Executive Producer

Anson W. Schloat

Producer

Elisabeth Kwak-Hefferan

Consultant

David Jack, Director of Fitness
Team Works Center, Acton, MA

Teacher’s Resource Book

Elisabeth Kwak-Hefferan

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MAIN MENU

➤ Play

➤ Play with Spanish Subtitles

This option allows you to view the program with Spanish subtitles. Subtitles are enabled/disabled by selecting a button on the DVD player remote or by using the remote to select subtitles from the menu button.

➤ Chapter Selection

From here you can access many different paths of the DVD, beginning with the introduction and ending with the credits.

1. Introduction
2. What Does Fitness Mean to You?
3. What Fitness Isn’t
4. Cardiovascular Endurance
5. Muscle Strength
6. Flexibility
7. Balance and Coordination
8. Body Composition
9. Calories
10. Conclusion

➤ DVD Extras

➤ The Cooper Test (cardiovascular endurance)

➤ The Plank Exercise (muscle strength)

➤ Body Mass Index (body composition)

➤ Nutrition (body composition)

➤ Teacher’s Resource Book

A printable file of the accompanying Teacher’s Resource Book is available on the DVD. Load the DVD onto a computer that has a DVD-ROM and Adobe Acrobat Reader.

For PC users: From the “Start” menu, click on “My Computer,” then right click on your DVD disk drive and select “Explore.” Double click on the PDF document to open the Teacher’s Resource Book.

For Mac users: In “Finder,” click on the DVD under “Devices.” Then click on the PDF document to open the Teacher’s Resource Book.
Ask a teen what it means to be physically fit, and he or she might think it refers to weighing a certain amount or having a certain body shape. Other young people mistakenly think that fitness is only for athletes, or that they don’t have the time or money to spend on fitness. But physical fitness is crucial for every teen. In fact, fitness is an essential part of overall health and well-being. Teens should work toward a happy, enjoyable and successful future—but without a healthy body, those goals will be nearly impossible to achieve.

The benefits of physical fitness are numerous: increased energy, higher self-esteem, reduced stress, better sleep, a healthy weight, lowered risk of serious diseases and a longer, more enjoyable life. But far too many teens are missing out on these important benefits. According to the Centers for Disease Control and Prevention, only one-third of high school students attend a physical education class every day. Even worse, almost 82% of teens surveyed admitted that they had not been physically active for at least 60 minutes each day in the past week.

The teen years are a critical period for developing healthy habits that will last a lifetime. Now is the time to equip teens with the knowledge they need to make fitness a priority. Not only does fitness greatly improve one’s quality of life but it prevents many health risks. A sedentary lifestyle is linked with health problems like obesity, heart disease, diabetes and high blood pressure.

The good news is that everyone can get in shape—and have fun doing it. Teens need to know that fitness needn’t be boring or a chore. Instead, fitness is all about choosing activities that are rewarding and enjoyable. Whether they are done solo or with friends, in an organized exercise class or out on a jogging path, in a competitive environment or a casual setting, the important thing is that teens get moving in a way that’s fun. Getting fit doesn’t require fancy equipment or an expensive gym membership. The only thing a teen needs is the motivation to be active.

Physical fitness is made up of five essential elements: cardiovascular endurance, muscle strength, flexibility, balance and coordination, and body composition. Different physical activities improve different elements, so it’s vital to perform a variety of exercises on most days to reap the maximum benefits. Once they understand why fitness is so important, teens must also learn how to improve their fitness levels for each element.

*Essential Physical Fitness: What Every Teen Needs to Know* clearly defines each of the five elements of fitness and provides examples of activities that help build each one. Real teens give encouragement and inspiration by sharing their own favorite activities. A fitness expert teaches viewers how to develop their own fitness plans. Students will come away knowing the importance of physical fitness—and they’ll also be enthusiastic to get moving themselves.
After watching the video *Essential Physical Fitness: What Every Teen Needs to Know* and participating in the activities included in this Teacher’s Resource Book, your students will be able to:

- define cardiovascular endurance, muscle strength, flexibility, balance and coordination, and body composition
- explain the importance of each of the five elements of fitness
- describe ways to improve each of the five elements of fitness
- list the physical and mental benefits of being fit
- assess their own levels of fitness in each of the five areas
- explain the body mass index and how it relates to body composition
- describe the basics of the USDA’s MyPyramid food guide
- create a personalized fitness plan that includes a variety of activities to improve all five elements of fitness
- describe how to start a physical activity program safely
Dear Teacher,

Please take note of the following activities in this Teacher’s Resource Book.

Activities 3-6: The Tests

These four activities instruct students to assess their own levels of fitness by performing simple tests. All tests can be completed as homework, but you may want to arrange an in-class testing session in which all students go through the fitness assessments as a group. This way, you will be able to make sure all activities are performed correctly and answer questions efficiently. It is best to hold these assessments in a gym, athletic field or other open space where students can move freely.

Some students may be discouraged by low scores on these fitness assessments. It’s important to remind them that the scores are merely a starting point and that improvement will follow with effort and practice.

Activity 12: My Fitness Blog

This activity involves each student trying a new physical exercise and chronicling his or her experiences in blog form. If you wish, you can adjust the activity so that students simply create a written journal that includes photos and drawings. However, you are encouraged to assist the students in posting their blog entries on a class website so that all of their experiences can be shared.

Many free blogging websites exist, including Blogger (www.blogger.com), WordPress (www.wordpress.com) and LiveJournal (www.livejournal.com). You can set up a class blog before assigning the activity, then show students how to post text, photos, art and video clips to the blog for all to enjoy. Most blogging websites include tutorials or instructions to help you begin.

Activity 13: My Food Diary

This activity asks students to track what they eat for three days in a row and then evaluate how nutritious their diet has been. Encourage students to eat normally while completing this activity—for example, they shouldn’t drastically change their diets in order to get a healthier result.

Depending on how much background knowledge your students have about nutrition, you might want to review the MyPyramid food groups and serving sizes. You will find additional information at <http://www.mypyramid.gov>.
“Meet Sam,” announces a female host as the program begins. In a lively animated segment, viewers are introduced to a male teen who has trouble walking a mile, climbing the stairs and getting through gym class. Next, we meet Tracy. Unlike Sam, she’s able to do physical activities with ease. While Sam feels exhausted most of the time and his self-esteem is low, Tracy is happy, has higher self-esteem and a positive body image. Plus, she has a much lower risk of developing serious diseases such as heart disease or diabetes.

“The only thing separating these two is physical fitness,” notes the host. She lists even more benefits of fitness: feeling better, more energy, healthy weight, better sleep and better mental health. “But what exactly does it mean to be fit?” she asks. Viewers then meet four real teens—Megan, Jaime, Jake and Kenisha—who explain what fitness means to them. Their comments include feeling healthy and confident, being able to perform physical activities from start to finish and a happier mood.

In a second animated segment, Sam and Tracy return to illustrate what fitness isn’t: just having huge muscles or being very skinny. “The pressure society puts on us to look a certain way can be intense,” notes the host. She reminds viewers that someone who has big muscles but can’t jog a mile is not fit and that extreme thinness is very unhealthy and linked to serious eating disorders.

