

Health Related Components of Fitness

Analyzing Physical Fitness

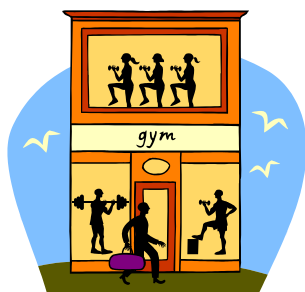
What is physical fitness? How can it be attained? It is very important that you understand the answers to these questions if you are going to become responsible for your own health and fitness.

Physical fitness is made up of both health-related fitness components and skills-related components. The health related-fitness components relate to how well the systems of your body operate. Are your heart and other muscles in good shape? This type of physical fitness is related to your overall state of health. The skill-related fitness items are concerned with abilities related to sports activities. Are you fast? Do you have good hand-eye coordination? The focus of this worksheet is on the health-related components of fitness, why they are important and how they can be improved. Skill-related components will be covered later.



Health-Related Fitness

Both kinds of fitness are important for successful participation in sports activities. However, only the health-related components can be related to the prevention of disease and the promotion of health. That is why they are called the health-related components of fitness.



Maintaining an acceptable level of the health-related components of fitness is recognized as a key element in maintaining a healthy lifestyle. People who attain such levels of fitness reduce their risks of developing health problems, such as heart disease, low back pain, and obesity, and improve their body's ability to function. This is why health-related fitness should be the concern of everyone, regardless of age.

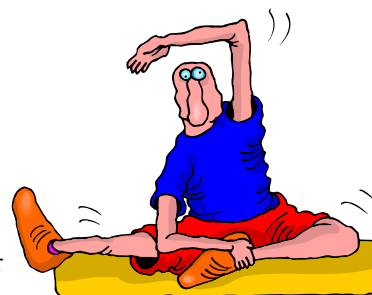
There are five health-related components of fitness: flexibility, cardiovascular fitness, muscular strength, muscular endurance, and body composition. Remember that fitness is for everyone. You do not have to be a great athlete to be physically fit. If you exercise regularly and follow the basic principles, you will improve your health-related fitness.

Flexibility

Flexibility describes the range of movement possible at various joints. It is probably the most frequently overlooked component of fitness. If you want to be as good as you can, you must work on flexibility as regular as you work on muscular strength and endurance or cardiovascular efficiency.

Because flexibility is specific to each joint, no single test can provide complete information about the flexibility of all major joints of your body.

However, there are several tests that will give you an indication of flexibility in joints most likely needing attention. These tests include the sit and reach test, the shoulder stretch test and the v-sit test.



“The lack of regular movement through a joint’s full range of motion results in a decrease in flexibility, and sedentary living is the greatest contributor to the loss of flexibility with aging.”

Cardiovascular Endurance

Cardiovascular fitness relates to the ability of the heart, blood, blood vessels and the respiratory system to supply oxygen and necessary fuel to the muscles during physical activity. The best type of physical activity for improving cardiovascular fitness is aerobic activities. Aerobic activities are those which force the body to use a large amount of oxygen for a sustained period of time. *Sustained* means that the physical activity should be done for a period of 15 to 30 minutes to get the aerobic benefits. Examples of aerobic activities are jogging cycling, swimming, rope jumping, and aerobic dance. Certain sports like basketball and soccer also provide the workout needed to achieve an aerobic training effect. Aerobic activities provide a safeguard for your physical and mental health.

Cardiovascular fitness can be measured in a number of ways. The most accurate measurement is a stress test performed on a stationary bicycle or treadmill. The most common test is the one mile run for time.

“Cardiovascular fitness is the most important aspect of physical fitness because of its potential to reduce risks of developing chronic diseases.”

Health Related Components of Fitness (2)

Muscular Strength and Endurance

Muscular strength and endurance are closely related components that are very important to kids your age. **Muscular strength** is the ability of a muscle group to apply a maximal force against a resistance one time. **Muscular endurance** is the ability to repeat muscle movement for a long period of time.



In the past young men were much more interested in muscular development than young women. That gap is closing rapidly, as young women are realizing the importance of developing their muscular fitness. Today, more than ever before, women

want to have well toned muscles. An important fact to remember though is that young women cannot develop the large muscles for the simple reason that they do not have enough of the necessary hormone testosterone. Young men on the other hand have high levels of testosterone, enabling them to greatly increase their muscle size. Regardless of your gender, improving your muscle development will improve your overall fitness.

The partial sit-up test can be used to measure abdominal strength. Push-ups, pull-ups and the flexed arm hang are used to measure muscular strength and endurance of the upper body.

Key Terms to Understand

- Components of Fitness
- Health-related Fitness
- Skill-related Fitness
- Flexibility
- Cardiovascular Fitness
- Muscular Strength
- Muscular Endurance
- Body Composition
- Body Mass Index (BMI)
- Sedentary
- Chronic
- Kilogram
- Meter



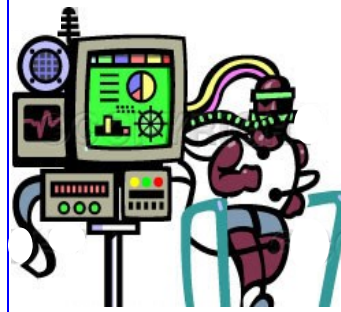
Body Composition

Body composition is the ratio of fat to muscles, bone, and other tissues that compose your body. *A certain amount of body fat is necessary for good health.* Extremely high or low amounts of fat can cause health problems. Most young adults desire a low percentage of body fat. However, your health may suffer if your percentage of body fat is too low or high. Looking good and feeling good depend a great deal on making sure you have the correct amount of body fat.

Body composition can be correctly evaluated in several ways. Although underwater weighing is the most accurate, it is also the most expensive means to measure body fat. Body composition is most commonly assessed by a device called a skinfold caliper. However, there are also several body composition measurement devices on the market which can give you a general measurement.

Another common measurement of body composition widely used today is the body mass index (BMI). The

body mass index provides an indication of the appropriateness of your weight relative to your height. One important note to the BMI though is that it does not indicate the presence of fat.



“Many people do not have a clear understanding of physical fitness. Some people think you have to be a good athlete to be physically fit. This is not what a personal fitness awareness program is about! Being physically fit is about understanding the Components of Fitness and working towards improving them as best as you can.”

BMI

The BMI is the ratio of one’s weight in kilograms to one’s height in meters squared. Although the BMI does not measure body fat, these calculations are associated with health risks. Therefore knowing one’s BMI is beneficial when trying to determine one’s risk of chronic disease.