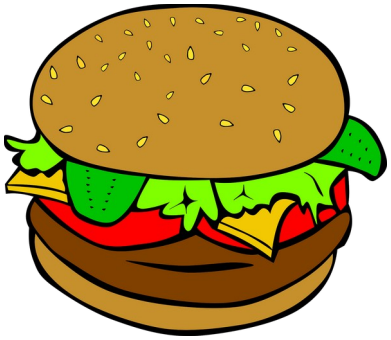
New Jersey Agriculture in the Classroom

The Big Mac and the Bee

Overview: If there were no bees, could you still eat a Big Mac? In this lesson, students break down a Big Mac into its parts and learn which ingredients are dependent upon pollination by bees.

Grades: 3-5



Objectives: The students will be able to:
Explain which of the seven ingredients of a Big Mac are dependent on pollination by bees.
Explain why bees are important to the food sources of people.

Materials:
The Big Mac and the Bee powerpoint presentation
Big Mac commercial featuring ingredients
*The presentation and commercial are available to download at njagclassroom.*org, NJAITC Lessons, Animal Agriculture

Procedure:
Show students the Big Mac commercial so they are familiar with the ingredients of a Big Mac.

Show the powerpoint presentation *The Big Mac and Bee,* either as a whole class on a smart board or in small groups or individually on a device.

As they continue through the presentation, the students will be asked if statements are true or false. By following the links for the true or false buttons, they will learn which ingredients are dependent on or affected by the health of our bee population. This will help students to understand where their food comes from as well as the impact bees have on it.

By the end of the presentation, students should recognize that although we would still have food without bees, it would not be as plentiful, diverse, or nutritious.

Evaluation:
Ask students in small groups or individually to make a Venn diagram or a chart that illustrates which ingredients of a Big Mac are dependent on bees.

New Jersey Learning Standards:

Science

3-LS2.C: Ecosystem Dynamics, Functioning, and Resilience When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die.

3-LS1.B: Growth and Development of Organisms Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles.

Nutrition

Understanding the principals of a balanced nutritional plan (e.g., moderation, variety of fruits, vegetables, limiting processed foods) assists in making nutrition-related decisions that will contribute to wellness.