Environmental Education Activity

Food Miles

Age/Grade Range

Ages: 7-18+

Group Size

- No minimum/maximum
- Can be done individually or in small groups



- Prep: 10-15 minutes
- Activity
 - 15-30 minutes + 15 minutes on first day
 - 2-6 hour wait time in between active time
 - o 15 minutes twice daily for 5+ days

Materials

- 500ml mason jars, 1 per child (or 1 large mason jar per small group)
- Cheese cloth
- Elastics
- Sprout seeds (for best results use organic seeds)
 - o Small seeds: alfalfa, broccoli, clover
 - Large seeds: mung bean, lentils
- Measuring cup (ideally with a spout)
- Measuring spoons
- Labels
- Magnifying glasses

Set Up

 Clean jars thoroughly with dish soap and warm water. Rinse any soap residue and allow to air dry.

Activity Directions

- 1. Get kids to put 1 tbsp of small seeds, or 2 tbsp of large seeds into each jar (or 2 tablespoons small seeds, or ½ cup of large seeds per large mason jar).
- 2. Cover each jar with 2-3 layers of cheese cloth and secure with elastics.



Topic

Local Food Production

Objective

· Learn to make your own food





- 3. Through the cheesecloth, slowly pour 1 cup of water into the seeds. Swirl the jar to soak all of the seeds. Drain water. Refill with 1 cup of water and soak seeds for 2-6 hours, then drain through cheese cloth.
- 4. Labels jars with child's name and date. Place jars in a spot away from direct sunlight at room temperature.
- 5. Rinse seeds twice daily for 5 days, or until the seeds have sprouted. To rinse, add 1 cup of water through the cheesecloth, swirl and drain through cheese cloth.
- 6. When fully sprouted, remove a few sprouts and get kids to look at the sprouts with a magnifying glass. Sprouts can be consumed when they are fully sprouted.

Notes

- Depending on the temperature and types of seeds being grown, the sprouts should be edible in about 5 days. Rinse sprouts will under running water before eating.
- If the sprouts are not being consumed the day they are picked, they can be kept for a few days in the refrigerator.
- Some seeds may form fuzzy looking growth which resembles mildew. These are actually tiny
 roots growing on the sprouts and are part of the sprout. Occasionally, some genuine mold or
 mildew will occur when the sprouts are watered too frequently and not drained fully. Smell
 the sprouts. They should not have a moldy/mildew smell.
- Sprouts are a nutritious addition to any meal. You can add them to just about anything, including: salads, sandwiches (best with small seed sprouts), burritos, tacos, wraps, soups (best with large seed sprouts), stir fry (best with large seed sprouts), or even in sushi. Large seed sprouts are delicious warm, served with butter, salt and pepper.

Additional Information

Sprout Nutrition

- When we eat sprouts we get more nutrition than if we ate them as seeds. When a seed sprouts it goes from a carbohydrate source (containing mainly energy in the form of starch) to a vegetable source (high in vitamins and minerals).
 - great source of protein
 - high fiber
 - source of B--complex vitamins
 - source of essential fatty acids
 - o vitamin A in a sprouted seed is 300% greater than in an unsprouted seed
 - o vitamin C increases 500% to 600% in a sprouted seed
 - in the sprouting process starches are converted to simple sugars which makes sprouts easily digested
 - o contain antioxidants and phytochemicals (plant compounds)
 - sprouts are low in fat and contain no cholesterol
 - o sprouts contain minerals such as calcium, iron, potassium, magnesium, phosphorous, sodium, folate, niacin, riboflavin, thiamine, zinc
- Sprouts can be an important source of vitamins and minerals, especially in seasons and situations when fresh vegetables are difficult or expensive to obtain.





Once a sprout reaches a stage of growth where the root structure develops (tap root
develops into branching roots), the sprout begins growing into a plant and the nutrients
decline, or normalize. As sprouts grow, their taste diminishes and once they form true leaves
they may become bitter. It is best to eat your sprouts before their true leaves develop, while
they are still full of vitamins, minerals, and enzymes

Pairs Well With

- Food Miles
- Other activities for growing/making your own food