Next, the program introduces David Jack, a youth fitness expert at TeamWorks Sports Centers in Acton, MA. “Just as long as you’re active, just as long as you’re sweating and your body is moving in different ways and you’re having fun—that is the perfect definition of fitness,” he says. He emphasizes that teens don’t need expensive equipment or access to special facilities to get in shape.

The host lists the five essential elements of physical fitness: cardiovascular endurance, muscle strength, flexibility, balance and coordination, and body composition. The program focuses on the first element, cardiovascular endurance. The host explains that this is the ability of the heart, lungs and blood to deliver oxygen to the muscles during prolonged exercise. Viewers learn that performing aerobic exercise—activity that uses large muscle groups like the legs, arms and hips and can be sustained for 20 to 30 minutes—is a great way to improve cardiovascular endurance.

Kenisha then describes her love for soccer and how her coach inspired her to take up running to improve her endurance. “Every morning I wake up at five to go running,” she explains. “The first time I made it all the way around without stopping, I was so happy. I was like, okay, I can do this again.”

The host explains that anaerobic exercise also helps improve cardiovascular endurance. This exercise involves short bursts of energy that force the muscles to work without using oxygen. Viewers learn that alternating anaerobic activity with slower-paced aerobic activity (called doing intervals) is a great way to strengthen the heart without wearing them out.
David Jack lists a variety of activities that improve cardiovascular endurance, including swimming, biking, hiking, running, lifting weights, playing sports and riding horses. “Anything that gets your heart rate up and gets us pumping blood and pumping oxygen throughout the body will improve our cardiovascular system,” he notes. Teens should work on their cardiovascular endurance three times a week for 45 to 60 minutes at a time, performing their chosen activity at a moderate to vigorous pace.

The host then makes the important point that teens new to exercising should check with their doctors before getting started on a workout routine. A doctor can help them get started and build endurance gradually and safely.

Next, the teens describe their favorite cardiovascular fitness routines: playing sports, riding bikes, dancing and running.

The second element of physical fitness is muscle strength, or the amount of strength one’s muscles can produce. Resistance exercises that make the muscles work against a force, such as a dumbbell or one’s body weight, improve strength by tearing down and rebuilding muscle fibers.

Jaime shares his passion for wrestling and weight lifting. “When I first started out, I felt like I wasn’t strong at all,” he says. But through regular workouts that incorporated weight lifting and body-weight exercises like push-ups and pull-ups, he improved his strength. “Now, I can get out on the mat and keep up,” he says.

David Jack explains, “One of the safest ways to build strength is using your own body weight” through squats, push-ups and pull-ups. Teens should work on muscle strength three days a week to promote lean tissue and burn calories. Jaime demonstrates the correct push-up form. Viewers learn that the average number of push-ups a boy between 15 and 17 can do in one set is 30-37; for girls in that age range, it’s 16 push-ups.

The program moves to the third element of fitness: flexibility, or the ability of a joint to move through its full range of motion. Megan describes her love for dancing and the importance of flexibility in all types of dance. “Before you stretch, you feel kind of tight,” she says. “By the end of dancing, you just feel like spaghetti.”

David Jack explains that teens can work on flexibility by simply moving in different ways, through activities like swimming, running, gymnastics, dancing and throwing balls. “Beyond that, we also do some specific stretching,” he says.

Next, the program tackles balance and coordination—the fourth element of fitness. Balance is the body’s ability to control itself; coordination is the ability to use all the body systems together
as a unit to perform a task. Jake describes his favorite activities: running, baseball, basketball, Ultimate Frisbee and soccer. He notes that coordination is very important in his sports, especially when batting in baseball and playing goalie in soccer.

David Jack tells viewers that any movement-based activity will improve balance and coordination. Doing challenging activities forces the body to get out of its comfort zone and boosts balance and coordination even faster. Jack describes several ways to evaluate these elements, including the ability to stand on one leg, catch and throw a ball, kick a ball, skip and do jumping jacks.

Next, viewers learn that the fifth element of fitness, body composition, is the proportion of fat, lean muscle, water and bones in the body. Everyone needs a certain amount of body fat to be healthy, but too much increases the risk of health problems like diabetes, stroke and heart disease. The host notes that teen girls should have 25 percent body fat or less, while teen boys should aim for 20 percent body fat or less.

David Jack returns to explain that the amount of food one takes in and the amount of calories burned during exercise are the two most important factors in determining one’s body composition. A calorie is a unit of energy, which the body uses to fuel all activities. To maintain a healthy weight, the number of calories a person eats should balance out with the number he or she burns through exercise.

“Not all calories are created equal,” notes the host. She advises teens to chose nutritious foods such as whole grains, fruits, vegetables, low-fat dairy products and lean proteins. Junk foods—like candy, soda and chips—should be avoided because they pack lots of calories without healthy nutrients.

The host adds that cutting down on unhealthy calories is only half of the equation—burning calories through exercise is also important. “Your body naturally burns calories every day just by being alive,” she says. “Being active increases the number of calories you burn.” David Jack recommends starting out slowly—for example, if a teen plays video games for three hours every day, he or she should first cut it down to two hours and add more physical activity during that time. “Just find something that you enjoy doing and get moving,” says Jack. “If you’re moving, you’re headed in the right direction.”

Finally, the host reviews the five elements of fitness. She explains that the best workout routines combine exercises that improve all five elements and let teens be active almost every day. The host puts in an encouraging word. “Challenging your body will make you tired and sore at first, but don’t give up! You can do it.” David Jack lists great sources of help for teens just getting started with fitness: gym teachers, doctors, school nurses, personal trainers and more experienced friends.
The program wraps up with the teens reminding viewers of all of the benefits of physical fitness. “You have the choice—would you rather be exhausted or energized?” asks the host. “Have a lower self-esteem and a worse mood, or feel happier and better about yourself?” She emphasizes that getting active is the difference between those choices. She closes with, “Everyone can get fit. The benefits are too great to pass up. Why not start today?”
1. d
2. b
3. c
4. c
5. a
6. d
7. a
8. b
9. a
10. d
STUDENT ACTIVITIES
1. Physical fitness is associated with ____________.
   a) increased self-confidence  b) more energy
   c) lowered risk of diabetes and heart disease  d) all of the above

2. The ability of the heart, lungs and blood to provide oxygen to the body during prolonged exercise is called ____________.
   a) flexibility  b) cardiovascular endurance
   c) body composition  d) muscle strength

3. When you perform short bursts of activity that force the body to work without using oxygen, you are doing ________.
   a) a workout  b) aerobic exercise
   c) anaerobic exercise  d) intervals

4. How often should you work on your cardiovascular endurance?
   a) once a week, 45 to 60 minutes at a time  b) three days a week, 15 minutes at a time
   c) three days a week, 45 to 60 minutes at a time  d) every day, 30 to 45 minutes at a time

5. Resistance exercises primarily improve which element of fitness?
   a) muscle strength  b) cardiovascular endurance
   c) flexibility  d) balance and coordination

6. __________ is an example of a body-weight resistance exercise.
   a) pull-up  b) push-up
   c) dumbbell raises  d) both a and b

This activity is continued on the next page.
7. Which of the following is not true about flexibility?

a) It is improved through performing resistance exercises.
b) It is the ability of a joint to move its full range of motion.
c) It helps you move more easily.
d) It improves athletic performance and posture.

