



#9628

BODY COMPOSITION

HUMAN KINETICS, 2001

Grade Levels: 7-12

30 minutes

1 Instructional Graphic Enclosed

DESCRIPTION

Considers body fatness, its purpose, and its relation to physical fitness. Demonstrates methods and tools for assessing amounts of body fat. Notes heredity and basal metabolism may affect fatness percentages. Provides guidelines for healthy eating and healthy levels of activity.

ACADEMIC STANDARDS

Subject Area: Health

- ★ Standard: Understands essential concepts about nutrition and diet
 - Benchmark: Knows eating disorders that affect health adversely (e.g., anorexia, overeating, bulimia) (See Instructional Goal #5.)
 - Benchmark: Understands the reliability and validity of various sources of food and nutrition information (e.g., dietary supplements, diet aids, fad diets, food labels) (See Instructional Goals #4 and 5.)
 - Benchmark: Understands how nutrients and energy needs vary in relation to gender, activity level, and stage of life cycle (See Instructional Goals #3, 4, and 6.)

Subject Area: Physical Education

- ★ Standard: Understands how to monitor and maintain a health-enhancing level of physical fitness
 - Benchmark: Knows personal status of body composition (See Instructional Goal #2.)
 - Benchmark: Knows how to interpret the results of physical fitness assessments and use the information to develop individual fitness goals (See Instructional Goals #1, 2, 4, and 6.)



INSTRUCTIONAL GOALS

1. To understand the importance of body composition in being physically fit.
2. To apply some methods for assessing the level of body fatness.
3. To understand the factors that influence a person's body fatness.
4. To understand what causes weight loss or weight gain.
5. To understand that there are healthy and unhealthy ways of maintaining body weight.
6. To create a personal fitness plan.

BACKGROUND INFORMATION

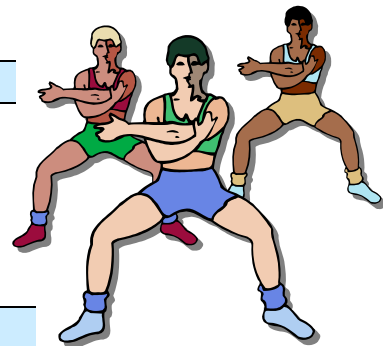
This film is part of a series: Chuck Corbin's Fitness for Life. Each video in the series individually address the four health-related parts of fitness: cardiovascular fitness, muscular fitness, flexibility, and body composition. The *INTRODUCTION TO LIFELONG PHYSICAL FITNESS* video gives a general overview of all of these components.

VOCABULARY

1. susceptible
2. obese/obesity
3. respiratory conditions
4. diabetes
5. eating disorders
6. anorexia
7. bulimic/bulimia
8. bingeing
9. purging
10. regurgitating
11. laxatives
12. heredity
13. circumference
14. body mass index
15. caliper
16. triceps
17. abdomen
18. basal metabolism
19. calories
20. hormones
21. moderation
22. fluctuations
23. fad diets
24. artificial sweeteners
25. fat substitutes

BEFORE SHOWING

1. Discuss factors that affect development of body composition and ways to measure body composition.
2. Develop a personal description of the ideal personal body composition.



DURING SHOWING

1. View the video more than once, with one showing uninterrupted.
2. Stop the video after each demonstration for assessing body fatness (waist-to-hip ratio using height-weight charts, skin fold measurements with a caliper, etc.) Try these assessment methods on yourself or a classmate.

AFTER SHOWING

► Discussion Items and Questions

1. What is body composition?
2. What is body fatness?
3. How does overweight differ from underweight? What are the benefits of being in the "healthy fatness range"?
4. What is essential fat and why is it important?
5. What is anorexia nervosa? What are some of the characteristics of this disorder?
6. What is anorexia athletica? How does it differ from anorexia nervosa?
7. What is bulimia? What are some characteristics of this disorder?

8. What is essential body fat and why do we need it?
9. How much body fat should girls have? How much should boys have?
10. What are some methods of assessing body fatness and body composition?
11. What is BMR? How is it related to body fatness? What are some factors other than BMR that influence your body fatness?
12. How many calories are there in a pound of fat? Why is this important to your body composition?
13. How frequently should you do activities and eat meals to maintain a healthy body fat level?
14. How can you determine "intensity" for body fatness? What is the relationship between activity and eating?
15. How much time does it take to lose or gain body fat? How much fat can you reasonably expect to lose in a week?
16. How is the physical activity pyramid valuable in helping you have a healthy body composition?
17. What are some tips (discussed in the video) for maintaining a healthy body fat level?



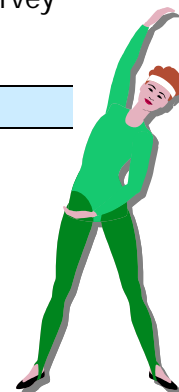
► Applications and Activities

1. Calculate and compare your body mass index (BMI) by using both a height-weight chart and the formula below. (See Instructional Graphic.)
 - a. Multiply your weight in pounds by 703.
 - b. Multiply your height in inches times itself.
 - c. Divide the Step 1 answer by the answer in Step 2.
 - d. Check the table to see the risk category associated with your BMI.
2. Set a personal body composition goal based on your body fatness level. Create a fitness plan. Include a target daily calorie intake and an exercise plan that will help you meet your goal.
3. Practice reading food labels on cans and boxes to determine serving size, calories, and other nutritional information.
4. Research fad diets. Find out why they are inadequate for long-term success in maintaining a healthy body.
5. Brainstorm nutritious alternatives for a concession stand at your school. Survey students to determine interest in trying alternatives to available junk foods.

RELATED RESOURCES



- [Cardiovascular Fitness #9629](#)
- [Introduction to Lifelong Physical Fitness #9632](#)
- [Flexibility #9742](#)
- [Muscle Fitness #9743](#)





World Wide Web

The following Web sites complement the contents of this guide; they were selected by professionals who have experience in teaching deaf and hard of hearing students. Every effort was made to select accurate, educationally relevant, and "kid safe" sites. However, teachers should preview them before use. The U.S. Department of Education, the National Association of the Deaf, and the Captioned Media Program do not endorse the sites and are not responsible for their content.



- **THE PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS**

<http://www.fitness.gov/index.html>

Describes the goals of the President's Challenge and provides links to resources for coaches and teachers as well as tips for students on keeping fit.

- **AMERICAN HEART ASSOCIATION**

<http://www.americanheart.org>

Gives information about upcoming local activities such as American Heart Walks, fundraisers that can be done by students such as Hoops For Heart, and has links to resources and articles relating to heart disease and fitness tips.



- **KIDNETIC**

<http://www.kidnetic.org>

Contains ideas for healthy eating, good nutrition, and fun physical activities. Includes recipes and fun games.

INSTRUCTIONAL GRAPHICS

- **BODY MASS INDEX CHART**