

Good Eats: Tomatoes

About *Good Eats*

Good Eats explores the origins of ingredients, decodes culinary customs, demonstrates recipes, and reminds students about safe cooking tips. Students will learn about shopping, chopping and preparing food, in its finest and most entertaining form.

About This Episode

In this episode, students will learn all about tomatoes: the different types, what it takes to be the perfect tomato and how to stuff and cook a tomato. They'll also take a serious look at serrated knives, a strange and delicious sandwich and a tomato sauce that almost isn't!

Vocabulary

Antioxidant
Cross pollinate
Fragrant
Heirloom
Hydrocarbon
Hybridize
Ripening
Serrated

Discussion Questions

1. Ask students how many of them like tomatoes. How many different foods can they name that contain tomatoes? How many different sauces and condiments can they name that contain tomatoes?
2. There are officially six different types of tomatoes. Ask students if they can name the different types and if they know the differences between them.
3. There has been a longstanding debate over whether tomatoes are a fruit or a vegetable. Before watching the episode, survey students to see what they think. Have them share justifications for their answers.
4. Before watching, ask students to predict how many pounds of tomatoes the average American eats each year. (The answer is 17 lbs.)

Extended Activities

Seeing Red (Science, Consumer Science)

The United States Department of Agriculture (USDA) recognizes six official color designations for tomatoes. Have students recall the color designations and descriptions from the episode. Designations and descriptions are as follows: Green (green); Breaker (some red, tan or pink visible); Turning (10-30% tan, pink or red); Pink (30-60% pink or red); Light Red (60-90% pink or red); and Red (more than 90% red). Have each student bring in a tomato from home. Using the USDA descriptions, have student groups identify the designations of their tomatoes. Then, using the process that Alton did in the episode, place any tomato that is not designated as "red" into a bag with a banana for one week. Have students observe any changes and report back to the class. Have the class draw conclusions based on their results.

The Perfect Tomato (Consumer Science, Language Arts, Marketing)

Have students use what they've learned in the episode and their own prior knowledge to list all of the wonderful things that a tomato offers to the world. They should include nutritional benefits,

taste, flexibility, ability to hybridize and facts about growing tomatoes in their list. Then have them imagine that they've been hired by the American Tomato Growers Union to write a 30-second commercial to persuade people to purchase and/or eat more tomatoes. Their commercial should have a target audience, i.e., parent, teenager, child, restaurant owner, etc. and should include at least three benefits of eating tomatoes. Extension: Have students draw storyboards for and/or film their commercials.

I Want to Ketch-up!! (Consumer Science, Language Arts)

Divide students into groups. Challenge each group to list as many foods, sauces and condiments they can think of that have tomatoes as an ingredient. Some ideas are: Ketchup, Pizza Sauce, Spaghetti Sauce, Chile, Sloppy Joe Mix, Steak sauce, Hot Sauce, Tomato Juice, Tomato Soup and Salsa. Ask students how many of them use ketchup to "spice up" their food. Have them finish this sentence, "I put ketchup on _____." Share answers. Then have students use the Food Network recipe below to make their own ketchup. Note that you will need access to a heat source, a food mill and a pot, in addition to the ingredients listed below.

- 3 tablespoons olive oil
- 3 cups coarsely chopped onion
- 3 garlic cloves, minced
- 3 pounds ripe plum tomatoes, coarsely chopped
- 1/3 cup distilled white vinegar
- 1/2 cup dark corn syrup
- 1/4 teaspoon ground cloves
- 1/4 teaspoon ground allspice
- 1 teaspoon mustard seeds
- 1/2 teaspoon ground celery seeds
- 1 tablespoon salt
- 2 teaspoons freshly ground black pepper

In a large heavy pot heat the olive oil over moderate heat and cook the onion until golden brown, stirring occasionally, about 8 to 10 minutes. Add the garlic and cook for another minute. Add the tomatoes, vinegar, corn syrup, cloves, allspice, mustard seeds, celery seeds, salt and pepper stirring to combine. Bring the mixture to a boil; reduce heat and simmer, stirring occasionally, for 1 hour. Pass the mixture through a food mill into a bowl and return to the pot. Bring the mixture back to a simmer and cook until very thick, stirring occasionally, about 45 minutes. Allow the ketchup to cool. The ketchup can be sealed in sterilized jars and kept indefinitely.