

Diabetes, Nutrition, and Wellness Project

Overview

Nutrition is directly correlated with the health and well-being of the general population. A person's diet (by definition: food and beverages regularly consumed) can be a contributing factor to the prevention, maintenance, and/or treatment of certain diseases.

One disease that is on the rise globally, and in the United States, is diabetes. According to the World Health Organization, the number of people with diabetes has risen from 108 million in 1980 to 422 million in 2014! Of that figure, 29.1 million in the United States have been diagnosed. The effects of diabetes can be devastating to those living with it, and organizations such as The Center for Disease Control, The World Health Organization, and The American Diabetes Association have raised millions of dollars with the vision of stopping the rapid increase of those diagnosed.

Recent estimates project that as many as 1 in 3 American adults will develop Type II Diabetes by 2050 unless we take steps to Stop Diabetes (American Diabetes Association). Though there are some contributing factors that people cannot control such as genetics and age, there are proven risk factors that people can control. Factors such as maintaining a healthy weight, consuming a balanced diet, and participating in an active exercise regime have been proven to prevent, delay, and manage the Type II Diabetes.

Objectives of this assignment:

- ANW 2.2 Analyze variations in daily dietary requirements of each nutrient in order to meet nutrition needs across the life span and for special dietary needs- **In this case, the nutritional needs to help both prevent (Type II) and manage Diabetes (I and II).**
- ANW3.2 Differentiate among various nutrition guidelines for different age groups and dietary needs (e.g., children, elderly, pregnant women, athletes, diabetics; individuals who are lactose-intolerant, require a gluten free diet, and/or have food allergies)- **In this case, the dietary needs of someone living with Diabetes.**
- ANW 3.3 Develop and create healthy meals and snacks address individual and family resources, activities, and preferences (e.g., time constraints, financial and equipment limitations, extent of physical activity, dietary preferences)- **In this case, someone who is eating to prevent risk factors that could lead to on-set diabetes (Type II mainly), or eating to manage Diabetes.**
- ANW 7.1 Examine potential career paths, trends, and job market opportunities related to nutrition, food, and wellness. **In this case, those related to helping patients prevent, diagnose, and manage Diabetes.**
- Develop an understanding of the correlation between nutrition/wellness and diabetes prevention and maintenance.
- Take part in awareness and prevention education of this rapidly increasing disease if one chooses to through the American Diabetes Association.

Directions: Use the following approved websites to conduct your research, and answer the questions following. Be sure to use your own words, and do not copy the website verbatim. Please take the time to read through the information, process it, then record your answer using your own words.

<http://www.diabetes.org>

<http://www.who.int/mediacentre/factsheets/fs312/en/>

http://www.who.int/diabetes/global-report/WHD2016_Diabetes_Infographic_v2.pdf?ua=1

<http://www.cdc.gov/diabetes/data/statistics/2014statisticsreport.html>

<http://www.cdc.gov/diabetes/prevention/prediabetes-type2/index.html>

<http://www.diabetes.org/diabetes-basics/type-2/>

<http://www.healthline.com/health/type-2-diabetes>

There are two parts to this project:

Part 1: Research _____/25

Compile your research by answering all of the questions below (#'s 1-17)

Points will be given based on thoroughness, accuracy, and originality of responses to items 1-17.

Part 2: Online Information Poster _____/25

On Monday, you will create a Glogster with a partner summarizing all of your information, with the purpose of educating others about Type 2 Diabetes and Nutrition.

Points will be given based on accuracy and quality of information, proper grammar, spelling, and punctuation, graphics, and attractiveness.

Please note: You will work alone on Part 1- Research, but may work with a partner on Part 2- Online Information Poster.

1. In your own words, define the different types of diabetes.

Prediabetes:

Type 1 Diabetes:

Type 2 Diabetes:

Gestational Diabetes:

Of the various types of diabetes, which is known as the type that there is no known prevention?

2. What is insulin, and what role does it play in our bodies?

3. What internal organs are most associated with the management of insulin and blood sugar?

4. Explain what blood sugar and glucose levels are.

5. What foods play a large role in raising blood sugar?

For the purpose of this project, we will focus on Prediabetes and Type 2 Diabetes.

6. What are the symptoms of Type 2 Diabetes?

7. What is the correlation between heart disease/heart issues and diabetes?

8. What are the risk factors (contributing factors) for Prediabetes and Type 2 Diabetes? Be detailed.

9. Analyze the risk factors above. In your opinion, write a paragraph explaining why you think the number of people diagnosed with Type 2 Diabetes has risen so drastically over the last few decades?

10. What serious health issues can Type 2 Diabetes lead to, especially if not managed?

11. What is the most common type of medical treatment for a Type 2 Diabetic?

12. Type 2 Diabetes in children is a growing problem. What are the common risk factors for children, though complex?

13. What are the symptom of Type 2 Diabetes in children that a caregiver should look out for?

14. Go to www.stopdiabetes.org, and click on the link Get The Facts, then click on the Facts and Myths tab. Read through all of the Facts and Myths. Discuss 5 pieces of information that you did not know and/ or found to be surprising.

15. Go to www.stopdiabetes.org, and click on the link Get the Facts, then click on The Numbers Are Shocking tab. Which statistics were most surprising to you? Which make the biggest impression in your opinion?