8. _______ is the body's ability to control itself; _________ is the ability to use all the body systems together to perform a task.

a) coordination; balance  
b) balance; coordination  
c) coordination; self-control  
d) balance; body composition

9. Teen girls should aim for ______ body fat or less; teen boys should aim for ______ body fat or less.

a) 20%; 25%  
b) 35%; 15%  
c) 25%; 20%  
d) 10%; 5%

10. What is the best way to maintain a healthy weight?

a) eat 1,000 calories or less each day  
b) consume more calories than you burn each day  
c) exercise three days a week  
d) balance the number of calories you consume with the number of calories you burn through exercise
Improving your overall health and fitness begins with developing good habits. When it comes to exercise, the U.S. Centers for Disease Control and Prevention recommend that teens get at least 60 minutes of physical activity each day. This activity should include exercises that improve your cardiovascular endurance, muscle strength, flexibility, balance and coordination. To improve your body composition, you should also follow the U.S. Department of Agriculture’s guidelines for healthy eating. You can learn more by visiting <http://www.mypyramid.gov>.

The questions below will help you evaluate your own health habits and identify any places where you can improve. Choose the best answer for each question. Be honest to get the most accurate results!

1. How often do you get at least 60 minutes of physical activity?
   a) five or more days a week
   b) three or four days a week
   c) less than three days a week

2. How often do you get at least 45 minutes of moderate to vigorous aerobic activity?
   a) three times a week or more
   b) one or two times a week
   c) rarely or never

3. How often do you perform resistance exercises to improve your muscle strength?
   a) three times a week or more
   b) one or two times a week
   c) rarely or never

4. How often do you perform stretching exercises to improve your flexibility?
   a) five or more days a week
   b) three or four days a week
   c) less than three days a week

5. How often do you perform exercises that improve your balance and coordination?
   a) five or more days a week
   b) three or four days a week
   c) less than three days a week

This activity is continued on the next page.
6. How many servings of whole grains (such as oatmeal, whole-wheat bread and brown rice) do you eat each day?
   a) 3 ounces or more
   b) 1 or 2 ounces
   c) less than 1 ounce

7. How many vegetables do you eat each day?
   a) 5 or more cups
   b) 2 to 4 cups
   c) less than 2 cups

8. How much fruit do you eat each day?
   a) 1½ cups or more
   b) ½ cup to 1 cup
   c) less than ½ cup

9. How often do you eat 5 or 6 ounces of lean meats (such as poultry or fish), eggs, nuts or beans?
   a) most days or always
   b) some days
   c) rarely or never

10. Do you try to limit the amount of sugar, salt and junk food that you eat?
    a) most of the time or always
    b) some of the time
    c) rarely or never

11. How often do you eat at fast-food restaurants?
    a) rarely or never
    b) once a week or less
    c) more than once a week

This activity is continued on the next page.
Name: _____________________________________

Give yourself 3 points for every “a” answer, 2 points for every “b” answer and 1 point for every “c” answer. Write down your score below.

MY TOTAL: ______________

If you scored 29 to 33 points:
EXCELLENT
Congratulations! You have very good fitness habits. You are getting lots of physical activity and eating a healthy diet. Though your score is high, there will always be areas in which you can improve. Think about ways you can make your habits even healthier!

If you scored 26 to 28 points:
GOOD
You are doing a good job with your fitness. You are physically active on most days and eat a generally nutritious diet. Like most teens, however, you can take steps to make your habits even healthier. Use your score to find areas where you can make healthy changes and improve your fitness.

If you scored 23 to 25 points:
FAIR
You are practicing some good habits, but your fitness level could use some work. Use your score to find areas where you can make healthy changes. Do you need to add more physical activity to your day? Do you need to cut out junk food and replace it with healthier meals? Break down your fitness goals into smaller goals. Before you know it, you will be on the road to better fitness!

If you scored 11 to 22 points:
NEEDS IMPROVEMENT
It’s time to make some real changes in order to develop the fitness habits you’ll need to stay healthy and happy throughout your life. Taking action to improve your fitness now will have a huge impact on your well-being. Don’t worry if changing your fitness habits seems like an impossible task. When you break down your goals into smaller day-to-day changes, it won’t seem so intimidating. Look back at your score to find out the areas where you most need to improve and start setting some health goals.
The three-minute step test (also known as the Cooper Test) is a simple way to evaluate your cardiovascular endurance. Follow the instructions below to determine your level of fitness in this area.

**THE THREE-MINUTE STEP TEST**

**Materials**

- 12-inch-high box or stair step
- stopwatch
- friend

**How to do it**

Have your friend time you and count out your pace for three minutes during this test. When your friend tells you to begin, step up on the box with your right foot, then bring your left foot up next to it. Step down with your right foot, then your left. Stick to a pace that allows you to do 24 steps per minute. Your friend should keep you on pace by saying, “Up, up, down, down” as you go.

Step up and down on the box for three consecutive minutes. When you’re done, sit down and rest for one minute. When that minute is up, take your pulse for one full minute.

Write down your number here: ______________

**Evaluation**

Now it’s time to see how well you did on this fitness test. Remember, these tests are meant to give you a general idea of your level of cardiovascular fitness—only a doctor or professional trainer can give you a personalized assessment.

If you have good cardiovascular endurance, your heart will be able to recover quickly from exercise. The lower your heart rate, the quicker it recovers and the better your endurance. If you scored “needs improvement,” don’t worry. Now you know what you need to work on to improve your health!

<table>
<thead>
<tr>
<th>Heart Rate</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 80 beats per minute</td>
<td>Excellent</td>
</tr>
<tr>
<td>80 to 95 beats per minute</td>
<td>Good</td>
</tr>
<tr>
<td>96 to 110 beats per minute</td>
<td>Fair</td>
</tr>
<tr>
<td>More than 110 beats per minute</td>
<td>Needs improvement</td>
</tr>
</tbody>
</table>
The push-up test is a great way to evaluate your level of muscle strength. Follow the instructions below to see where you stand.

THE PUSH-UP TEST

Materials

- none

How to do it

In this test, you will perform as many push-ups as you can without resting. To do a push-up, lie on your stomach. Place your thumbs next to your shoulders so that your arms make a 45-degree angle with your body. Make sure your toes are pointing straight into the ground. Keeping your legs and backside tight, push your body up, making sure that your body stays in a straight line and your hips don’t sag. Your stomach should be pulled in and your head relaxed and in line with your body. Do as many push-ups as possible while still using the correct form.

