A Look in the Mirror: Determining our Body Composition

**Introduction**

This lesson focuses on the importance of body composition and how physical activity improves the quality of life. Students will utilize choosemyplate.gov and other health sites to learn about what constituents an appropriate body composition. Students will determine their body composition by using the Hamwi equation, BMI, and waist circumference. Students will then create their own fitness plan for the next 2 weeks. This will serve as the basis for being physically active. Instructors are encouraged to assign an extended individual project where each student creates a personal fitness plan that they must follow for a minimum of 2-4 weeks. It is important to consider cultural, SES, and other personal characteristics when helping students design a plan that they will follow for the project.

**Group Size**

Any Size

**Learning Objectives**

Students will be able to accurately determine their BMI.

Students will be able to construct a fitness plan according to FDA guidelines provided by [www.choosemyplate.gov](http://www.choosemyplate.gov).

**Guiding Questions**

How much physical activity is enough?

How can I incorporate physical activity into my lifestyle?

What are appropriate portion sizes?

What changes can I make in my diet and activity level to make my lifestyle healthier?

**Materials**

Computer (1 per student)

Scale

Measuring tape

Calculator

PowerPoint

Printer

[www.choosemyplate.gov](http://www.choosemyplate.gov)

<http://www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/tools.htm>

**Procedures**

1. The instructor will begin the lesson by directing students to the web address: <http://www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/tools.htm> and instruct students to take the portion distortion quiz.
2. Class will discuss what are energy, calories, body composition, and physical activity.
3. Students will be instructed to create a physical activity plan that they will follow for a two week period and take tests to determine their body composition (Hamwi equation, BMI, and waist circumference).
4. Students will use the rest of the class time to research body composition and physical activity on their own and create a PowerPoint with their findings and activity plan. The PowerPoint does not have a definitive structure but it does require the needed components mentioned in step 3 and students are also suggested to include other facts, statistics, and ideas that interest them. Students are encouraged to work together (but submit individual assignments) and to utilize research skills to find their information on body composition and physical activity.
5. Before the end of class, the instructor should inform students that the body composition tests are based on averages and is not completely accurate. Students should be reassured that these tests only give estimates and suggestions. If they have a concern about their body or body image, then they should see a guidance counselor or the school nurse for further support.

**Assessment**

Students will be assessed by their participation in the portion distortion quiz and by the creation and critical analysis of their fitness plan and body composition test results. Each day of the fitness plan should consist of the appropriate amount and variation of physical activity as suggested by the FDA.

**Benchmark/Standards**

HE.912.B.3.1

Determine the value of applying a thoughtful decision-making process in health-related situations

HE.912.B.3.2

Examine barriers that can hinder healthy decision-making

HE.912.B.4.2

Formulate a plan to attain a personal health goal that addresses strengths, needs, and risks

HE.912.B.4.3

Implement strategies and monitor progress in achieving a personal health goal

HE.912.B.4.4

Formulate an effective long-term personal health plan