16. Go to www.diabetes.org and click on the Food and Fitness tab → What Can I Eat → Making Healthy Food Choices. Scroll down to each of the topics. All of the information to the bold headed items below can be found within this area on the website.

a) Grains and Starchy Vegetables: Read through the information and summarize the recommendations made.

Next, Discuss how the information relates to what we have learned about carbohydrates during our class lectures and labs.

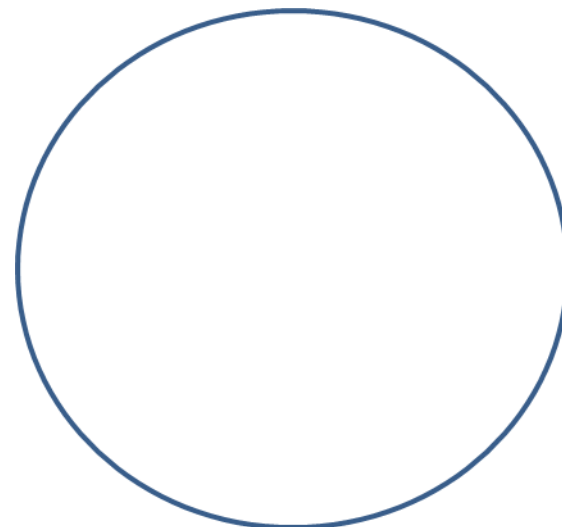
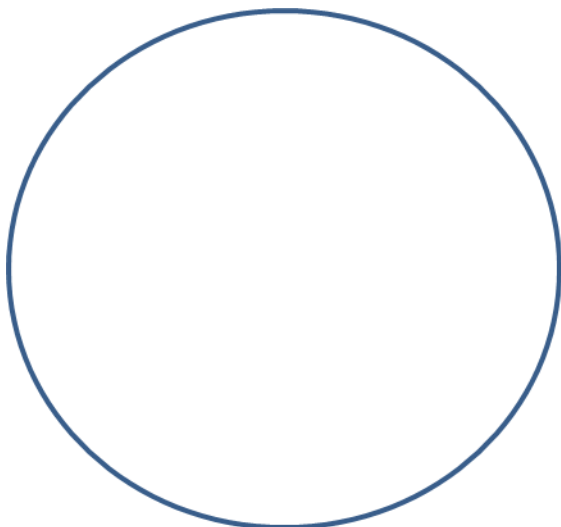
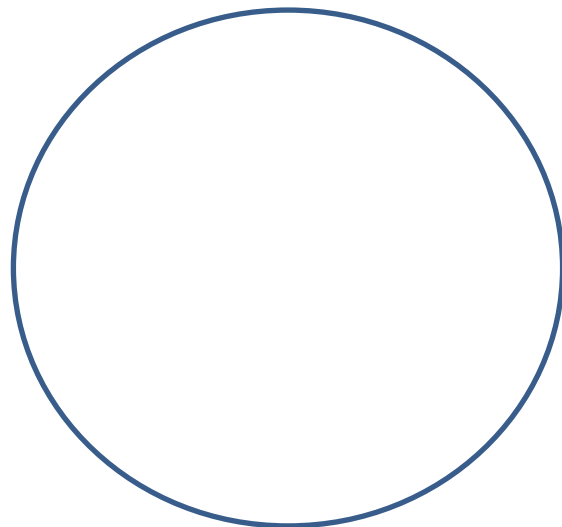
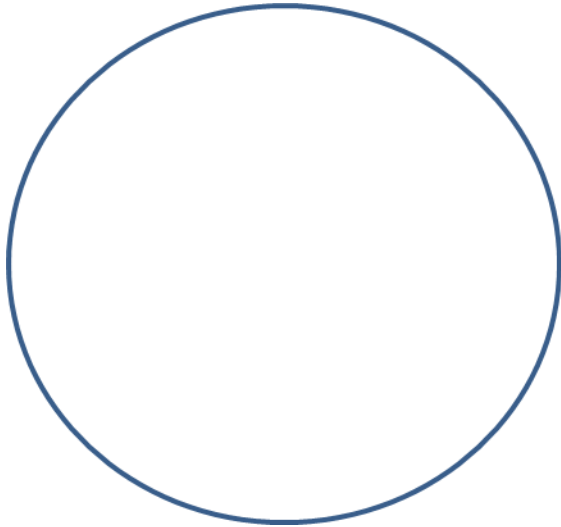
b) What Can I drink: What drinks are recommended to consume and which to avoid?

c) Diabetes Superfoods: Read through the list of foods. Why was this list created? What do you notice about this list of food?

d) Glycemic Index- Read about the Glycemic Index, and summarize what it is, and how it is helpful to a diabetics diet (If you cannot find it within the tabs, utilize the search box).

- What foods are low on the glycemic index?
- What foods are high on the glycemic index?

e) Create Your Plate Feature- Create an appealing breakfast, lunch, dinner, and snack for a diabetic client using this feature. Draw the plates below, and write in the foods and percentages on the plate.



f) If you were a dietician or nutritionist counseling a new patient with diabetes, what advice could you give them about the types of foods, beverages, and meal structure, as well as topics such as dining out, portion control, and still enjoy favorite treat meals.

17. Read through the information within the Food and Fitness Tab, such topics as Carb Counting, Sugars, Fats, Making Carbs Count, etc. Relate 5 pieces of information to what we have learned in class.

What I Read	How It Applies to What I Have Learned in Class