Write down your total here: ________________

Evaluation

According to the President’s Council on Physical Fitness, this is what your score means:

FOR TEEN BOYS (15- to 17-years old)

<table>
<thead>
<tr>
<th>Score</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 46 =</td>
<td>Excellent</td>
</tr>
<tr>
<td>38 - 46 =</td>
<td>Very Good</td>
</tr>
<tr>
<td>30 - 37 =</td>
<td>Average</td>
</tr>
<tr>
<td>25 - 29 =</td>
<td>Fair</td>
</tr>
<tr>
<td>0 to 24 =</td>
<td>Needs improvement</td>
</tr>
</tbody>
</table>

FOR TEEN GIRLS (15- to 17-years old)

<table>
<thead>
<tr>
<th>Score</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 20 =</td>
<td>Excellent</td>
</tr>
<tr>
<td>17 - 20 =</td>
<td>Very Good</td>
</tr>
<tr>
<td>15 - 16 =</td>
<td>Average</td>
</tr>
<tr>
<td>12 - 14 =</td>
<td>Fair</td>
</tr>
<tr>
<td>0 to 11 =</td>
<td>Needs improvement</td>
</tr>
</tbody>
</table>
Flexibility can be tested in many different ways. It is possible to be more flexible in one area of your body and less flexible in another—for example, you might have good flexibility in your shoulders, but need to work on the flexibility in your legs and hips. It is especially important to work toward balanced flexibility on both sides of your body. If one of your shoulders or one of your legs is more flexible than the other, you are at a higher risk for injury.

Perform these two simple tests to see where you stand. Follow the directions below.

**THE STRAIGHT LEG RAISE**

**Materials**

- none

**How to do it**

Lie on your back with your heels on the ground and toes pointing upward. Keeping your left heel on the ground, lift your right leg as high as you can. Make sure to keep both legs straight. Repeat with the other leg. Using this diagram, estimate how far each of your legs were able to go.

**Evaluation**

This test helps evaluate how flexible your hips and hamstrings are. The farther toward your head you can lift your leg, the more flexible you are. It’s important that both legs have the same level of flexibility.

- More than 90 degrees: Excellent
- 90 degrees: Very good
- 45 - 60 degrees: Average
- Less than 45 degrees: Needs improvement

*This activity is continued on the next page.*
THE BEHIND-THE-BACK HAND TOUCH

Materials

➤ none

How to do it

Raise your right arm straight over your head. Bend your left arm behind your back with your fingertips pointing up. Bend your right elbow behind your back and try to touch your fingers to each other. How far apart are your fingertips—touching, within one hand length of each other, or more than one and a half hand lengths apart? Switch arms and repeat.

Write down your answer here (right arm raised):

__________________

Write down your answer here (left arm raised):

___________________

Evaluation

This test helps check the flexibility in your shoulders. The closer your fingers can get, the more flexible you are. It’s important to have similar flexibility in both of your shoulders (though it is common for the side of your dominant hand to be a bit tighter than the other).

Fingers touching: Excellent

Fingers within one hand length of each other: Good

Fingers more than one and a half hand lengths of each other: Needs improvement
There are many different ways to evaluate your balance and coordination, from hopping on one foot to throwing and catching a ball. Here are two simple tests:

**SINGLE LEG BALANCE**

**Materials**

- stopwatch

**How to do it**

Stand up and lift one foot off of the ground so that you’re standing on one foot. Time yourself to see how long you can balance without putting the other foot down. If you feel yourself falling, put your other foot down and regain balance. Switch feet and repeat. (If you make it to 30 seconds, you can stop.)

How long could you stand on your right leg? ________________

How long could you stand on your left leg? ________________

**Now repeat the test with your eyes closed.**

How long could you stand on your right leg? ________________

How long could you stand on your left leg? ________________

**Evaluation**

The longer you are able to stand on one leg, the better your balance. That goes double for when your eyes are closed, because your eyes play a big role in how you orient yourself in space.

- 30 seconds or more: Excellent
- 20 - 29 seconds: Good
- 10 - 19 seconds: Fair
- Less than 10 seconds: Needs improvement

*This activity is continued on the next page.*
SCRAMBLE UP COORDINATION TEST

Materials

► small ball (such as a baseball or tennis ball)
► friend

How to do it

Lie on your stomach on a soft surface, such as a lawn or track. When your friend says “Go!” push yourself off the ground, jump up and try to land on one foot in one fluid motion. Repeat, landing on the other foot.

If you can do this successfully, add one extra step: as soon as you land on one foot, have your friend toss you the ball to catch. Repeat on your other foot. (If you are unable to complete the first part of this test, skip the ball step.)

How did you do? Circle the best answer:

I couldn't scramble up to balance on either leg.

I could scramble up to balance on one of my legs.

I could scramble up to balance on both legs and catch the ball at least once.

It was easy for me to scramble up to balance on both legs and catch the ball.

Evaluation

The easier it was for you to combine jumping up, landing on one foot and catching a ball, the better your coordination is. The more you practice movements like this, the better you will become.

It was easy for me to scramble up to balance on both legs and catch the ball: Excellent

I could scramble up to balance on both legs and catch the ball at least once: Good

I could scramble up to balance on one of my legs: Fair

I couldn’t scramble up to balance on either leg: Needs improvement
Now that you have completed *Fitness Habits Self-Assessment* and the four fitness test activities, you should have a good idea of where you are doing well and where you can improve. For example, maybe you discovered that you have good flexibility, but that your cardiovascular endurance could use a boost, or that your strength and coordination are good, but that your eating habits could use a tune-up.

The best way to achieve any goal is to break it up into smaller, easier goals. Though big goals can seem overwhelming, smaller goals are more realistic and manageable. And as you accomplish each smaller goal, you will be working toward your overall goal! This activity will help you set three big fitness goals and break them up into smaller, more achievable goals.

First, think about three general fitness goals you would like to accomplish. For example, you might want to eat a more nutritious diet, increase your muscle strength or improve your coordination. Now, focus on your goal. A good goal is specific—meaning you can clearly define it, and measurable—meaning you can track your progress. Instead of “I want to increase my strength,” you might say, “I want to be able to do 20 push-ups” or “I want to lift 20 percent more weight.” Instead of “I want to eat a better diet,” you might set a goal to eat five servings of vegetables each day or to cut down your intake of junk food to one or two servings a week instead of six or seven.

Write down each of your three focused goals. Then, add at least three smaller goals to work toward that will lead you to your overall goal. Read the sample below to get started.

**GOAL:** I want to run a 5K race without stopping.
Mini goals: *I will run at least three days a week after school.*
           *I will increase the distance I run by 10 percent each week.*
           *I will complete the entire 5K course first, even if I have to walk at times.*

**GOAL 1:** ________________________________________________________________
Mini goals: ________________________________________________________________
           ________________________________________________________________
           ________________________________________________________________

**GOAL 2:** ________________________________________________________________
Mini goals: ________________________________________________________________
           ________________________________________________________________
           ________________________________________________________________

**GOAL 3:** ________________________________________________________________
Mini goals: ________________________________________________________________
           ________________________________________________________________
           ________________________________________________________________
We all know that it’s important to exercise—but you’ve probably heard many excuses for why people don’t work on their fitness regularly. Maybe you’ve even made a few excuses yourself! For this activity, imagine that you have a friend who doesn’t want to exercise. Each time you press your friend to do something healthy, you hear one of the excuses below. Using your own knowledge and what you learned in the video, respond to each one.

