
ESSENTIAL QUESTION: How did the people living in colonial London Town preserve and conserve available food sources to sustain their diet?

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Grade Level: Elementary (Grade 4/5)

COMMON CORE STATE STANDARDS:
CCSS.ELA-Literacy.RI.4.1
Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

CCSS.ELA-Literacy.RI.4.3
Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

CCSS.ELA-Literacy.W.4.2.b
Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.

CCSS.ELA-Literacy.W.4.9
Draw evidence from literary or informational texts to support analysis, reflection, and research.

MARYLAND CONTENT STANDARDS: Describe how scarcity and the availability of economic resources determine what is produced and the effects on consumers.

INSTRUCTIONAL OBJECTIVES:
- Determine what food preservation processes were used in London Town in the eighteenth century.
- Explain why food conservation was important in the eighteenth century.

MATERIALS:
- RS#01: Preservation or Conservation?
- RS#02: Waste Not, Want Not: Guide to Colonial Food Preservation
- RS#03: Food Cards (cut and placed in envelope for each student group)
- RS#04: Colonial Cuisine Organizer
- RS#05: Colonial Cuisine: Examples of 18th Century Recipes
- RS#06: Waste Not, Want Not: Conservation Practices in the 18th Century Kitchen Exit Ticket

PROCEDURE:
1. Arrange students in working groups of no more than 5 students per group.
2. As a drill or anticipatory set, ask students, “How many of you throw food away after you are finished eating?” Students may respond in a variety of ways, but it is very common to find that most students discard a majority of their lunch or dinner after they are finished eating. Explain that this wasn’t the case in London Town in the 1700s. All families practiced some form of conservation and preservation of food items.
3. Read the following: “In eighteenth-century London Town, people practiced both preservation and conservation of their food sources. Specifically, most proteins needed to be conserved because they could not be preserved for long periods of time. Fruits and vegetables could be preserved in some way during their growing season to sustain people’s diets.”

4. Distribute or project RS#01, Preservation or Conservation? Define the terms, “preservation” and “conservation,” and discuss the necessity of these processes in colonial towns (i.e. lack of refrigeration and demand for high-quality food).

5. Introduce students to the materials, and review the group work portion of the lesson.

6. Distribute RS#02, “Waste Not, Want Not: Guide to Colonial Food Preservation,” with an envelope containing the two food labels and randomly sorted food cards (created from RS#03, Food Cards), to each student group.

7. Students will discuss whether each food could be “preserved” or “conserved” and then place the corresponding food card into either a “Foods for Preservation” or “Foods for Conservation” pile. Encourage students to reference RS#02, “Waste Not, Want Not: Guide to Colonial Food Preservation,” for information on preserving. This activity can be modeled using a document camera or similar viewer.

8. Students will realize that many foods were preserved and that each process of preservation was related to the type of food, i.e. salting and smoking were related to proteins and drying, and pickling and jellying were related to fruits and vegetables.

9. Next, reveal when the opportunities for conservation occurred. This is accomplished by looking closely at the cooking methods and ingredients used at London Town. (See Foodways at Colonial London Town for more information.)

10. Distribute the copies of RS#04, Colonial Cuisine Organizer. Students will view examples of colonial recipes from different social classes and discover examples of conservation and preservation of food sources as evidenced in the recipes.

11. Distribute the copies of RS#05, Colonial Cuisine: Examples of 18th Century Recipes. Highlight the fact that these recipes are examples from the three social classes in colonial London Town: the lower sorts (poor and servants), the middling sorts (middle class), and the gentry (the wealthy). It is very important that students understand that conservation and preservation was practiced among all social classes. You may want to assign different student groups different recipes to speed up the activity.


TECHNOLOGY:

- A document camera can be used to model the food sorting activity.
- Websites for further research:
  - Food Timeline, examples of colonial diets, food conservation: http://www.foodtimeline.org/foodcolonial.html
  - Colonial Williamsburg, examples of food conservation: http://www.history.org/Foundation/journal/Autumn04/food.cfm

DIFFERENTIATED INSTRUCTION:

- One of the simplest ways to differentiate this lesson would be to incorporate more teacher modeling.
- If students are not familiar with primary source analysis, it is highly recommended that the teacher work directly with students – especially during the time that the students need to read the recipes.
- Vocabulary might also be a concern. Words that might be difficult for students to comprehend can be replaced with synonyms within the documents, or you can provide a glossary for the students along with the documents that they need to complete the lesson.
ASSESSMENT:

- Students should successfully complete RS#06, Waste Not, Want Not: Conservation Practices in the 18th Century Kitchen Exit Ticket provided for this lesson.
- Re-teaching the concepts “preservation” and “conservation” might be necessary if students have difficulty completing the exit ticket.
RS#01: Preservation or Conservation?

