

**Activity 3.2.5: PLTW Nutrition – Client Report for James Clifton**

**Client Name**: James Clifton

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

James is a 24-year-old law student at the local university. A competitive swimmer throughout college, James has always been in good health. Now that his schedule has become so hectic, he has limited time for exercise other than walking to class. He eats most meals outside of the house and admits to snacking and drinking caffeinated beverages to stay up to study.

The patient describes a family history of heart disease in both his mother and his father. His father takes medication for both high blood pressure and cholesterol and his mother has had angioplasty to open a blocked artery in her heart. His uncle on his mother’s side developed Type II diabetes at age 40. There is no family history of cancer.

Recent lab work revealed that James’s LDL cholesterol is 130 and his HDL cholesterol is 45. His average blood pressure was 135/85.

James feels sluggish and he is looking for ways to improve his quality of life. He wants an assessment of his current health and he would like recommendations for how he can integrate exercise and healthy eating habits back into his busy schedule.

**Height**: \_\_\_\_\_\_\_6’ 2”\_\_\_\_\_\_\_\_ **Weight:** \_\_\_\_\_\_\_235lbs\_\_\_\_\_\_\_\_\_\_\_

**BMI**:

* Calculate James’s BMI based on his height and weight and describe the implications of this number. Take James’s athletic history into account.

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

James reports going to the campus pool about once a week for a 30-45 minute swim. He walks to class each day, but his apartment is not far from the main law buildings or the library. James spends 4-5 hours a night at the library studying or writing. About once a month, he meets his father to play golf. They play 18 holes, but use a golf cart to maneuver around the course.

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

**Food Intake (Input)**:

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

|  |  |
| --- | --- |
| Average calories consumed per day | 3024 |
| Average fat consumed per day | 81g |
| Average saturated fat consumed per day | 40g |
| Average carbohydrates consumed per day | 355g |
| Average protein consumed per day | 40g |
| Average sodium consumed per day | 3,056mg |

James reports eating 2-3 servings of fruits or vegetables per day. He reports drinking 4-5 cups of coffee per day as well as 2-3 caffeinated sodas, and 2-4 glasses of water per day.

James reports eating fast food at least once a day.

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

* Compare calories consumed versus calories expended.
* Describe what will happen to James’s 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 James’s health goals. Describe final recommendations to improve James’s overall health and meet his fitness goals. How should James alter his eating habits and his activity? Link your recommendations to his personal health history *and* his family history.