1. “I don’t have time to exercise.”
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________

2. “Working out at the gym is boring.”
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________

3. “It makes me so sore.”
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________

4. “I don’t have enough money for equipment or a gym membership.”
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________

5. “I don’t like playing sports.”
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________

6. “I’m always too tired after school.”
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________

7. “Nobody ever wants to exercise with me.”
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________

8. “I have back problems—exercise will just make them worse.”
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________
PART ONE:
Doing more than one kind of physical activity is the best way to make sure that you are improving all five of the essential elements of fitness. Plus, the more activities you do, the less chance you’ll get bored! List at least 15 of your favorite physical activities in the space below. These activities can be anything—rowing crew, doing sit-ups, gymnastics, yoga, running, doing pull-ups, dancing, skateboarding and more.

1. 
2. 
3. 
4. 
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9. 
10. 
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13. 
14. 
15. 

This activity is continued on the next page.
PART TWO:
Now, sort your list according to which element of fitness the activity helps improve. For example, “running” would fit into the cardiovascular endurance category. Remember that many activities work on more than one element of fitness at once—“gymnastics” would help improve muscle strength, flexibility, and balance and coordination. Write these activities in all boxes that apply. (All of your physical activities help improve your body composition because they all burn calories.)

<table>
<thead>
<tr>
<th>Cardiovascular endurance</th>
<th>Muscle strength</th>
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<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Balance and coordination</th>
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</table>

Look over your boxes. Are there any that have only a few activities listed? In a different color, add activities that interest you—even if you’ve never tried them—to the appropriate box until each box has at least six different activities listed.
Choose one of the following topics and write a two- to three-page paper on that subject. Research your topic using reputable websites, articles and books. Use a Resource Tracker to keep track of your research.

**Flexibility and Injury**
Accepted wisdom used to hold that stretching before physical activity helps prevent muscle strains, sprains and other injuries. But recent research has found that pre-exercise stretching has little to no effect on the likelihood you’ll be injured—even that stretching before exercise harms athletic ability. What is the latest thinking on this topic? Would you recommend stretching before physical activity? Why or why not? (Use your research to back up your answer.) If not, what can you do to prevent athletic injuries? What types of stretching are most beneficial?

**Interval Training**
You may have heard athletes or coaches talk about “interval training” or “doing intervals.” What do they mean by this? Share some examples of exercise routines that incorporate interval training. How does interval training affect your cardiovascular endurance? Why is it different from aerobic activity, such as running or swimming at a steady pace?

**Body Composition Testing**
Plugging your height and weight into the BMI formula is only one way to estimate your body composition. Several other tests can also give you an idea of the proportion of fat, bone, water and muscle in your body. Find out more about the following body composition tests: skinfold measurements, underwater weighing and bioelectrical impedance. How accurate is each test? What are the pros and cons of each one? Where can you take each type of test?

**Muscle Strength and Substance Abuse**
Anabolic steroids are synthetic hormones that can help improve the body’s ability to build muscle and prevent muscle breakdown. But these drugs also have a number of serious side effects. Find out more about anabolic steroids. How do they work? Who uses them? What are the health risks of using these drugs? What is the legal status of steroids?

**Obesity and Your Health**
You many already know that being overweight or obese increases your risk for developing heart disease, stroke and type II diabetes later in life. But what about the health risks an overweight teenager faces right now? Carrying too much extra weight can have serious health effects even during the teenage years. What are the risks and how are they related to obesity? How can a young person decrease his or her chances of suffering these risks?

*This activity is continued on the next page.*
<table>
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<th>Title of book or article:</th>
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PART ONE:
To begin, find a fitness expert who can discuss exercise options with your class. The expert should be someone with training and experience in physical fitness, such as a gym teacher, coach or physical trainer. Your expert must also be someone local who is willing to come into your class for a brief presentation.

Your teacher will divide the class into four groups. Each group will be responsible for one of these elements of fitness:

- cardiovascular endurance
- muscle strength
- flexibility
- balance/coordination

Arrange for your expert to make a 20- to 30-minute presentation to your class. Ask him or her to demonstrate specific exercises or activities that will improve each of the following elements of fitness: cardiovascular endurance, muscle strength, flexibility and balance/coordination. These exercises should be geared toward teens. It's fine to use exercises that require equipment (such as weights), but ask your expert to include exercise routines that can be performed with little or no extra materials.

Take careful notes while your expert demonstrates the activities that improve your group's assigned element of fitness. Arrange for someone to bring in a camera or video recorder to take photos of each step of the exercise. You can also sketch the exercise on your own. Make sure you know the following:

- Step-by-step instructions on how to perform the activity correctly
- Any materials or equipment needed
- Tips on keeping the proper form

After the presentation, your group should design one page per activity. Each page should explain what the exercise is and precisely how to do it. If necessary, perform additional research about each activity. You can consult the President’s Council on Fitness, Sports and Nutrition website at <http://presidentschallenge.org/challenge/physical/benchmarks.shtml> for specific guidelines on how many repetitions are best for teens like you.

Punch three holes in each page so that they can be collected in a class binder. Use the sample on the next page as a guide. Include photos or sketches of your expert demonstrating each step. Your instructions should be clear and easy for everyone to follow.

PART TWO:
As a class, collect all of your activity pages in one binder. The binder should have separate sections for cardiovascular endurance, muscle strength, flexibility, balance and coordination. Keep the binder in class for reference. (Alternately, your teacher can make copies so that each student gets his or her own fitness guidebook.)

This activity is continued on the next page.
PUSH-UPS

This exercise improves: Muscle strength

**How to do it:** Start by lying on your stomach with your hands next to your shoulders. Your arms should come up at about a 45-degree angle with your body. Keep your toes pointing straight down at the ground.

Keeping your legs and backside tight, push your arms against the ground so that your whole body rises up. Lower yourself slowly and repeat.

**Things to remember:** When you push up, keep your body in a straight line and don’t let your hips sag. Keep your stomach pulled in tight. Keep your head relaxed and in line with your body.

**How many to do:** Do as many as possible in a row while still keeping good form. Repeat at least three times. Work up to doing at least 10 push-ups in a row. When this becomes easy, add five more push-ups to each set. Do push-up sets three times per week.

If you can’t complete a push-up with the proper form yet, start with modified push-ups until you become strong enough to do them the standard way. To do this, keep your knees on the ground, toes still pointing down, while you perform the push-ups.
Trying new physical activities is a great way to get and stay fit. New exercises work your body in different ways—plus, experimenting with fresh activities will keep you from getting bored with your routine. Can you think of any activities that you’ve always wanted to try? Now is your chance!

Choose one new physical activity to try for two weeks. You must engage in this activity at least three times a week. Your activity should be something brand-new to you. It can be anything that gets you moving and improves your fitness. Here are a few suggestions:

➤ Sign up for a dance class
➤ Take kayaking lessons
➤ Start a running routine
➤ Go rock-climbing at a local indoor rock wall
➤ Play Ultimate Frisbee with friends
➤ Ride your community bike paths
➤ Start a weight-lifting routine
➤ Play pickup volleyball in the park

Your activity can be anything, as long as it’s something new and as long as you can realistically participate three times a week. For example, you wouldn’t want to choose skiing if you live in Florida! You can sign up for a class or go to a gym, but remember that many physical activities are totally free and don’t require any special equipment.

