Module 8. Healthy Eating With Diabetes

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be better able to:

1. Define the key elements that define a healthy diet for diabetes;
2. Indicate the basics of carbohydrate counting versus calorie counting;
3. Recall the meaning of glycemic index, glycemic load, and food insulin index and their importance in blood glucose management;
4. Relate how sugar and sugar substitutes fit in to a diet plan; and
5. Define how to interpret food labels and portion sizes.

Post-test/Rationale

1. Which of the following nutrients is not an essential part of a balanced diabetes diet:

   A. Carbohydrates
   B. Alcohol***
   C. Fats
   D. Protein

Correct Answer: B
Macronutrients that provide energy for routine body functioning and activity consist of carbohydrates, fats, and protein.

2. What should people eat to enhance the good gut bacteria that reduce inflammation?

   A. Fiber (oats)***
   B. Protein (soy)
   C. Omega-3 fats (fish oils)
   D. Sugar (brown sugar)

Correct Answer: A
Although research is ongoing, it is clear that fiber enhances the abundance of good bacteria in the gut that helps to reduce inflammation.

3. In which of the following foods are unhealthy trans fats most likely to be found:

   A. Fruits and vegetables
   B. Nuts and seeds
   C. Baked goods***
   D. Pasta
Correct Answer: C
Trans fats are found in the most abundance in products like crackers, cookies and baked goods.

4. Which macronutrients affect blood glucose levels at some time point after meals?
   A. Carbohydrates
   B. Protein
   C. Fat
   D. Carbohydrates, protein, and fat***

Correct Answer: D
Carbohydrates, protein, and fat are the dietary macronutrients that provide energy to the body and have the capacity to alter blood glucose levels after consumption.

5. What lowers the glycemic index (GI) of a particular food?
   A. Lower acidity and storage at room temperature
   B. Cooking foods instead of eating them raw
   C. Higher acidity, cold storage, and undercooking***
   D. Allowing fruits to ripen fully (like bananas)

Correct Answer: C
In general, overcooking will increase the GI of a particular food. Highly acidic foods like vinegar can lower the GI of foods when consumed together, and also slows gastric emptying. Finally, cold storage can increase the resistant starch content of food, thereby lowering the GI.

6. What does that food insulin index (FII) take into account that GI and GL do not?
   A. Amount of carbohydrates in a food
   B. Total insulin release required to handle a food***
   C. Fiber content of a food
   D. Postprandial spike in blood glucose caused by a food

Correct Answer: B
The FII rates insulin responses to common foods based on studies done on healthy adults without diabetes.

7. Which of the following products is not a sugar alcohol used in “sugar free” products:
   A. Stevia***
   B. Xylitol
   C. Sorbitol
   D. Lactitol
Correct Answer: A
Stevia is considered a natural sweetener that is derived from the plant Stevia rebaudiana.

8. What effect does caffeine intake have on insulin action in people with diabetes?

A. It lowers insulin resistance and blood glucose levels
B. Coffee and caffeine have no impact on insulin or blood glucose levels
C. It can make people more insulin resistant and raises blood glucose***
D. Only coffee impacts insulin action, but caffeine alone does not

Correct Answer: C
According to referenced studies, caffeine can potentially increase insulin resistance and raise blood glucose levels in some instances.

9. Which item on food labels has been newly added to ease concerns about sugar intake?

A. Total carbohydrates
B. Fiber
C. Added Sugars***
D. Sugars

Correct Answer: C
Added sugars have recently been included on food labels in order to make it easier to understand the difference between added white sugars and added fruit sugars.

10. Which one of the following statements is false related to portion sizes:

A. Some foods are best when eaten only in small quantities
B. A portion may be more or less than a standard serving
C. People who are unknowingly given larger portions eat more, but are not always fuller
D. Most people are able to conceptualize portions sizes very well***

Correct Answer: D
It has been shown in studies that most individuals cannot understand how serving size compares with portion size.