research has shown that American youngsters have become increasingly sedentary, sitting for hours every day in front televisions and computers. The consequences have been dire. Childhood obesity is on the upswing, as are diseases typically associated with overweight adults – Type 2 diabetes and heart complications. The short-term results are bad enough with a growing number of overweight youngsters having to deal with unkind comments from peers, but also with illnesses not normally seen until adulthood. The projected long-term results are also grim, with healthcare costs skyrocketing, as ever-larger numbers of adults with serious health problems require long-term medical assistance. The toll in human suffering cannot even be estimated.

Why Exercise? is based on the National Health Education Standards of the American Association for Health Education and has been produced for youngsters in Standards of the American grades 3-5. It has been designed to be used in the health curriculum, but also can be used in physical education and science classes. The program, based on the National Health Education Association for Health Education, shows children how to adopt healthful daily routines to prevent the onset of disease normally associated with sedentary life styles. Special attention

has been given to portray exercise as a positive experience, and a large variety of exercise options are shown. Revised material includes information on the government's latest food guide pyramid, adopted in 2005.

Program Synopsis

The video begins by asking viewers if they can think of anything that is both enjoyable and good for them. Shortly, the answer – exercise – becomes obvious. The narrator explains that the human body needs exercise to keep three of its key systems healthy. Those systems are the heart and the rest of the circulatory system, the skeletal system and the muscular system. The first part of the video then shows a variety of activities that will help keep those systems fit. Safety concerns are also covered during the first part of the program. Proper equipment, the need to hydrate, and warm-up and cool-down periods are discussed.

The second part of the program explains the role of an adequate diet to enhance any exercise program and discusses the food guide pyramid. The role of good hygiene and sleep are also covered. A detailed discussion of the benefits of endorphins released during exercise is included. The program ends on some suggestions to help youngsters' transition from a sedentary life style to a more active one.

VIEWER OBJECTIVES

After viewing this video and participating in the suggested activities, viewers should be able to do the following:

1. Tell why people need exercise to stay healthy.
2. Recount at least three physical activities each to keep the circulatory, skeletal and muscular systems in excellent condition.
3. Discuss the need for safety equipment, hydration, warm-up and cool-down periods as key components of exercise.
4. Explain the food guide pyramid and tell why using it can support a good exercise program.
5. Recount the benefits of endorphins released during exercise.

The producers encourage you to make adaptations and changes to the following lesson plan whenever you feel it will enhance your students' learning experiences. Only by tailoring the material to your unique classroom situation will you be able to maximize the educational experience afforded by these materials.

SUGGESTED LESSON PLAN

Introduce the Program

A week in advance, hand out "***My Free Time Activities.***" Go over the instructions, making certain that the activities and times listed are for pastime endeavors that do not include homework, eating meals and so forth.

Pre-Viewing Activities

Have the students classify their activities listed as either "sedentary" or "active." Then have them tally the times spent in each category. If your students are typical, they will have spent much more time pursuing sedentary, passive activities than participating in those that are active. Ask the class if they feel if it's better to have more sedentary activities than active ones. After the discussion, tell them they will now see a video about exercise. Tell them that when they are finished viewing the video, you will want them to know the following information that you list them on the chalkboard:

- Three body systems that require exercise
- The kinds of activities that strengthen each system
- Three ways to exercise safely
- The kinds of foods that should be eaten in order to exercise properly
- How brain chemicals called "endorphins" are made and why they are so useful to us

View the Video

Total viewing time is approximately 13 minutes.

Post-Viewing Activities

Discuss each of the points bulleted above, in the Pre-Viewing section of this guide. After your discussion, ask your students to take out the "***My Free Time Activities***" handout. After viewing the program, ask if they now feel that they get enough physical activity each day. Now hand out "***My Eating Habits***" and "***My Sleep and Hygiene Habits***." Explain that these work sheets will help everyone find out if they eat the kinds of foods and practice the kinds of personal habits that support good health. Ask your students to do the two work sheets. After they've had time to complete these exercises, discuss what they've written. Show the video again and then pass out "***My Exercise Program***." Have your students complete this worksheet. Do their activities and times meet the recommended daily minimums? If not, have each child revise their chart so that it meets at least the minimum requirements. Explain that exercising is a lifetime activity – that the human body, as explained in the program, needs activity on an ongoing basis. For follow-up activities, you could invite a nutritionist, your school nurse, physician, exercise physiologist or other health professional to discuss why exercise is so important to maintain one's health.