After each session of your new activity, you will write a two- to three-paragraph blog entry about the experience. (Your teacher will give you specific instructions on how to turn in your work.) In each blog entry, write about the experience. Describe your session. Why did you choose this activity? What did you do? Where did you go? How did you like it? How did it make your body feel? As you get more experienced, note any changes you notice in your ability or your fitness level. In your last entry, write about whether or not you would like to continue doing this activity. Why or why not? What have you learned? What advice would you give to a friend who wanted to get started with this activity?

Be creative with your blog entries. Include photos from your sessions, drawings or quotes from your fellow exercisers.
Part of maintaining a healthy body composition is eating enough of the nutritious foods your body needs—and not too much of the unhealthy fats, sugars and other junk food that it doesn’t! The U.S. Department of Agriculture’s Food Guide Pyramid is a tool to help you eat a balanced, healthy diet. See the Food Guide Pyramid fact sheet for more information.

How healthy is your diet? Find out by tracking what you eat for three days in a row. Choose three typical days in your life to track (for example, don’t do this activity over Thanksgiving weekend or on vacation). Make three copies of this diary (one for each day). Record everything you eat and drink on each day, noting how much of each item you ate. A few sample items have been filled in.

Date: ____________

<table>
<thead>
<tr>
<th>Food/beverage</th>
<th>Amount</th>
<th>Food Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole-grain waffles</td>
<td>2 waffles = 1 cup</td>
<td>Grains</td>
</tr>
<tr>
<td>Apple slices</td>
<td>½ cup</td>
<td>Fruit</td>
</tr>
<tr>
<td>Pizza: cheese</td>
<td>½ cup</td>
<td>Milk</td>
</tr>
<tr>
<td>Pizza: tomato sauce</td>
<td>¼ cup</td>
<td>Vegetables</td>
</tr>
<tr>
<td>Pizza: crust</td>
<td>1 cup</td>
<td>Grains</td>
</tr>
</tbody>
</table>

This activity is continued on the next page.
How did your diet stack up to the Food Guide Pyramid? Record your total intake of each food group here:

### Day 1

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Recommended amount for teens</th>
<th>My Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain</td>
<td>5 to 7 ounces</td>
<td></td>
</tr>
<tr>
<td>Vegetables</td>
<td>2 to 3 cups</td>
<td></td>
</tr>
<tr>
<td>Fruits</td>
<td>1½ to 2 cups</td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td>3 cups</td>
<td></td>
</tr>
<tr>
<td>Meat &amp; Beans</td>
<td>5 to 6 ounces</td>
<td></td>
</tr>
<tr>
<td>Oils</td>
<td>5 to 6 teaspoons</td>
<td></td>
</tr>
<tr>
<td>Junk food*</td>
<td>As little as possible</td>
<td></td>
</tr>
</tbody>
</table>

### Day 2

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Recommended amount for teens</th>
<th>My Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain</td>
<td>5 to 7 ounces</td>
<td></td>
</tr>
<tr>
<td>Vegetables</td>
<td>2 to 3 cups</td>
<td></td>
</tr>
<tr>
<td>Fruits</td>
<td>1½ to 2 cups</td>
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<tr>
<td>Milk</td>
<td>3 cups</td>
<td></td>
</tr>
<tr>
<td>Meat &amp; Beans</td>
<td>5 to 6 ounces</td>
<td></td>
</tr>
<tr>
<td>Oils</td>
<td>5 to 6 teaspoons</td>
<td></td>
</tr>
<tr>
<td>Junk food*</td>
<td>As little as possible</td>
<td></td>
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</tbody>
</table>

### Day 3

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Recommended amount for teens</th>
<th>My Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain</td>
<td>5 to 7 ounces</td>
<td></td>
</tr>
<tr>
<td>Vegetables</td>
<td>2 to 3 cups</td>
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<tr>
<td>Milk</td>
<td>3 cups</td>
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</tr>
<tr>
<td>Meat &amp; Beans</td>
<td>5 to 6 ounces</td>
<td></td>
</tr>
<tr>
<td>Oils</td>
<td>5 to 6 teaspoons</td>
<td></td>
</tr>
<tr>
<td>Junk food*</td>
<td>As little as possible</td>
<td></td>
</tr>
</tbody>
</table>

*Junk food is any food or drink that provides calories, but little to no nutritional value. Some examples include soda, candy, baked goods, sugar, potato chips, syrup, chocolate and ice cream.*
It takes about three weeks for a new behavior to become a habit. Sticking with regular physical activity for just three weeks will help you get used to making exercise part of your daily life, improving your fitness as you go.

Here is your chance to take all you’ve learned about fitness and apply it to your life. You will plan a fitness calendar that includes activities to improve your cardiovascular endurance, muscle strength, flexibility, balance and coordination. You will improve your body composition along the way, simply by being active.

**PART ONE:**

Prepare a list of activities that improve each of the following elements of fitness. You will use these activities to fill in your fitness calendar. Remember that some activities work on more than one element at the same time. Each activity you list should be something that you enjoy doing and that is realistic for you to do. (For example, don’t include kickboxing if you don’t have access to a kickboxing class or equipment.) Include a note about where you can perform each activity. If you need inspiration, look back to the following activities: *Playing Favorites, Fitness Guidebook* and *My Fitness Blog*.

**Sample:**

Cycling: community bike path  
Weight lifting: high school weight room during open hours

**Cardiovascular endurance**

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

**Muscle strength**

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

**Flexibility**

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

**Balance and coordination**

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

*This activity is continued on the next page.*
PART TWO:

Make two copies of the blank fitness calendar on the next page. Each page represents a week. Using the activities you listed above, plan out a routine that works on all the elements of fitness. On which days will you do which activities? For how long? Write down a starting and ending time for each activity. Include one rest day per week.

Use these guidelines when planning your fitness routine:

**Cardiovascular endurance:** Work on it at least three times per week, 30 to 45 minutes at a time

**Muscle strength:** Work on it three times per week

**Flexibility:** Work on it every day

**Balance and coordination:** Work on it every day

**Sample calendar days**

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
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</thead>
<tbody>
<tr>
<td>2:15-2:30 pm: Stretching and warm-ups at North Town Pool</td>
<td>4:00-4:30 pm: Strength workout at Scott Park (push-ups, lunges, step-ups, pull-ups, sit-ups)</td>
<td>6:30-7:30 pm: Dance class at the community gym</td>
</tr>
<tr>
<td>2:30-3:15 pm: Swimming</td>
<td>4:30-4:45 pm: Balance exercises at Scott Park</td>
<td>7:45-8:15 pm: Flexibility class at the community gym</td>
</tr>
<tr>
<td>3:15-3:30 pm: Cool-down and stretching</td>
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PART THREE:

This is the fun part! Now that you’ve planned your fitness activities, stick to your calendar and do them. You might find that you’re surprised how easy it is to follow your plan when you’ve thought ahead—and when you do the activities you enjoy.

*This activity is continued on the next page.*
**Fitness Calendar**

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
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</table>
BETTER MOOD

Physical activity releases brain chemicals called endorphins, which boost your mood. Endorphins reduce emotional stress and tension.

