

**Activity 3.2.5: PLTW Nutrition – Client Report for Jeffrey Wilson**

**Client Name**: Jeffrey Wilson

**Health History (including any specific health goals)**:

Jeffrey Wilson is a 22-year-old college senior who has not worried much about his weight in the past four years. He has never been involved in sports and he rarely exercises. He would prefer to walk from his campus apartment to class, but he is often running so late, he just takes his car. Jeffrey spends countless hours a day in the library or in his apartment at his computer. He reports snacking constantly, although many times he does reach for fruit or nuts. Jeffrey is allergic to seafood. He will cook most nights of the week, but he sticks mainly to pasta, hamburgers, and frozen pizza. He does not have time to prepare side dishes or vegetables.

Jeffrey has a strong family history of cardiovascular disease. His father died of a stroke at age 39 and his maternal grandmother has battled high blood pressure for years. His mother runs marathons and is in perfect health. His uncle just found out that his routine colonoscopy revealed some cancerous polyps. There is no family history of diabetes.

Recent lab work revealed that Jeffrey’ LDL cholesterol is 162 and his HDL cholesterol is 39. His triglycerides are 180. His average resting blood pressure was 130/80.

Jeffrey is bothered by his classification as obese and wants to make a change. He would like to lose at least 50lbs. He needs help to design a healthy strategy for getting his health back on track.

**Height**: \_\_\_\_\_\_\_5’ 11”\_\_\_\_\_\_\_\_ **Weight:** \_\_\_\_\_\_\_274lbs\_\_\_\_\_\_\_\_\_\_\_

**BMI**:

* Calculate Jeffrey’ BMI based on his height and weight and describe the implications of this number.

**Activity Level: BMR and TDEE (Output)**:

Jeffrey only walks to campus about once or twice a week. He used to play basketball with his friends on weekends, but now he becomes too winded to keep up.

* Compute Jeffrey’ BMR.
* Discuss the activity factor used in the Harris-Benedict Equation and calculate TDEE.

**Food Intake (Input)**:

Jeffrey completed a food diary for one week. Analysis of his food choices revealed the following results:

|  |  |
| --- | --- |
| Average calories consumed per day | 3780 |
| Average fat consumed per day | 90g |
| Average saturated fat consumed per day | 60g |
| Average carbohydrates consumed per day | 455g |
| Average protein consumed per day | 40g |
| Average sodium consumed per day | 3,520mg |

Jeffrey reports eating 1-2 servings of fruits or vegetables per day. Jeffrey does not drink coffee, but he drinks about 4-5 sodas per day. He goes out drinking with his friends about twice a week and usually drinks a six pack of beer.

Jeffrey eats on campus every day for lunch. Most days he skips breakfast, so lunch is normally a big meal. He is a not a picky eater and he likes trying new foods, he just does not have time.

**Calorie Deficit or Surplus (Compare Inputs and Outputs)**:

* Compare calories consumed versus calories expended.
* Describe what will happen to Jeffrey’ weight over the next month if he continues the same eating patterns. Show your work.

**Overall Assessment**:

* Discuss overall implications of BMI and any energy imbalance on overall health.
* Analyze food choices
  + Is the client getting enough of each of the designated food groups?
  + How does consumption of fats, carbohydrates, proteins and sodium compare to recommended values?
* Propose ways to bring the energy input and output in line with Jeffrey’ health goals. Describe final recommendations to improve Jeffrey’ overall health and meet his fitness goals. How should Jeffrey alter his eating habits and his activity? Link your recommendations to his personal health history *and* his family history.