

Human Physiology 110: Wellness Review

Be familiar with the following definitions:

| | | | |
|-----------------|----------------|-----------------|-----------------|
| Wellness | Optimum health | Premature death | Life Expectancy |
| Physical health | Mental health | Social health | Acute Stress |
| Chronic Stress | Stressor | | |

Answer each of the following questions:

1. What points lie at each end of the wellness continuum?
Premature death
Optimum Health
2. What are some situations that could lead to premature death?
Having a low energy level
Frequent illness
Not being able to manage stress affectively
Having poor social relationships
Not making healthy lifestyle choices (eating healthy, exercising, smoking etc)
3. What is wellness?
The state of being in good health.
4. What are 5 factors that affect your life expectancy? Which are controllable and which are uncontrollable?
Unhealthy Lifestyle Choices (controllable)
Poor Environmental Quality (controllable)
Inadequate health care (controllable)
Heredity (uncontrollable)
5. List and explain each of the 3 components of wellness.
Physical Health = the fitness of your body
i.e. sleep, eating habits, activity, stress, use of tobacco, alcohol or drugs etc

Mental Health = the way you feel about yourself, your life and the world around you.
i.e. positive attitude, sense of community/belonging etc

Social Health = the way you get along with friends, family and other people

6. What are the 7 aspects of the wellness wheel? Explain and give an example of each.

Social – having good relationships with those around you (i.e. having good relationships with family, friends and co-workers, participating in events with them, spending time with them etc)

Physical – healthy activities that benefit your body (i.e. eating healthy, exercising, not smoking etc)

Environmental – caring about the environment the water, earth, soil etc (i.e. recycling, picking up litter, conserving water etc)

Career (Occupational) – Contributing to a work environment (i.e. helping a co-worker with their work, liking your job and taking pride in it etc)

Intellectual – using resources to expand your knowledge (i.e. watching the news, reading the newspaper, completing crossword puzzles or word searches, reading a book etc)

Emotional – taking care of yourself (i.e. showering and getting dressed in clothes you like, reducing stress etc)

Spiritual – connecting your mind and body (i.e. yoga, meditating, praying etc)

7. Explain the difference between chronic and acute stress.

Acute : most common type, short term response to something immediate. It is the fight or flight response. The stressor can be real or perceived (i.e. preparing for an exam, illness, work, school etc)

Chronic : is prolonged stress, more than an individual can cope with or control. (i.e. long-term school or work overload)

8. List some examples of physical and emotional stressors.

Physical stressors = illness, accidents, lack of sleep, heat, cold, noise etc

Psychological/Emotional = pressure and deadlines at work or school, problems with loved ones, the need to pay bills, rejection etc

9. What is recommended in terms of physical activity for students your age?

60 minutes a day of moderate to vigorous intensity activity, 2-3 times a week should be vigorous activity, 2-3 times a week should be strengthening your muscles and bones.

10. What is the difference between moderate and vigorous intensity activities?

Moderate intensity you can talk but not sing and your heart rate is increase slightly.

Vigorous your heart rate is increased significantly and you will not be able to sing or talk.

11. How many hours of sleep do students your age need?

8-10 hrs

12. List the 6 problems with our eating habits. What can we do to reduce these problems?

1. Too few fruits and vegetables
2. Too little fiber
3. Too much saturated fat
4. Too many added sugars
5. Too much sodium
6. Too much food overall (i.e. calories)

We can reduce these problems by being more mindful of what we eat and eating a well-balanced diet.

13. What are the 6 nutrients we need in various quantities in your diet.

- Carbohydrates
- Fats
- Proteins
- Vitamins
- Minerals
- Water

14. Given the following nutrition label for Oreo Cookies answer the questions that follow.

Ingredients: SUGAR, ENRICHED FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE {VITAMIN B1}, RIBOFLAVIN {VITAMIN B2}, FOLIC ACID), HIGH OLEIC CANOLA OIL AND/OR PALM OIL AND/OR CANOLA OIL, AND/OR SOYBEAN OIL, COCOA (PROCESSED WITH ALKALI), HIGH FRUCTOSE CORN SYRUP, CORNSTARCH, LEAVENING (BAKING SODA AND/OR CALCIUM PHOSPHATE), SALT, SOY LECITHIN (EMULSIFIER), VANILLIN - AN ARTIFICIAL FLAVOR, CHOCOLATE. CONTAINS: WHEAT, SOY.

| Nutrition Facts | |
|--|---------------------------|
| Serving Size 34g | |
| Servings per Container about 15 | |
| Amount Per Serving | |
| Calories 160 | Calories from Fat 60 |
| % Daily Value* | |
| Total Fat 7g | 11 % |
| Saturated Fat 2g | 10 % |
| Trans Fat 0g | 0 % |
| Cholesterol 0mg | 0 % |
| Sodium 160mg | 7 % |
| Total Carbohydrate 25g | 8 % |
| Dietary Fiber 1g | 4 % |
| Sugars 14g | |
| Protein 1g | |
| Vitamin A 0 % | Calcium 2 % |
| Vitamin C 0 % | Iron 10 % |
| *Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs: | |
| | Calories: 2,000 2,500 |
| Total Fat | Less than 65g 80g |
| Sat Fat | Less than 20g 25g |
| Cholest | Less than 300mg 300mg |
| Sodium | Less than 2,400mg 2,400mg |
| Total Carb | 300g 375g |
| Fiber | 25g 30g |

- i. What is a serving size? **34g**
- ii. Does this serving size tell you how many oreos you can eat? **No unless you weighed the oreo to see how many g 1 is**
- iii. How many grams of fat would be in two servings? **14g**
- iv. Why doesn't the amount of saturated and trans fat add to the total fat? **Because the other types of fat are not required to be broken down on a food label yet. So the missing amounts include the various types of unsaturated fat in the food.**
- v. How many carbohydrates are in one serving? **25g**
- vi. What % of your calories come from fat? **$7g \times 9cal/g = 63/160 = 39\%$**
- vii. What ingredient is found in the greatest quantity in this cookie? **sugar**