BETTER SLEEP

Teens need eight to nine hours of sleep a night—more than adults—to feel and think their best. Exercise improves sleep, which helps you get the rest you need and feel more alert during the day.

POSITIVE BODY IMAGE

When you’re physically fit, you are more likely to appreciate how great your healthy body makes you feel and less likely to obsess about looking “perfect.”

IMPROVED SELF-ESTEEM

Setting and achieving goals to improve your fitness makes you feel great when your hard work pays off. A healthier body contributes to increased confidence. Plus, the better you feel physically, the better you’ll feel about yourself.

MORE ENERGY

Exercise delivers oxygen and nutrients to your muscles, providing a boost. The fitter you get, the more efficiently your heart and lungs work—which means that your long-term energy will increase, too.

REDUCED RISK OF DISEASE

Being physically fit significantly lowers your chances of developing a serious health problem later in life. Being overweight or obese is linked to heart disease, stroke, type II diabetes, high blood pressure and osteoporosis. These diseases can have a huge impact on your quality of life and can even be fatal—but getting fit as a teen is one of the best ways to prevent them.

HEALTHY WEIGHT

Physical activity burns calories, which helps regulate your weight. Eating too many calories without burning them off leads to weight gain, which in turn can lead to health problems. But being active on most days helps balance the calories you eat and keeps you at the ideal weight for your body.
What is it?

Cardiovascular endurance is the ability of the heart, lungs and blood to provide oxygen to the body during prolonged exercise.

Why is it important?

The better your cardiovascular endurance, the longer you can run, bike or swim without getting tired. The more efficiently your heart can deliver blood to the body, the stronger and healthier it is. A strong heart is linked to reduced risk of health problems such as heart disease and high blood pressure, and it improves your chances of living a longer, healthier life.

How can I improve?

Any activity that makes you sweat and breathe hard will improve your cardiovascular endurance. Aerobic exercise is one way to work on your endurance. This is any activity that uses large muscle groups (such as the arms or the legs) and can be sustained for at least 20 to 30 minutes. Examples include running, dancing, cycling, kickboxing, hiking or playing basketball.

How often should I work on it?

Perform aerobic activities at least three times per week for 45 to 60 minutes at a time. For best results, do the activity at a moderate to vigorous intensity level. Moderate intensity is a 5 or 6 on a scale of 1 to 10 (10 being the hardest); vigorous is a 7 or 8.

How can I test my cardiovascular endurance?

Several tests can assess cardiovascular fitness. The three-minute step test uses your heart rate to determine how fit you are; the lower your heart rate is after stepping up and down on a box for three minutes, the easier it is for your heart to recover from activity and the more fit you are.

Cardiovascular endurance can also be assessed with the VO₂ max test. This test measures how efficiently your heart delivers oxygen to your muscles during exercise and how efficiently your muscles use the oxygen. The higher your VO₂ max, the better your body is at supplying oxygen to your muscles.
What is it?

Muscle strength is the amount of force your muscles can produce.

Why is it important?

Muscle strength allows you to stand up, squat down, kick a ball, pick up an object or throw a football. Without muscle strength, you would not be able to move your body at all.

How can I improve?

Resistance exercises improve muscle strength by forcing the muscles to work against a heavier load than they are used to. This load can be an external weight or your own body weight. When muscles adapt to a more challenging task, they break down a little. When your body rebuilds the damage, your muscles become stronger than they were before.

Many resistance exercises are classified as anaerobic exercises. These involve short, intense bursts of energy that force the body to work without using oxygen. Examples of resistance exercises include lifting weights, push-ups, pull-ups, lunges, squats, handstands and rowing.

How often should I work on it?

Perform muscle-strengthening exercises three times per week.

How can I test my muscle strength?

There are many different ways to assess the strength of different muscle groups in your body. It is important to work toward a balanced level of strength—for example, someone who has very strong legs but weak arms would not be considered to have good muscle strength. Relative strength—the ability to move your body weight against resistance by jumping, pushing and pulling—is a good sign of overall muscle strength.

The more push-ups you are able to perform in a row while using proper form, the stronger your upper body.

For girls, the average number is 15 push-ups for 15- to 16-year-old girls, and 16 push-ups for teen girls 17 and above.

For guys, the average number is 30 push-ups for 15- and 16-year-old boys, and 37 push-ups for teen boys 17 and above.

What is it?

Flexibility is the ability of a joint to move through its entire range of motion. Flexibility exists in all areas of the body. It is possible to have flexible legs and hips but inflexible arms and shoulders and vice versa.

Why is it important?

Flexibility allows you to move more efficiently and smoothly and improves your posture. It also helps prevent muscle strains, sprains and other injuries during physical activity.

How can I improve?

One easy way to improve your flexibility is simply to move your body in different ways. This helps your muscles stay limber and your joints to move more easily. Activities such as dancing, gymnastics, martial arts and yoga are especially good for improving flexibility.

Stretching is another important way to keep your muscles elastic. Dynamic stretching involves stretching muscles while moving; examples include making arm circles or high-knee marching. Static stretching means holding a single stretch for 20 to 30 seconds.

How often should I work on it?

Work on your flexibility through movement and stretching every day. It is especially important to warm up and loosen your muscles before and after physical activity.

How can I test my flexibility?

There are many ways to assess your level of flexibility in different parts of your body. It is possible to be flexible in one area and inflexible in another. It is important to have balanced flexibility on both sides of your body; for example, your right and left legs should have about an equal level of flexibility.

The sit-and-reach test helps evaluate the flexibility in your hamstrings and lower back. To perform this test, sit with your legs extended straight out and reach forward with both arms. The farther you are able to reach, the more flexible you are in that area. The single-leg raise is another way to evaluate hamstring flexibility.

One way to test the flexibility in your shoulders is the behind-the-back hand touch. The closer you can get your fingers, the more flexible your shoulders are.
What is it?

Balance is the body’s ability to control itself in space. Coordination is the ability to use all your body systems as a unit to perform a task.

Why is it important?

Almost every activity or movement you do is dependent on balance and coordination. Without the ability to stay on your feet and move your body as a unit to accomplish a task, you would not be able to run, walk, throw a ball or successfully complete any movement.

How can I improve?

Simply moving your body in different ways will work on your balance and coordination. Challenging yourself to complete more difficult tasks will force your body to adapt to new movements, which will help you improve.

Completing exercises while on your feet (not sitting down or using exercise machines) also helps your balance because you must concentrate on controlling your body in space as well as performing the exercise.

How often should I work on it?

Work on your balance and coordination through movement and activity every day.

How can I test my balance and coordination?

Standing on one leg is a simple way to evaluate your balance. The longer you can do it without stumbling, the better your balance is. Closing your eyes while standing on one leg is even more difficult.

Your ability to perform tasks like skipping, throwing and catching objects, kicking a ball and doing jumping jacks helps determine your coordination level. The more easily you can complete the activities, the better your coordination is.
What is it?
Body composition is a measure of the proportion of fat, lean muscle, water and bone in your body.

Why is it important?
Everyone needs a certain amount of body fat to be healthy, but too much body fat makes it more likely that you will become overweight or obese. This in turn increases your risk of serious health problems.