**Preservation or Conservation?**

- **Preserve:** to prevent food from decaying
- **Conserve:** to use food carefully in order to prevent loss or waste

Your materials needed for this part of the lesson are on your tables.
2. Inside the envelope you will find two category cards labeled "Preservation" and "Conservation." You will also find smaller cards labeled with food items.
3. In your group, determine whether each food can be preserved or conserved based upon the information presented in "Waste Not, Want Not: A Guide to Colonial Food Preservation."
**Waste Not, Want Not: Guide to Colonial Food Preservation**

**Drying** – Removing water from food helps to preserve it by preventing the growth of microorganisms (bacteria) and decay. For thousands of years, people dried food using the sun, air, and fire.

**Salting** – When salt is applied to food, it removes the moisture that causes decay and creates an environment where many microorganisms and fungi cannot survive. In colonial times, meat that was not eaten fresh or preserved by smoking was usually salted, or “cured.” Salt, brown sugar, saltpeter, and red and black pepper were common staples in dry-cure recipes.

**Smoking** – The tradition of smoking meats has changed little over the last several centuries. Smoke-curing techniques varied from farmer to farmer and were a matter of great personal pride. Most people used a similar process. Smoking meat required a lot of work, and the process often took many weeks. Typically, the first step, salting, began immediately after the annual livestock slaughter, usually in mid-winter when it was cold and the meat would not spoil. Wooden salting racks or troughs were sterilized with boiling water and set on the smokehouse floor. The hams were laid flat on the racks, with their cut sides up. They were sprinkled with salt or saltpeter and then left to absorb the salt for a day. After this initial salting, the hams were salted again. Then, depending on the weather, they were left in the salt to cure for three to five weeks. After this curing period, the hams were washed with hot water. Pepper was rubbed into the cut ends to seal them. The hams were then hung in the smokehouse for a few days to allow air to circulate around all sides of the meat. Finally, the hams were smoked for additional days using various woods, which were chosen for the flavor they imparted to the meat.

**Pickling** – Pickling is a technique that preserves food in an acidic environment and prevents the growth of bacteria. Fruits, vegetables, and meat were pickled by soaking them in casks (containers shaped like barrels) filled with brine, a salt-water solution. Some people simply stored their food items directly in the brine. But the brine was so salty that the pickled food was often then soaked in water to remove some of the salt before being eaten. After the items were removed from the water, some cooks would transfer the pickled food to a vinegar solution and store it in a cool place. Pickled fruits and vegetables can last for years.

**Jellying** – Jellying is the process of preserving fruit in sugar syrup. Usually the fruit is mashed and boiled in sugar and liquid and then jarred and put away.
RS#03: Food Cards

Instructions: Cut out the cards and distribute to each group in an envelope.

Food Labels

Foods for Preservation

Foods for Conservation
RS#03:  Food Cards

**Food Cards**

<table>
<thead>
<tr>
<th>corn</th>
<th>beans</th>
</tr>
</thead>
<tbody>
<tr>
<td>pork</td>
<td>potatoes</td>
</tr>
<tr>
<td>beef</td>
<td>fish</td>
</tr>
</tbody>
</table>
**RS#03: Food Cards**

**Food Cards**

<table>
<thead>
<tr>
<th>eggs</th>
<th>cheese</th>
</tr>
</thead>
<tbody>
<tr>
<td>milk</td>
<td>wheat</td>
</tr>
<tr>
<td>turtle</td>
<td>chicken</td>
</tr>
</tbody>
</table>
RS#03: Food Cards

Food Cards

<table>
<thead>
<tr>
<th>cabbage</th>
<th>cucumbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>sugar</td>
<td>beets</td>
</tr>
</tbody>
</table>
RS#04: Colonial Cuisine Organizer

<table>
<thead>
<tr>
<th>Recipe</th>
<th>Example of Conservation</th>
<th>Example of Preservation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pease Soup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pickled Cucumbers in Slices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To make Umble Pye</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egg and Bacon Pie to Eat Cold</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Ragoo of Sweetbreads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Butter a Crab or Lobster</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**RS#04: Colonial Cuisine Organizer Answer Key**

<table>
<thead>
<tr>
<th>Recipe</th>
<th>Example of Conservation</th>
<th>Example of Preservation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pease Soup</td>
<td>Uses a hough, or shin, of beef, which is not very good for eating other than to flavor soups</td>
<td></td>
</tr>
<tr>
<td>Pickle Cucumbers in Slices</td>
<td></td>
<td>Recipe for preserving cucumbers by pickling them in salt and vinegar</td>
</tr>
<tr>
<td>To make Umble Pye</td>
<td>Made from the liver, kidneys, stomach or intestines of a deer. There are only one to two of each of these organs in each animal, so they are rather rare.</td>
<td></td>
</tr>
<tr>
<td>Egg and Bacon Pie to Eat Cold</td>
<td></td>
<td>Uses bacon, which is salted pork</td>
</tr>
<tr>
<td>A Ragoo of Sweetbreads</td>
<td>Uses the glands of animals, which cannot be preserved and have to be used fresh. Since each animal has one or two of these glands, they are more of a luxury and used sparingly.</td>
<td></td>
</tr>
<tr>
<td>To Butter a Crab or Lobster</td>
<td></td>
<td>Uses anchovies, small fish that have been preserved in salt and oil</td>
</tr>
</tbody>
</table>
RS#05: Colonial Cuisine: Examples of 18th Century Recipes

Colonial Cuisine: Examples of 18th Century Recipes

Recipes for the “Lower Sorts”

Pease Soup

Boil a Hough\(^1\) of Beef, with a Pound and a Half of Pease \(\text{[peas]}\), till they are all dissolved, then strain it and put in it whole onions and spice, salt it to your Taste, brown some Butter and Flour and mix with it. You may put boil’d Sellery \(\text{[celery]}\) cut in Dice in it, if you please.

