Lesson 2

Obesity, Eating Habits, and Weight Loss

Introduction:

This lesson plan helps students to evaluate current guidelines for a healthy diet, compare them to their own eating habits, and learn safe behaviors for maintaining a healthy weight.

Lesson Objectives:

Students will:

- Identify the components of the Food Pyramid and explain critics' objections to the composition of the Food Pyramid
- Analyze fast foods and determine if they are in accordance with contemporary dietary guidelines; compare the nutritional content of fast foods, frozen dinners, and frozen skillet meals.
- Recognize safe and healthy ways to lose weight
- Identify the causes of obesity in this country.

Correlation to National Health Standards:

(from http://www.aahperd.org/aahe/natl_health_education_standards.html)

HEALTH EDUCATION STANDARD 3:

Students will demonstrate the ability to practice health-enhancing behaviors and reduce health risks through:

- evaluating a personal health assessment to determine strategies for health enhancement and risk reduction
HEALTH EDUCATION STANDARD 4:

Students will analyze the influence of culture, media, technology and other factors on health through:

- evaluating the effect of media and other factors on personal, family, and community health
- evaluating the impact of technology on personal, family, and community health

Materials Needed:

- TV /VCR
- Videotape of the FRONTLINE film "Fat"
- Access to computers with Internet

Teaching Strategy:

1) Ask how many students are familiar with the Food Pyramid. As a class, draw the pyramid on a chalkboard or overhead projector and attempt to fill in the categories of foods represented, as well as serving suggestions. For more information, visit the USDA Web site at [http://www.nalusda.gov:8001/py/pmap.htm](http://www.nalusda.gov:8001/py/pmap.htm). Explain to students that the Food Pyramid replaced the "Basic Four" food groups based on research that the USDA and the Department of Health and Human Services review every five years. How many students can name the "Basic Four?" The USDA and HHS also use this research review to publish dietary guidelines for all Americans. To see the guidelines published in 2000, please visit [http://www.smartpicks.com/sp_dietary_guidlines.htm](http://www.smartpicks.com/sp_dietary_guidlines.htm).

2) Discuss with the class the following question "Does the Food Pyramid really lead to good health, or does it detract from it, as some of its critics charge?" For more insight into the controversy, visit the following sites:

- In These Times: Food Pyramid Scheme [http://www.inthesetimes.com/muwakkil2417.html](http://www.inthesetimes.com/muwakkil2417.html)
- WebMD Medical News [http://health.excite.com/content/article/1671.50635](http://health.excite.com/content/article/1671.50635)
Ask students to summarize the objections to the food pyramid, based on their research. Which of these criticisms seem valid? How would they adjust the pyramid, if at all?

3) Although we live in an age where medical researchers provide us much information about healthy habits, more Americans than ever (some 91 million) are now considered obese. What accounts for the rise in obesity? Begin this investigation by encouraging students to examine their eating habits. Ask students to prepare a survey that addresses the following questions:

- How frequently do they eat fast food? What restaurants, and what types of food?
- How frequently do they eat frozen dinners? Frozen skillet meals?

Ask students to administer the survey to family and friends. Compile the results.

4) Obtain nutritional information from three fast food restaurants (from the restaurants or from the Internet). Add it to the data collected in the survey to compute fat, calories, protein, cholesterol, and sodium intake for the most "typical" fast food meals. Compare these values to those for a typical frozen dinner and frozen skillet meal. What are the healthiest options? Does any of these meet the USDA's dietary guidelines? (Daily diet should be 60% carbohydrates, 10% protein, < 30% fat.)

5) A diet rich in heavily processed and/or fast food may be one cause of the obesity epidemic, but other factors (lifestyle, exercise, genetics) come into play as well. What options exist for those who want to lose weight? Brainstorm some weight loss strategies as a class. As an extension, ask students to visit a health store like GNC and count how many products are designed to help people lose weight. (You may also visit online stores like http://www.gnc.com/). What does this tell them?

6) Look carefully at the packaging for these "natural," "herbal," and over the counter weight loss products. Are there any side effects or disclaimers? Do any of these companies encourage exercise in conjunction with these aids or is it a "quick fix?" Establish a chart that will allow you, as a class, to quickly compare the active ingredients, side effects, and package information of different products.

7) Compare and contrast at least three of the fad diets out right now (Atkins, Sugar Busters, The Zone, Jenny Craig, Weight Watchers, etc.). Categories to be compared/contrasted are:

- Premise of diet
- Dietary recommendations of the diet
- Caloric guidelines
- Low or missing nutrients
8) Research gastric surgery, a drastic weight-reduction technique for people who are severely obese. **Show "Fat" video segment on gastric surgery beginning at 29:00.** Have students discuss the pros and cons of such a procedure. Why do some people feel that this will be the only answer to their problem? Learn more about this procedure by visiting the following sites:

- FRONTLINE "Fat": Weight Loss Surgery

- NIH: Gastric Surgery for Severe Obesity

- MDChoice.com: Gastric Surgery

- Medical College of Wisconsin: Gastric Surgery
  [http://healthlink.mcw.edu/article/933126362.html](http://healthlink.mcw.edu/article/933126362.html)

9) **Show "Fat" video segment 3:00 - 13:00.** Ask students to use what they have learned in this lesson to answer the following questions:

- What has led America to a crisis in obesity?
- What are the best ways for America to slim down?

10) **Extension activity:** Have students keep a journal of what they eat for 3-5 days. Have them analyze whether or not they are adhering to recommended dietary guidelines explored in question 1. Where are they deficient? Where are they over the limit? How can they alter their plans so they are following dietary guidelines?