How can I improve?
Eating more calories than you burn through physical activity leads to weight gain; burning more calories than you eat leads to weight loss.

Eat healthy foods and stay away from junk food. Fruits, vegetables, whole grains, low-fat proteins and healthy fats provide the nutrients your body needs for growth and energy. Junk foods, on the other hand, contain “empty” calories in the form of unhealthy fat, sugar and salt; these don’t provide the important nutrients you need.

Staying active is the other part of the equation. Doing any physical activity burns calories, which helps keep your body composition in check.

How often should I work on it?
Work on your body composition every day by being physically active and eating a nutritious diet.

How can I test my body composition?
The body mass index, or BMI, is a useful tool for evaluating how much body fat you have. The BMI is a calculation that considers your age, gender, height and weight. For teens, the BMI number must be converted to a percentile that tells you where you stand compared to other teens your age.

A BMI at or below the 5th percentile is underweight. Anything between the 5th and 85th percentiles is considered a healthy body composition. A BMI above the 85th percentile is overweight or obese. (Note: The BMI is not perfect. Someone with a lot of lean muscle might have a high percentile on the BMI, but still be fit and healthy.)

Calculate your BMI by visiting this web page from the Centers for Disease Control and Prevention:

<http://apps.nccd.cdc.gov/dnpabmi>

If you prefer to calculate your BMI yourself, use this formula:

\[
BMI = \frac{(\text{weight in pounds} \times 703)}{(\text{height in inches}^2)}
\]
The U.S. Department of Agriculture has developed a tool, called the Food Guide Pyramid, to help people eat a healthy, balanced diet. Each colored band on the pyramid represents a different food group; the pyramid also provides guidelines on how much of each group to eat every day.

**Grains**

Grains are foods made from rice, cornmeal, wheat, oats or any other cereal grain. Examples include pasta, bread, tortillas and oatmeal. *Whole grains* are the healthiest type of grain. These include the entire grain kernel, such as whole wheat, oats and brown rice. *Refined grains* such as white bread, white rice and white flour have been processed to remove some of the nutrients. Aim for 5 to 7 ounces of grain each day. At least half of that amount should come from whole grains.

**Vegetables**

This group includes both raw and cooked veggies and 100% vegetable juice. A healthy diet contains a variety of vegetables in different colors. Some common vegetables are spinach, carrots, squash, broccoli, corn, peas and zucchini. Dry beans and peas also belong to the vegetable group. Aim for 2 to 3 cups per day.

*This fact sheet is continued on the next page.*
Fruits

This group includes any fresh, canned, frozen or dried fruit, plus 100% fruit juice. Examples include apples, berries, pineapples, mangoes, plums, watermelon and raisins. Aim for 1½ to 2 cups per day.

Milk

This group contains milk and milk products like cheese and yogurt. It is best to choose skim or low-fat milk products because whole milk products are high in unhealthy saturated fat. Aim for about 3 cups of milk or milk products each day.

Meat and beans

Meat, poultry, fish, beans, eggs, nuts and seeds are part of this group. The healthiest choices are lean or white meats and fish; limit the amount of red meat you eat. Aim for 5 to 6 ounces from this group per day.

Oils

Oils are not represented on the pyramid, but they are mentioned because they are part of our diets. Oils—also called unsaturated fats—are fats that are liquid at room temperature, such as olive oil, canola oil and corn oil. Saturated fats are usually solid at room temperature. Aim for 5 to 6 teaspoons of oils per day, and remember that unsaturated fats are healthier than saturated fats.
If you’re not physically active now, the prospect of getting fit can be intimidating. But remember that everyone can get fit. Start out slowly by making small changes in your routine. Before you know it, you will be improving your health—and your life—by leaps and bounds.

Follow these tips to get started safely:

- Check in with your doctor before starting any new exercise program. He or she will make sure that your body is ready to begin, and, if you have any medical conditions, that your exercise routine is safe for you.

- Start slowly. If you’ve never exercised before, try walking for 15 minutes at a time, several days a week. As this becomes easier for you, increase the length of time, intensity and frequency of your workouts.

- Warm up for at least five minutes before you exercise with light cardiovascular activity, such as jogging or jumping jacks. Loosen and stretch your muscles before you begin. Cool down for at least five minutes after your workout with lighter activity, such as walking, so that your heart rate returns to normal more gradually. Stretch after your workout as well.

- Remember that it’s normal to feel stiff or sore when you first begin exercising. Over-the-counter pain relievers can help soothe the ache. It’s not normal, however, to feel pain after working out. If you do, you may have injured yourself. Talk to a doctor and take some time off for your body to heal.

- If you ever feel pain while exercising, stop! You might be performing the activity incorrectly or pushing your body too far. Also stop if you feel dizzy or faint while exercising.

- Learn how to perform exercises correctly before you start. This is especially important for weight lifting. Try signing up for a class at school or a gym in your community, or ask a trainer to show you how to perform the moves correctly. More experienced friends can also help you with your form, but remember that they might not be doing everything correctly. It’s essential to start with a professional to ensure you won’t get hurt.

- Make sure you have the proper equipment for your activity. This usually includes clothing that allows you to move freely and sturdy shoes. Depending on your exercise, you might also need a helmet, elbow or knee pads or a mouthguard.
Motivation is the key to sticking with a new exercise program, even if it seems hard at first. Follow these tips to stay enthusiastic about your new, healthy lifestyle.

- Work out with a friend. You will keep each other company during your exercise sessions, push each other to work hard and support each other’s improvements. Plus, you’ll be less likely to skip a workout if you know your buddy is counting on you to show up!

- Track your progress on your Three-Week Challenge calendar or an exercise journal. It’s very satisfying to check off each workout as you complete it.

- Tell your family and friends about your new workout plan. The more people know about your commitment to fitness, the more likely you are to stick with it.

- Cut out inspirational pictures of people you admire. They shouldn’t be supermodel-skinny or ultra-muscular. Instead, choose healthy people who you look up to. Display the photos where you can see them every day.

- Try new things. Performing the same exercises the same way every time is not only less effective, it’s boring! Mix things up by choosing a variety of activities—try some that you do alone, some that you do with friends and some that you can do with an exercise class or instructor. Experiment with both indoor and outdoor activities.

- Give yourself a reward when you stick with your exercise plan for a certain amount of time—say, every few weeks or so. Choose a healthy reward, such as going to the movies, hanging out with friends, a new article of clothing or jewelry or a dinner out.

- Stay positive. When you feel discouraged, repeat inspirational thoughts to yourself. Try “I am getting healthier every day,” “I am proud of how hard I’m working” or “I feel stronger, faster and fitter than I did before.”

- Forgive yourself if you skip a few days of physical activity. Decide to get back on track or make a new fitness plan that is more fun for you to follow.


This fact sheet is continued on the next page.
<http://kidshealth.org/teen/food_fitness/exercise/strength_training.html>

<http://sportsmedicine.about.com/od/fitnessevalandassessment/qt/ShoulderFlex.htm?once=true&>

<http://www.nytimes.com/2008/11/02/sports/playmagazine/112pewarm.html?_r=1>

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