From Elizabeth Cleland, \textit{A New and Easy Method of Cookery}, 1755

Pickle Cucumbers in Slices

Slice your Cucumbers pretty thick, and to a dozen of Cucumbers slice in two or three good onions, and strew on them a large handful of salt, and let them lie in their liquor twenty-four hours; then drain them, and put them between two coarse cloths; then boil the best white-wine vinegar, with some cloves, mace, and Jamaica Pepper in it, and pour it scalding hot over them, as much as will cover’em all over; when they are cold, cover them up with leather, and kept them for use.

From E. Smith, \textit{The Compleat Housewife: or, Accomplished Gentlewoman’s Companion}, 1739

Recipes for the “Middling Sorts”

To make Umble\(^2\) Pye \(\text{[Pie]}\)

Take the Umbles \(\text{[liver and kidneys]}\) of a Dear \(\text{[deer]}\) and boil them tenderly, and when they are cold, chop them as small as Meat for minc’d Pyes, and shred to them as much Beef-Suet \(\text{[beef fat]}\), six large Apples, half a Pound of Sugar, a Pounds of Currants \(\text{[type of berries]}\), a little Salt, and as much Clove, Nutmeg and Pepper powder’d as you see convenient; then mix them well together, and when they are put into the Paste, pour in half a Pint of Sack \(\text{[wine]}\), the Juice of two Lemons and an Orange; and when this is done, close the Pye, and when it is baked, Serve it hot to the Table.

From Richard Bradley, \textit{The Country Housewife and Lady’s Director}, 1732

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\(^1\) A “Hough” of beef is located on the shin of the beef cow. It has a high amount of connective tissue is not desirable for a roast. Meat from the Hough is used to flavoring soups and stews.

\(^2\) Umbles are usually any animal’s liver and kidneys; they can also be the stomach or intestine. When referenced in recipes, it usually refers to the innards of a deer. Other names for the umbles include garbage, humbles, and innards.
Egg and Bacon Pie to eat Cold

Steep a few thin slices of bacon all night in water to take out the salt, lay your bacon in the dish, beat eight eggs, with a pint of thick cream, put in a little pepper and salt, and pour it on the bacon, lay over it a good cold paste, bake it a day before you want it in a moderate oven.

From Hannah Glasse, *The Art of Cookery, Made Plain and Easy*, 1774

Recipes for the “Gentry”

A Ragoo [Ragu, a meat-based sauce] of Sweetbreads

Take your Sweet-Breads [animal glands] and skin them, and put some Butter in the Frying-pan, and brown it with Flour, and put the Sweet-Breads in, stir them a little; and turn them; then put in some strong Broth and Mushrooms, some Pepper and Salt, Cloves and Mace [a brown spice]; let them stew half an Hour, then put in some forced Meat Balls, some Artichoke Bottoms cut small and thin; make it thick and serve it up with sliced Lemon.

From A. Bettesworth and C. Hitch, *The Complete Family-Piece*, 1737

To Butter a Crab or Lobster

Boil your Crabs or Lobsters; and when they are cold, take all the Meat out of the Shels and Body; mince that of the Claws small before you put it together, and add two or three Spoonfuls of Claret [wine], a very little Vinegar, and a Nutmeg grated; then let it boil up till it is thorough hot; then put in some melted Butter, with some Anchovies [type of small fish preserved in salt and oil] and Gravy, and thicken it with the Yolk of an Egg or two; when it is very hot, put it into the Shels again, and stick it with Toasts.

From Mary Eales, *The Compleat Confectioner*, 1742

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3 When cooking in the 18th century, no part of the animal really went to waste. You can find many receipts (recipes) using any and all parts of the animal. This receipt is for what is called the Sweetbreads, which are any of the glands of an animal, but most receipts are referring to the thymus and or the pancreas of a lamb or calf. *Foodways at Colonial London Town* is a Teaching American History grant partnership program between Anne Arundel County Public Schools, the UMBC Center for History Education, and Historic London Town and Gardens. Materials may be reproduced under educational fair-use guidelines.
RS#06: Waste Not, Want Not: Conservation Practices in the 18th Century Kitchen Exit Ticket

Examples of how people in the 18th century conserved their food supplies

Were there any differences among the social classes in how much preservation and conservation techniques were used? Why do you think that was?

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