



FOOD CHOICES AND TYPE 2 DIABETES

Objective:

Students will be able to analyze the link between food choices (specifically, refined carbohydrates and lack of fiber) and type 2 diabetes.

Students will use listening, writing, reading, and speaking skills to demonstrate their knowledge of the link between food choices and type 2 diabetes.

Grade Level: 7-12

Resources:

- [Get to Know Carbs](#) - American Diabetes Association
- [Preventing, managing, and even reversing type 2 diabetes](#) - Physicians Committee for Responsible Medicine.

Procedure:

1. Share the following information with students:

The Centers for Disease Control and Prevention estimates that by the year 2050, one out of three adults will have Type 2 diabetes. Type 2 diabetes is highly linked to our diet and a lack of exercise.

According to the American Diabetes Association: "For optimal health, adults need to eat 25 to 30 grams of fiber each day. Most Americans do not consume nearly enough fiber in their diet, so while it is wise to aim for this goal, any increase in fiber in your diet can be helpful. Most of us only get about half of what is recommended."

According to the Physicians Committee for Responsible Medicine, "Studies show that eating a diet high in fatty foods can cause fat particles to build up inside our cells. These fat particles interfere with insulin's ability to move sugar out from our bloodstream and into our cells. Instead of powering our cells, the glucose remains in our bloodstream, eventually leading to diabetes. A plant-based diet is low in fat, which allows insulin to function properly."

2. Distribute copies of the "[Get to Know Carbs](#)" article from the American Diabetes Association. Have students partner-read or read independently.



3. Have students identify the three main types of carbs. Have them list three facts learned about each type of carbohydrate.
4. As a class, list favorite foods that contain fiber. (Fiber is only found in plant foods.)
5. Have students explore [this article](#) from the Physicians Committee for Responsible Medicine to explore the link between fatty foods and type 2 diabetes.
6. Discuss the article as a class.

Assessment:

Have students answer the following questions using the PCRM article:

- a. What type of diet has been shown to be highly effective in managing type 2 diabetes?
- b. Why is a plant-based diet helpful in controlling type 2 diabetes? (higher fiber intake, natural instead of refined sugars, lower in saturated fat)
- c. How does saturated fat contribute to higher blood sugar levels?

Additional Resources for Further Research:

Number of Americans with Diabetes Projected to Double or Triple by 2050:

<https://www.cdc.gov/media/pressrel/2010/r101022.html>

World Health Organization - Diabetes Facts:

<https://www.who.int/en/news-room/fact-sheets/detail/diabetes>

Diabesity-Treating Symptoms Rather than Causes:

<https://nutritionstudies.org/diabesity-treating-symptoms-rather-causes/#cite-ref-1>