Description of Blackline Masters

MY FREE TIME ACTIVITIES – Helps students discover how much time they spend in sedentary and active pursuits.
MY EATING HABITS – Helps students develop good eating habits based on the food guide pyramid.
MY HYGIENE AND SLEEP HABITS – Helps youngsters understand the necessity of good hygiene and adequate sleep.
MY EXERCISE PROGRAM – Helps students construct an exercise/activity program that will promote good health.

TRANSCRIPT OF THE VIDEO

How many things can you think of that are both enjoyable and good for you?

That's certainly yummy – at least to most people – but not very good for you.

Okay, this can be good for you when you're sick. But taking it usually isn't very enjoyable.

Can't think of anything? Well, what if we told you that there's something that's not only enjoyable, but good for you in many ways – not just one? Hard to believe?

Well, here it is – exercise. And it's easy, too.

To find out why exercise is so good for you, you have to go back to when humans lived in caves, millions of years ago.

There were no grocery stores then, of course. So, to survive, our prehistoric ancestors needed to hunt animals and gather berries and other vegetation. Their bodies were made for all that activity.

Even though much has changed since those days, in many ways our bodies have remained the same.

Namely, the human body needs activity – movement – to stay fit. And, like our ancestors, we have various body parts.

We have bones. They're known as our skeletal system. Exercise keeps our skeletal system healthy.

We also have muscles – our muscular system. Exercise keeps it healthy, also.

And we have a heart, a pair of lungs, and veins and arteries, all of which make up the main parts of our circulatory system.

And – you guessed it – exercise is important in keeping it healthy, too.

The heart lies at the core of the circulatory system. As you may know, this muscle pumps blood throughout our body – blood that carries life-giving oxygen and food particles called nutrients.

Certain activities, such as bicycling and soccer, are great ways to exercise heart muscle.

That's because these activities increase your heartbeat rate. That is, they make your heart pump faster.

In fact, whenever you speed up any physical activity, your heart beats more rapidly.

Those activities include baseball, softball, ice skating and inline skating, dancing, swimming, playing any kind of game in which there's lots of running or any other fast activity.

All offer great exercise for your heart and the rest of your circulatory system.

Of course, if you're going to be doing those fun things, you'll want to do them safely.

Wearing safety equipment is one of the best ways to do that. Helmets, elbow guards, knee guards, and wrist guards are important safety equipment if you're skating.

And brightly colored clothing is pretty much a must if you want to skate or bike-ride safely.

In any event, if you do one or any combination of these activities for at least 20 minutes every day, you'll keep your heart and the rest of your circulatory system working at peak performance.

You'll also improve your general health.

Now, on to some activities that keep your muscles in tip-top shape. They include exercises in which you bend, stretch, and reach. All are good for your joints, too.

At home, you reach when you rake leaves, clean windows, and vacuum the floor.

These activities not only keep your muscles strong, they also keep your joints flexible.

And they help out around the house.

In a similar vein, whenever you clean the yard, you're also doing a good turn at home and doing bending exercises that help strengthen your muscles.

It's the same whenever you do stretching activities, such as sweeping out the garage and driveway.

Of course, there are fun activities, too ... that are good for your muscles and joints – again, activities that include reaching, bending and stretching.

Bowling and a host of other ball games are particularly good for muscles and joints.

Many yoga exercises are valuable for muscles and joints, too.

Moreover, yoga teaches people how to breathe correctly. But if you do yoga, which has become fairly popular in recent years, you'll need to carefully follow the directions of a trained yoga instructor.

In any event, exercise experts say that a person should do about 20 minutes of stretching, bending, and reaching activities at least two or three times a week – more is better – to keep his or her muscles fit and body joints flexible.

Up to this point, we've talked about ways to keep your heart and circulatory system operating at peak performance and we've discussed ways to keep your muscles in good shape and your body joints flexible. That helps you move easily.

Now we're going to see how to keep your bones healthy.

You probably already do a lot of these things without even realizing it. For instance, every time you walk up the stairs, carry your backpack on your back, or bring in the groceries, you're helping your bones become strong and stay that way (your muscles, also).

