



## Cucumber, a.k.a Cuke

**Scientific Name:** Cucumis Sativus (genus/species). **Plant Family:** Cucurbitaceae (Cucurbits). This plant family also includes gourds, pumpkins, squash and melons. Can be identified by palmate or five-lobed leaves, male and female flowers on the same plant and a vining habit.

**History and Fun Facts:** Originated in India and cultivated for over 3,000 years. The cucumber has also been mentioned in the bible.

- “Cool as a Cucumber” - first termed by John Gay’s Poem “New Song on New Similies in 1732. The cucumber is 95% water and the inside can be 20 degrees cooler than the air outside of the fruit.
- 5,200,000 lbs of pickles are consumed annually in the U.S. ~ 9 pounds per person.
- Florida is the largest producer in the U.S. and China was the largest producer in 2010
- World record weight for largest cucumber is 59 pounds.

**Culinary/ Nutrition:** Used as a vegetable in the kitchen although it is a fruit by botanical definition.

- Usually paired with intense herbs and spices to cool the palate.
- Good source of fiber, Vitamins C & K, Minerals Potassium, Manganese, Copper.  
1cup sliced: kcal: 14 Pro: <1g Fat: 0g Carb: 3g Fiber: 1g Sod: 2mg

**Bitterness and Burping:** Causes are related to Stress during growth– low moisture, high temperatures, or poor soil nutrients. Natural chemical- cucurbitacin also thought to cause burping after consumption. Pickling will not remove the bitterness.

**Varieties:** Slicing, Pickling and Burpless. EarthDance - Diva & Lemon used for slicing. Diva is considered one of the less bitter varieties.

**Seed start/ Planting:** Most varieties are seeded and need pollination. Greenhouse varieties are not pollinated and only produce female flowers that will create seedless fruit. Can be grown all season from spring to fall however, peak time is May through August. Space seeds 2 inches apart and ½ inch depth. Start seeds indoors 2-4 weeks before the last frost. Seeds germinate best in soil temperature of 70 degrees, slowly at 60 degrees and not at all less than 50 degrees. Transplant 5-6 inches apart.

**Days to Maturity:** 48- 65 days. Companion plants: radishes, peas, beets, carrots, dill, marigolds, nastiums, sunflowers. Avoid: tomatoes and sage

**Optimal growing conditions:** Warm, well drained loamy soil and pH of 6.5. Provide 1 to 1 ½ inches of water per week. Mulch to keep soil optimal temperature, moisture in and weeds out.



## Disease & Pests:

Cucumber Beetle- adults feed early on seedling and lay eggs. Larvae feed on the roots and when mature they will return to foliage for feeding. They can be striped (exclusive to cucumbers) or spotted, 3 generations per season, vector for disease:

Bacterial Wilt- wilted leaves   Gummy Stem Blight   Cucumber Mosaic Virus- green/yellow mottling



Pest Management: Biological- not reliable due to very few natural predators in our area. Physical- early row cover (remove during flowering for pollination), select varieties with low cucurbitacin (a natural chemical in the plant that stimulates beetle and larval feeding), Chemical- EarthDance uses Neem Oil

**Harvest Method:** Pickling- 1 to 1 ½ inches long, Slicing- 6 to 7 inches long. Cut from vine using a sharp knife or pruners leaving 1 inch of the stem attached to the cucumber. The stem end will not rot as fast in storage if a small stem is left.

**Storage:** Cucumbers prefer to be stored in cool (55 degrees) and moist conditions. A perforated plastic bag helps with keeping moisture. Expected life in refrigeration is a few day. Recommendations state not to store with tomatoes and apples. Can be pickled for prolonged storage: slicing variety- produces a soft pickle due to low sugar content must fresh pack pickle method, pickling variety- brining/fermenting

**Seed Saving:** 2 different varieties of plants must be planted a ½ mile apart for purity. Harvest the cucumber 5 weeks after the ripe for eating stage until golden in color. Cut length wise to scrape out seeds and jelly. Store in a jar for 3-4 days until jelly is dissolved. Rinse, separate and dry.

## Resources:

Missouri

Extension - [http://extension.missouri.edu/platte/documents/horticulture/fruit\\_veg/](http://extension.missouri.edu/platte/documents/horticulture/fruit_veg/)

Purdue Extension - <http://www.hort.purdue.edu/ext/bittercukes.html>

USDA Nutrient Database - <http://ndb.nal.usda.gov/ndb/foods>

Wikipedia - <http://en.wikipedia.org/wiki/Cucumber>

International Seed Saving Institute - <http://www.seedsave.org/issi/904/experienced.html#anchor007>

Nutrition Data- know what you eat - <http://nutritiondata.self.com/>

