Lesson and Activity Suggestions for 3rd - 5th

Yep, You Eat That!

We have talked a lot about vegetables, but we have one last bit of information for you this summer. Many of the vegetables you eat are roots, bulbs, or even flowers! Yep!

Vegetables are classified into three major edible groups:

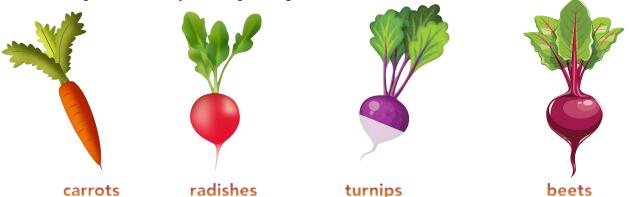
- 1. **Underground** parts, such as roots, tubers, and bulbs
- 2. Above ground parts, such as stems, leaves, and flowers
- 3. Fruits and seeds, such as usually unripe fruits and seeds.

We are going to look more closely at the first two because they are more surprising.

Underground Edibles

Roots, tubers, and bulbs are known as geophytes ("earth plant"): plants that have fleshy underground parts that originate from roots, stems, or leaf bases.

Roots or "taproots" can become swollen and colorful, or remain quite drab, but they are tasty! Examples of edible roots include carrots, radishes, turnips and beets. Circle the root vegetables that you are growing this summer.



Native Americans from the western areas of North America used the "Lewis bitterroot" for food and medicinal purposes. They could be collected and dried to last for winter meals when food was scarce. The name was given to them by Lewis and Clark because they were introduced to them during their famous expedition across America in the early 1800s.



Tubers are underground plant organs that store important nutrients. Many have considered the potato (a tuber) to be one of the top five plants that have changed the world. (Interested in how? Read the article at https://www.smithsonianmag.com/ history/how-the-potato-changed-the-world-108470605/?

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Today, the potato ranks fourths a major food staple globally. Originating in the Andes, there is evidence that wild potatoes were eaten 13,000 year ago and have been cultivated for at least the last 7,000 years!

Two other tubers have been included in the important plants that have changed the world. Manioc (cassava root) and sweet potato are two such plants. You have probably not heard of manioc because it is not common in our area, but it is a staple food for over 500 million people. Are you growing any tubers this summer? If yes, circle them.



Bulbs are defined as modified underground leaf shoots with modified scales or buds. We eat lots of these buds. Examples are onions, garlic, leeks, and shallots. Circle any bulbs you are growing to eat this summer.



Information gathered from the U.S. Department of Agriculture at www.fs.fed.us

shallot

Onions are part of the genus (a larger plant group) *Allium*, which has been an important food source since before recorded time! Besides providing an aromatic flavor, this bulb has medicinal properties as well. Onions release sulfur compounds when their cells are ruptured. This is what causes our eyes to water when we chop onions! Fun fact: if you submerge or hold an onion in water while slicing it — or chill or freeze it prior to slicing — the effects of its powerful vapors will be lessoned.



broccoli

Above Ground Edibles

Cauliflower

Leaves and stems have been an important part of the human diet for thousands of years. A few that we still eat today are asparagus (stem), lettuce (leaves), artichoke (leaves), and celery (leafstalk). Circle any you are growing this summer.



Believe it or not, there are many edible **flowers**. Some are obvious flowers, but there are several we eat often that are kinda in disguise. Examples are cauliflower, Brussel sprouts, and broccoli. We harvest and eat these prior to the flowering; we are eating the flower buds or "curds." Circle any edible vegetable flowers you are growing this summer.



Brussel sprouts

Fun Fact: Some obvious flowers that are edible are violets, dandelions, and roses! So, the next time you are throwing together a salad, top it with some of these beautiful, colorful flowers. Or, try this rainbow salad recipe from Giora Stuchiner at https://thefeedfeed.com/thenonchalantcook/rainbow-radish-and-edible-flower-salad-with-blood-orange-vinaigrette





INGREDIENTS

- 1 (5 oz) package butterhead lettuce
- 1 (5 oz) package arugula
- thinly sliced watermelon radish
- 1 thinly sliced purple radish
- 1 thinly sliced green radish
- 3 rainbow carrots, shaved into ribbons, then shocked in an ice
- bath to set curl 1/2 cup thinly sliced snap peas
- 1/4 cup red cabbage, shredded
- 2 shallots, cut into rings
- 2 blood oranges, segmented
- 1/2 cup blood orange juice 1/2 cup extra virgin olive oil
- 1 tablespoon red wine vinegar
- 1 tablespoon dried oregano
- 1 tablespoon honey
- Salt and pepper, to taste for garnish Edible Flowers

DIRECTIONS

FOR THE MARINATED SHALLOTS

In a jar combine the olive oil, red wine vinegar and oregano. Add the shallots and leave to marinate on the counter for at least 2 hours.

FOR THE VINAIGRETTE

Remove the shallots from the olive oil and set aside. Combine the orange juice, olive oil, honey and a pinch of salt and pepper in a jar and shake well until thick and smooth. Taste and adjust seasoning.

TO ASSEMBLE THE SALAD:

In a very large bowl, toss the lettuce and arugula with about 1/4 cup of the vinaigrette. Add half the radishes, carrots, peas, shallots and orange segments and toss.

Transfer to a platter. Arrange the remaining ingredients to create a colorful finish. Drizzle more vinaigrette and garnish with edible flowers.