But you have to be careful that the load you're carrying isn't too heavy.
If it is, you can injure yourself because carrying too much weight can fracture or break your bones and strain your muscles.

So, it's always wise to let an older, stronger person carry the

Some people use weights to strengthen their bones. But exercise experts caution that you should be at least 15 years old – even older is better – before working out with heavy weights or weight machines.

Until then, your muscles haven't developed fully, and that can create a risk of injury. However, you can work out with light dumbbells before turning 15.

Elastic bands, such as those often used by karate students, are also excellent devices to develop your muscles (if you're not 15, yet), as are light medicine balls and exercise balls.

Using them regularly are great ways to increase your strength and improve your coordination.

By the way, it's important to find out the proper way to do weight-bearing exercises. Otherwise, you could injure yourself.

Speaking of avoiding injuries, according to the experts you should have a warm-up period – about five to ten minutes – to prepare for any vigorous exercise session.

The same holds true for a cool-down period afterwards.

Stretching and doing knee lifts are good ways to warm up and cool down. So is walking.

Drinking water before, during and after hard exercising is another good idea.

That keeps you from becoming dehydrated; in other words, from losing too much water from your body.

That's particularly important for people who exercise in hot climates, or whenever it's hot outside. Dehydration can make you extremely ill. Here are some rules of thumb: drink two cups (or sixteen ounces) of liquid two hours within two hours before exercising; about one-half cup every fifteen to twenty minutes while your exercising; and approximately three cups after you exercise.

What you drink and what you eat play a big role in your ability to exercise day in and day out.

Nutritionists, scientists who study what foods the body needs to stay healthy, have developed what they call the “food guide pyramid.”

According to the pyramid, everyone needs to eat foods from what’s called the “grain group” – breads, crackers, pasta, rice and cereal.

Next, individuals need to eat fruits and vegetables very day. Dark green vegetables, such as spinach, and a group of vegetables called legumes are examples.

Next come food in the “meat and bean group,” including red meat, poultry and fish – as well as eggs, dry beans and nuts.

Milk and milk products such as skim milk, yogurt and cheese are also part of a healthful diet, as are sweets and fats. These should be eaten in small amounts, however.

You can find the exact amounts of the foods you need if you go to ***www.mypyramid.gov*** and type in your age, select whether you’re male or female, and then choose your activity level. When you do, the program will give you a tailor-made guideline for a healthful diet.

According to this guideline, everyone needs between six and nine servings every day (in any combination) of breads, crackers, pasta, rice, and cereal.

Of course, you can exercise and eat properly, but if you don't shower or bathe daily – as well as brush, floss, and use mouth wash at least twice daily – and get plenty of sleep each night (normally, a minimum of eight hours), you won't have a completely healthful life-style.

All these factors – plenty of sleep, a diet based on the food guide pyramid, good hygiene, and plenty of exercise – can make your life much more pleasant.

And not simply because you'll be more healthy.

You see, exercise helps you look better, too. It's one of the best ways to prevent a person from becoming overweight.

And when you look good, you feel good!

And speaking of moods, if you're upset or sad, exercise is one of the best ways to get rid of those unpleasant feelings.

That's because physical activity can produce chemical changes in your brain. Specifically, brain chemicals known as endorphins are released when you exercise. And certain kinds of endorphins reduce sad and angry feelings.

Still other endorphins improve your memory. So these chemicals released during exercise can help you become a superior student because, after all, the better you remember course material, the better you'll probably do on tests.

So it just stands to reason that whenever you have a choice, you'd be wise to be more active, by walking up and down escalators – carefully – instead of merely standing on them, for instance; or by taking stairs when they're available, instead of elevators; or walking to the store – or riding your bike – instead of getting in the car.

How about turning off that TV, video game, or computer and heading out with a friend to play an outdoor sport in the fresh air?

There's almost no end to the good things that result from exercising, then, whether it's keeping active to strengthen your

heart and the rest of your circulatory system, or exercising your muscles to keep in shape and to increase joint flexibility, or working to keep your bones fit.

Good exercise habits require that you pay attention to safety by taking time to warm up and cool down, by drinking plenty of liquids, and by always wearing the proper equipment.

Good exercise habits also require that you eat the proper foods, practice good hygiene, and get at least eight hours of sleep each night.

Do all these things, and you're almost certain to have the kind of life you want – active, healthy, and happy.

