



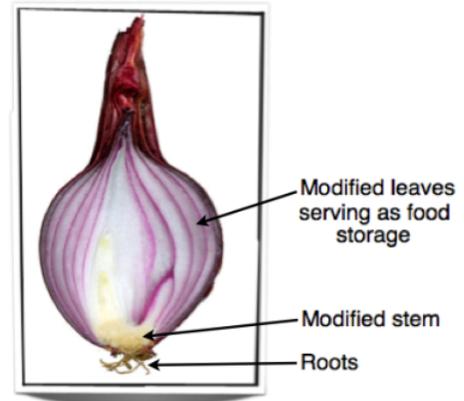
# ONION & LEEK TALKING POINTS

## 2. Onion & Leek History

- Onion species natively occur in temperate climates of the northern hemisphere, except for a few species occurring in Chile, Brazil and tropical Africa.
- Because onions are small and their tissues leave little or no trace, there is no conclusive opinion about the exact location and time of their birth. Many archaeologists, botanists, and food historians **believe some species of onions originated in central Asia (e.g. *allium cepa*), while others (*allium canadense*) originated in North America**
- Bulbs from the onion family are thought to have been used as a food source for millennia.
- In Bronze Age settlements, traces of onion remains were found alongside date stones and fig remains that date back to 5000 BC. However, it is not clear if these were cultivated onions.
- Workers who built the Egyptian pyramids may have been fed radishes and onions.
- In ancient Greece, athletes ate large quantities of onion because it was believed to lighten the balance of the blood. Roman gladiators were rubbed down with onions to firm up their muscles.
- In the Middle Ages, onions were such an important food that people would pay their rent with onions, and even give them as gifts. Doctors were known to prescribe onions to relieve headaches, coughs, snakebite and hair loss.
- Onions were taken by the first settlers to North America, where the **Native Americans were already using wild onions (*allium canadense*) in a number of ways, eating them raw or cooked in a variety of foods**. They also used them to make into **syrops, to dress and heal wounds, and in the preparation of dyes**.

## 3. How do onions and leeks grow?

- Onions and leeks are plants that grow close to the ground. They are also cool season crops that can tolerate some light frosts.
- We usually harvest them to **eat the onion bulb (which are modified leaves that store the plant's food) and leek "stems" (because botanically the edible part is also fleshy leaf bases)**.
- The best way to grow big-bulb, European-type onions is from transplants. These are thin, young onion seedlings, and the optimum planting size is when they're just the size of a pencil. Onions will grow in practically any kind of soil but, one that's rich in decayed organic matter and humus and drains well is best
- You can start leeks easily indoors, like onions, and set them out as transplants, or you can sow the seeds right in the garden in a wide row. Leeks like lots of fertilizer. Seeds start slowly, so don't let any weeds overwhelm them.
- Northern gardeners should get underway in the early spring. Remember to keep the young plants watered well. If you don't use a wide row, you can set out the young



transplants in the bottom of a shallow furrow. As the plants grow, gradually fill in the furrow with soil. This is one way to get nice, white stems of four to six inches.

If you plant early in the spring you should get plenty of leeks a few weeks before the first fall frost.

- We harvest onions and leeks before they make a flower stalk (see image on the right). When the plant makes the flower stalk, bees are important pollinators to ensure seeds are produced.



#### 4. What season do we pick onions and leeks?

- In South Dakota most onion farmers grow storage onions. **The best time to harvest storage onions** is when about 75% of the tops are bent over, which happens **in South Dakota in the fall**.
- If you have a garden in South Dakota, you could also grow sweet onions which can be harvested in late summer.
- For onions, the top three onion producing areas are: Washington, Idaho-Eastern Oregon, and California.
- Leeks are quite tolerant of the cold. Gardeners in warmer climates will heavily mulch the plants with straw in the fall and continue to harvest into the winter. In South Dakota the winters get too cold for that to work well much past Thanksgiving. **During the fall, harvest leeks by pulling them up** and strip off the outer most couple leaves, all the way down to the roots.

