FARM BUREAU NORTH CAROLINA

Ag in the Classroom | Going Local

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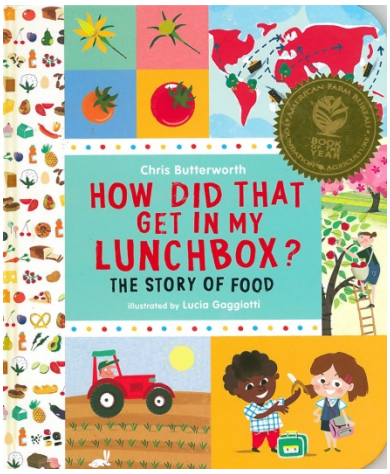

August 2016 Book of the Month
How Did That Get In My Lunchbox?
The Story of Food
By: Chris Butterworth

Many children think their lunches came from the grocery store, and cannot answer how their produce, and lunch ingredients got there. In the book, *How Did That Get In My Lunchbox? The Story of Food*, author Chris Butterworth takes a simple snapshot of a lunch box: sandwich, fruit, vegetables, juice, and a chocolate chip cookie, and traces the ingredients for each item back to the farmers that grew them. He even explains how the produce is cleaned, processed and packaged before it arrives to the grocery store. The informative text and colorful illustrations provide real life answers about each item's trip to our plate; ultimately tracing everything back to its origin—the farm.

Fun Facts:

- In Latin, onion translates to 'large pearl.' Ancient Egyptians would bury onions with their pharaohs and presented baskets of onions as funeral offerings. [1]
- President Richard Nixon banned soup from being served at state dinners because he always seemed to dribble it on himself at the table! [1]
- Astronaut John Glenn was the first person to eat in space. His meal was semi-liquid applesauce, spaghetti, and roast beef. [1]
- Pickling (preserving foods in vinegar or brine) is one of the oldest methods of food preservation, dating back to around 2400 B.C. [2]
- The earliest humans learned that cooking their food made the food easier to chew and digest, and in the process, enables us to get more energy with less effort. [3]
- In 1886, Justice Horace Gray ruled the tomato to be considered a vegetable instead of a fruit saying, "tomatoes are the fruit of the vine, just as are cucumbers, squashes, beans and peas. But in the common language of the people…all these vegetables…are usually served at dinner in, with, or after the soup, fish, or meat, which constitute the principal part of the repast, and not, like fruits, generally as dessert." [4]
- Around 9000 B.C., humans began to settle and grow their food instead of moving from place to place hunting animals and gathering plants for food. [5]
- Ketchup was created by the Chinese as a fish sauce called *ke-tsiap.* The name gradually changed to ketchup as people began to add other ingredients instead of fish. In the 18th century, people began adding tomatoes. [6]

Activities

Sandwich Bag Composting [7]

You'll need:

- A small sandwich Ziploc bag
- Straw (can cut in half)
- Paper or cardboard egg carton (or newspaper), cut into small pieces
- Vegetable scraps, cut into small pieces

Add the vegetables and egg carton pieces together inside the Ziploc bag (the smaller the pieces, the quicker everything starts to compost). Add a couple of tablespoons of water to the mixture. Zip the bag to the end, but leave a space for the straw to be half in/half out of the bag. The straw provides air to the mixture, and helps the scraps break down into compost. Mush the contents of the bag daily, and add water when needed. After a few weeks, you will have compost! Students can then use the compost to plant seeds in the classroom, or add the compost to a school garden to grow more fruits and vegetables.

The Potato Chip Challenge [8]

Students will design packaging for one potato chip that will protect the chip from breaking when sent through the mail. Provide various packing materials for the students to use when building their structure, such as cotton balls, tape, cardboard, tissue paper, etc. They may not alter the chip in any way, but must design a structure to contain the chip. Once the structures are complete, they can be mailed back to the students. Before the packages have arrived, allow the students to hypothesize what will happen to the chips. Which structures were the sturdiest and why? Once all of the packages have arrived back to the students, allow the students to score each package using the following system:

- 10 points – like new, perfect
- 7 points – slightly damaged; cracked but still in one piece
- 5 points – broken in 2-5 pieces
- 1 point – broken into more than 10 pieces; crumbled

Allow the students to compare the potato chip with produce, such as apples or squash. What packing methods would work on these items, and how do they differ from the potato chip packaging?

Desktop Growing [9]

Allow students to choose which fruit/vegetable they want to use for the experiment: a pineapple, a green onion, or a sweet potato.

For the pineapple: Make sure the top leaves of the pineapple are nice and green, and don't look dried out. Remove the top by twisting the crown (leaves) and base away from each other. Then,

peel off the bottom leaves until you have a nub about an inch long. Place the nub in a glass or jar filled with water so that just the nub is submerged in water. Change the water every few days. Within a month, you will start to see roots, and the top will have grown into a nice full plant.
For the green onion: Trim off the bottom (root end) of your onion, leaving about an inch of green growth. Place the roots down in a glass or jar of water. Change the water every few days. Within a few days, they will start growing long green stems again.
For the sweet potato: Choose a sweet potato that is firm, without any soft spots, wrinkles, or signs of rot. Poke four toothpicks into the sides of the sweet potato, spacing evenly so they form around the potato. Place into a jar filled with water so that the bottom half of the sweet potato is submerged. The toothpicks should provide support so the entire sweet potato doesn't fall in the jar. Change the water weekly. Within a few days, you will see new shoots appear on the top of the sweet potato. Roots will appear a few days later.
Create a weekly chart for the students to record the changes to their plants. They may choose to draw pictures of their plant's progress, or write sentences or short phrases. Students can also predict what they expect to happen the following week. [10]

Food-A-Pedia:
https://www.supertracker.usda.gov/foodapedia.aspx
The Food-A-Pedia is a tool that shows the nutritional information for different foods. Have students write down the foods they ate for lunch and record the nutritional values for each. How many calories were consumed? How much protein? How much dietary fiber? etc.

Links:
- Fruit/Vegetable Harvesting Machines – a compilation video.
  https://www.youtube.com/watch?v=9-zSt-1PvPg
- Inside a bakery – a video showing bakery work
  https://www.youtube.com/watch?v=iUuKstAWof4

Sources:

1. http://communitytable.parade.com/169137/toriavey/did-you-know-10-surprising-food-history-facts/
2. http://www.history.com/news/hungry-history/pickles-throughout-history-2
3. http://www.natgeoeat.com/#/meat/1
4. http://www.vegetablefacts.net/vegetable-history/history-of-tomatoes/
5. http://www.localhistories.org/farming.html
6. http://www.localhistories.org/condiments.html
7. http://www.howweelearn.com/compost-experiment/
8. http://teachers.egfi-k12.org/potato-chip-challenge/
9. http://modernparentsmessykids.com/the-kitchen-experiment-garden-growing-plants-from-food-scraps/
10. http://homeguides.sfgate.com/grow-sweet-potato-vine-water-39519.html