Broccoli & Cauliflower

History of Broccoli & Cauliflower

**Broccoli** is a member of the family Brassicaceae, also known as the cabbage family, along with Brussels sprouts, cabbage, cauliflower, kale and radishes. We eat the flower buds of the plant, before they bloom; the stalks are also edible, but have a tougher texture. The plant’s primitive ancestor is native to Asia Minor, but a significant amount of its development occurred in southern Italy.

**Cauliflower** is also in the Brassicaceae family, with a head comprised of flower buds. It is believed that it was cultivated in Egypt as early as the 4th century B.C. and has a parallel history to that of broccoli. Cauliflower has a compact, typically white head, that is covered in many layers of green leaves.

Fun Facts

- Broccoli was developed from the flower of wild cabbage.
- Broccoli and cauliflower are referred to as inflorescent (arrangement of flowers on a stem) vegetables, along with artichokes.
- White cauliflower heads lack color because they have undeveloped chlorophyll.

Reading Corner

Children’s Books
- *Monsters Don’t Eat Broccoli*, by Barbara Hicks
- *The Boy Loved Broccoli*, by Sarah A. Creighton
- *The Vegetables We Eat*, by Gail Gibbons

Harvest of the Month provides resources for the cafeteria, classroom, and community to promote the use of local, seasonal foods.

Broccoli & Cauliflower

Benefits

- Broccoli is an excellent source of vitamin C and the mineral postassium; it is a good source of B9 (folic acid) and dietary fiber. Similar to other members of Brassicaceae, broccoli contains beta-carotenes.
- Cauliflower is an excellent source of vitamin B9 (folic acid) and C, as well as the mineral potassium.

Science | Root, Fruit or Other?

Supplies needed:
Multiple fruits and veggies (refer to list below), brown paper bag or basket and signs (reading: root, stem, leaves, bud, flower, fruit, seed).

Directions:
- Designate a place in the room for each plant part. You can spread signs out around the classroom or in an outdoor space, or have the class gather in a circle and place a sign for each plant part within the circle.
- Review the role of each plant part.
- Have students, individually or in teams, pull out an item from the bag, decide what part of a plant it is, and place it in the appropriate spot.
- Review all of the items as a class to make sure they were sorted correctly.

Plant Parts:
- **Roots**: absorb water and nutrients from the soil, store food, and anchor the plant.
- **Stems**: carry water and stores food.
- **Leaves**: make food.
- **Buds**: turn into flowers.
- **Flowers**: attract pollinators.
- **Fruits**: hold seeds and are tasty to attract animals.
- **Seeds**: grow new plants.

Source: Upper Valley Farm-to-School.

Note: For an extended, standards-based version of this lesson plan, please visit Upper Valley Farm-to-School’s Harvest Lessons: http://www.uvfts.org/fts-tools/classroom/harvest-lessons/

Art | Forest of Broccoli and Cauliflower Mural

Supplies needed:
Butcher paper, paint and raw broccoli and cauliflower.

Directions:
- Cut various sizes of broccoli and cauliflower in half and place in tubs at each table.
- Have a plate for each color of paint being used.
- Instruct students to wiggle broccoli and cauliflower in paint, flat side down, then print on paper.
- Students can draw or paint in other elements, such as soil, additional plants, animals, the sky and the sun.

Source: GMFTS.

Classroom Connections

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<table>
<thead>
<tr>
<th>Plant Parts:</th>
<th>Fruit or Vegetable:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roots</td>
<td>Beets, Parsnips, Rutabagas</td>
</tr>
<tr>
<td>Stems</td>
<td>Celery, Rhubarb</td>
</tr>
<tr>
<td>Leaves</td>
<td>Herbs, Kale, Lettuce</td>
</tr>
<tr>
<td>Buds</td>
<td>Broccoli, Cauliflower</td>
</tr>
<tr>
<td>Flowers</td>
<td>Chamomile, Nasturtium</td>
</tr>
<tr>
<td>Fruits</td>
<td>Blueberries, Summer Squash, Tomatoes, Winter Squash</td>
</tr>
<tr>
<td>Seeds</td>
<td>Beans, Corn, Wheat</td>
</tr>
</tbody>
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