



BEETS & RUTABAGA

IN THE CLASSROOM

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

www.nhharvestofthemonth.org

History of Beets & Rutabagas

Beets are native to the shores of North Africa, Europe and the Middle East; they were first cultivated by the ancient Romans. In the 19th century, when it was found that beets could be converted into sugar, the crop's commercial value significantly grew. Beets are a member of the *Amaranthaceae* family, along with chard, quinoa and spinach. This root vegetable comes in an array of colors, including: deep red, red and white striped, orange, golden yellow and purple.

Rutabagas are a cross between the Savoy cabbage and the turnip; this root vegetable was developed by the Scandinavians during the Middle Ages. Rutabagas are members of the *Brassicaceae* family, also known as the cabbage family, along with Brussels sprouts, cabbage, cauliflower, kale and radishes.

Reading Corner

Children's Books

- » *Tops and Bottoms*, by Janet Stevens
- » *Eat Rutabagas*, by Jerry Apps
- » *The Turnip*, by Morgan Pierr

Sources: *The Visual Food Encyclopedia*, *The Encyclopedia of Healing Foods*, GMFTS

Fun Facts

- Betanin is the pigment that gives beets their deep purple-red color; it is known for its cancer-fighting properties.
- Beets can serve as a substitute for coffee: finely slice, dry, roast and grind into a powder!
- The English name rutabaga is derived from the Swedish term for the vegetable: *rotabaggar*.

VARIETIES OF BEETS & RUTABAGAS:



Detroit Dark Red



Early Wonder Tall Top



Forono



Chioggia



Touchstone Gold



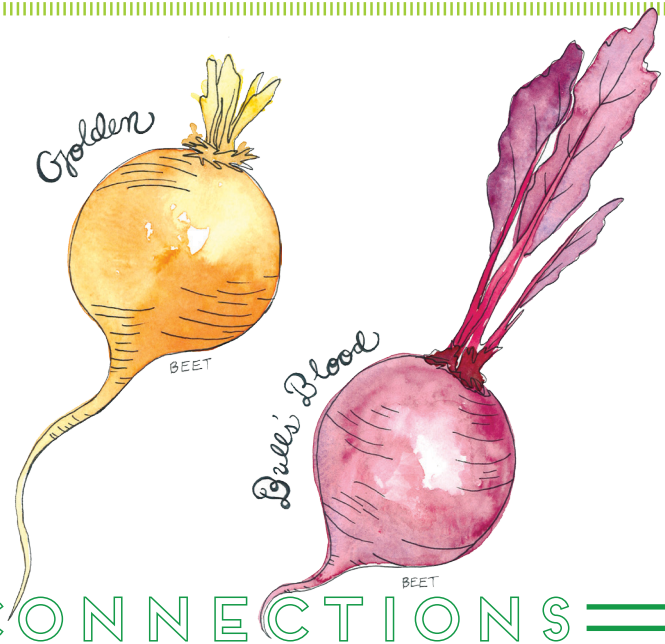
Joan Rutabaga

BEETS & RUTABAGA

IN THE CLASSROOM | PAGE 2

Benefits

- Beet leaves are an excellent source of potassium and a good source of vitamin B9 (folic acid) and the mineral magnesium. Beet roots are an excellent source of vitamin A and the mineral potassium; they are a good source of vitamin C, B2 (riboflavin) and magnesium.
- Rutabagas are an excellent source of the mineral potassium and a good source of vitamin C.



CLASSROOM CONNECTIONS

English | Beets & Rutabagas Venn Diagram

Supplies needed:

Multiple varieties of beets, rutabagas, knife, Venn diagram handout

Directions:

1. Pre-cut some beets and rutabagas in half, for viewing. For tasting, cut into strips to taste raw and/or roast before class to taste cooked.
2. Using the five senses (sight, touch, taste, smell and hearing), have the students compare and contrast beets and rutabagas.

Source: GMFTS

Art | Painting with Beet Juice

Supplies needed:

Paintbrushes, paper, containers for water and paint, cooking pot, blender, strainer and a diversity of beet varieties

Directions:

1. Cook beets, blend, strain and mix with water to create paint.
2. Beet juice stains easily, so have children wear smocks, if possible.
3. This a a great opportunity to teach students about shading: the more water you add, the lighter the paint becomes.

Source: GMFTS

HARVEST LESSONS

For extended, standards-based lesson plans, visit:
www.nhharvestofthemoth.org/harvest-lessons

Math | Measuring Beets & Rutabagas

Supplies needed:

Various-sized beets and rutabagas, measuring devices (ruler, string, scale), handout for recording measurements

Directions:

1. Place a few beets and rutabagas at each table.
2. Measure the length, width, diameter, circumference, radius and weight.
3. Have students record their findings; as a class, make a chart that compares and contrasts beets and rutabagas.

Source: GMFTS

Science | Sprout a Beet

Supplies needed:

Beets, bowls or saucers, sand, soil, water, knife, handout for tracking growth in various conditions

Directions:

1. Cut the root so that half an inch remains, then cut the stems (if still attached) so they're half an inch long.
2. Set up at least three bowls or saucers with one medium in each: a half-inch layer of soil, a half-inch layer of sand, or a quarter-inch of water.
3. With the root facing down, put one beetroot into each set-up.
4. Place all of the beetroots in a window with good light. Soon, leaves will begin to sprout from the tops of the beets.
5. Have students observe the growth of the leaves over time for each of the three mediums.

Source: Upper Valley Farm-to-School, GMFTS