WEB RESOURCES

Exercise, Balanced Diet Best Way to Fight Childhood Obesity

http://www.kidsource.com/health/fight.child.obesity.html
More detailed information on this crucial subject based on research conducted by Georgetown University Center for Food and Nutrition Policy

Health Benefits of Physical Activity During Childhood and Adolescence

http://www.fitness.gov/childhood.html
An excellent review of the many ways physical activity benefits children of all ages

Physical Fitness & Activity in Schools

http://www.aap.org/policy/re9907.html
The American Academy of Pediatrics policy statement that underscores the need for physical education programs in the nation's schools

Name _____

My Free Time Activities

How do you spend your free time, periods when you're not at school, doing homework, eating or sleeping? Do you play computer games? Chat online? Watch TV? Keep a log of your free time activities and how much time they take up.

Day	Activity	Time
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Name _____

My Eating Habits

A Checklist

As you saw in the video, vegetables are an important part of eating well. Do you eat the recommended amount of vegetables each day? Go to ***www.mypyramid.gov***. Type in the information required on the site (your age, daily activity level, etc.) to see how much of each food category you should eat. Then fill in the information below. Check the box on the left if you eat the proper amount in each food category.

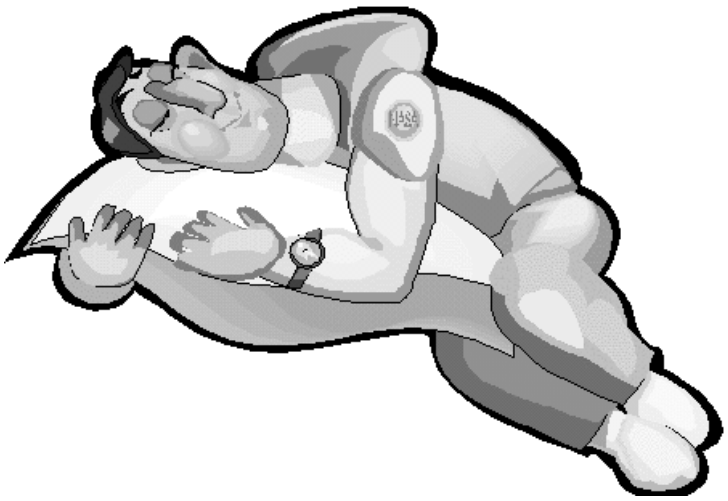
- ☐ I should eat _____ of grains each day.
- ☐ I should eat _____ of vegetables each day.
- ☐ I should eat _____ of fruit each day.
- ☐ I should drink/eat _____of milk and milk products each day.
- ☐ I should eat _____of meat and beans each day.

If you do not eat these foods in their recommended amounts, you may decide to change your eating habits so that you can eat in a way that will support a healthful exercise program.

Name _____

My Sleep & Hygiene Habits

A Checklist



As you saw in the video, getting enough sleep and practicing good hygiene are important parts of a healthful life style – as well as exercising regularly. If you can check all the items below – and if you exercise regularly – you have a healthful lifestyle. If you can't check all the items, try readjusting your habits so you'll be able to in the near future.

- ☐ I get at least eight hours of sleep each night.
- ☐ I go to bed at about the same time each night.
- ☐ I shower or bathe daily.
- ☐ I shampoo at least three times a week.
- ☐ I wash my hands after using the washroom.
- ☐ I wash my hands before eating meals.
- ☐ I brush my teeth at least twice daily for a minimum of three minutes each time.
- ☐ I floss my teeth each time I brush.
- ☐ I use mouthwash each time I brush my teeth.
- ☐ I cover my mouth when I cough or sneeze.
- ☐ I don't use tobacco products or any other non-prescribed drug.

Name _____

My Exercise Program

Daily Log

Your heart and circulatory system, skeletal system and muscular system need daily exercise. You need at least 20 minutes of enjoyable, moderate activity (some experts say 30 minutes) to keep your heart and circulatory system in good shape. A half hour of vigorous activity 3-4 times a week is also recommended. Bending, stretching and reaching exercises will keep your muscular system in good working order and your joints flexible. Lifting (as long as the load isn't too heavy), as well as using elastic bands, exercise balls and light medicine balls are good for your skeletal system. Fill in the daily log to see if you exercise enough.

Day	Activity	Time
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		