

Obesity Unit: Obesity-related diseases activity

(30 points)

Objective: To research the effects of obesity on the body

Rationale: taken from: <http://www.cdc.gov/healthyweight/effects/index.html>

“The Health Effects of Overweight and Obesity

Research has shown that as weight increases to reach the levels referred to as "overweight" and "obesity,"* the risks for the following conditions also increases:¹

- Coronary heart disease
- Type 2 diabetes
- Cancers (endometrial, breast, and colon)
- Hypertension (high blood pressure)
- Dyslipidemia (for example, high total cholesterol or high levels of triglycerides)
- Stroke
- Liver and Gallbladder disease
- Sleep apnea and respiratory problems
- Osteoarthritis (a degeneration of cartilage and its underlying bone within a joint)
- Gynecological problems (abnormal menses, infertility)

*Overweight is defined as a body mass index (BMI) of 25 or higher; obesity is defined as a BMI of 30 or higher.”

To do: You will take one of the bulleted points above and investigate, through reliable resources, how and why this disease occurs as a result of obesity. Your end product will be in the form of an essay **or** powerpoint presentation to the class on the given date.

Essay format: Typed, double-spaced, one-inch margins all around, title centered two spaces under your name/date/period (which is single spaced). Length: about 2 to 3 pages. Should include how being overweight contributes to this disease, how is the body affected, treatments available, and preventative measures to be taken. Don't forget to include a reference page.

Powerpoint format: Aim for about ten slides that include a title, the four elements listed above (you may need to take more than one slide for an element), a couple of graphics (picture, data), and a reference page. Presentation time: about 5-7 minutes. Ask if class has questions.

Teacher directions and notes:

1. Make a handout similar to above with your specifications. May include a rubric for criteria.
2. You may want to assign students to a topic, or limit the number of people per topic (so that you don't have too many doing the same subject).

3. You may want to assign pairs, to practice teamwork and communication skills.
4. Show a sample powerpoint, if available (on a similar topic).
5. Give class time a few days before due, to check on student progress.

Helpful websites:

“The percentage of children and teens who are overweight has more than doubled in the past 30 years. A total of 17 percent of American children ages 2 to 19 are overweight or at risk of becoming overweight. Like adults, overweight children and adolescents are at risk for a variety of health consequences, including type 2 diabetes, high blood pressure, high blood cholesterol, cardiovascular disease, and asthma. Those facts are changing the way that researchers are approaching obesity itself, as well as its causes and treatment.” (Ferrell, K. (2007), “Reducing Childhood Obesity,” NIH Medline Plus, Issue: Volume 2 Number 3 Pages 26 – 27, retrieved on 6/24/10 from <http://www.nlm.nih.gov/medlineplus/magazine/issues/summer07/articles/summer07pg26-27.html>).

Study showing how physical activity and exercise for children can be beneficial:
<http://www.ncbi.nlm.nih.gov/pubmed/20550840>

Effects of obesity: <http://www.allaboutlifechallenges.org/effects-of-obesity-faq.htm>

National Healthcare Foundation Standards and Accountability Criteria:

- 1.1 Human Structure and Function
- 1.2 Diseases and Disorders
- 2.1 Concepts of Effective Communication
- 2.3 Written Communication Skills
- 8.2 Team Member Participation
- 9.1 Healthy Behaviors
- 11.2 Information Technology