#### 5. Why should we eat onions and leeks?

- **Remember everyone should eat between 5-9 servings of fruit and vegetables daily.** One serving of onions and leeks is 1/2 cup, which would fit in the palm of the average third graders palm.
- 1 cup of raw onions provides the following:
  - An excellent source of **vitamin C** which helps the body heal cuts and wounds and helps lower the risk of infection.
  - A good source of **fiber** which keeps the digestion system working and healthy.
- Onions are very low in Saturated Fat, Cholesterol and Sodium. It is also a good source of Dietary Fiber, Vitamin B6, Folate, Potassium and Manganese, and a very good source of Vitamin C.
- 1 cup of raw leeks provides the following:
  - An excellent source of **vitamin B6** which supports brain health.
  - A good source of **manganese** which supports bone health.
- Leeks are low in Sodium, and very low in Saturated Fat and Cholesterol. It is also a good source of Dietary Fiber, Vitamin B6, Iron and Magnesium, and a very good source of Vitamin A, Vitamin C, Vitamin K, Folate and Manganese.

### Sulfides in onions?

- Onions, like garlic, are members of the Allium family, and both are rich in sulfur-containing compounds that are responsible for their pungent odors and for many of their health-promoting effects. A wide variety of allyl sulfides are found in onion, including the four major diallyl sulfides. Onions are an outstanding source of polyphenols, including the flavonoid polyphenols. Within this flavonoid category, onions are a standout source of quercetin.

## 6. How do you pick good onions and leeks?

- **Onions** should be **firm with no soft spots** and have a consistent color.
- **Leeks** should have **long, white stems** with a few roots still attached. Avoid leeks with wilted leaves.
- Onions can be kept at room temperature for a few weeks. Leeks can be stored in the refrigerator for 5-10 days.

### Fun Facts

- China produces over 20 million tons of onions!
- Around 9.2 million acres of onions are harvested annually around the world
- Libya has the highest consumption of onions in the world with around 30kg per person consumed annually
- In the middle ages onions were not just used as food, but as medicine to relieve headaches, snake bites and to cure hair loss
- Pilgrims took onions to America on the Mayflower only to discover that the Native Americans already used them extensively for food, clothing dyes and even as toys
- Onion skins have been used in some dyes for things like wool.
- You cry when onions are cut because some compounds are released that irritate the lachrymal glands in the eyes which causes tears to be released.

### Resources

<http://www.onions-usa.org/all-about-onions/history-of-onions>  
[http://www.garden.org/foodguide/browse/veggie/onions\\_care/493](http://www.garden.org/foodguide/browse/veggie/onions_care/493)  
<http://www.colostate.edu/Depts/CoopExt/4DMG/Garden/Amazing/whatpart.htm>  
<http://www.garden.org/articles/articles.php?q=show&id=491>  
[http://www.garden.org/foodguide/browse/veggie/onions\\_getting\\_started/494](http://www.garden.org/foodguide/browse/veggie/onions_getting_started/494)  
[http://pubstorage.sdstate.edu/AgBio\\_Publications/articles/B579.pdf](http://pubstorage.sdstate.edu/AgBio_Publications/articles/B579.pdf)  
<http://courses.nres.uiuc.edu/HORT100/oldsite/3473-01.htm>  
<http://igrow.org/gardens/gardening/grow-me-grow-me-leeks/#sthash.SG5Undm4.dpuf>  
<http://www.thestu.co.uk/article/15-interesting-facts-about-onions#sthash.ZPojKZAw.dpuf>  
<http://nutritiondata.self.com/facts/vegetables-and-vegetable-products/2501/2#ixzz3AxmL3xjO>  
<http://nutritiondata.self.com/facts/vegetables-and-vegetable-products/2470/2>  
<http://www.whfoods.com/genpage.php?tname=foodspice&dbid=45>