

Organic Veggies Classroom Kit Student Guide

Cultivating the Organic Lifestyle

No matter how you look at it, the benefits of eating and growing organic are bountiful. Simply stated, the word “Organic” is defined as produce and other ingredients that are grown without the use of pesticides, synthetic fertilizers, sewage sludge, genetically modified organisms, or ionizing radiation. Many people today are recognizing that organically grown food is an effective means to achieve a healthier mind and body. Organic foods have entered the mainstream diet with a big bang in recent years and outlined below are just some of the reasons why, if you have a garden, it should be organic.

The benefits of organically growing food reach beyond reducing toxins in the human body and improving the environment. The soil, when organically farmed is improved as natural fauna and flora are encouraged. In turn, this creates a nutrient rich soil that produces high quality vegetables and fruits. Also, groundwater would no longer be polluted by chemical runoff produced by using pesticides and herbicides.

Reducing the ingestion of toxic chemicals is by and large a major advantage in eating organic foods. Organic foods also contain higher levels of anti-oxidants as well as taste better! Organic produce has also been shown to have a higher vitamin and mineral content than those grown with the use of chemical fertilizers, pesticides, and herbicides. The foods that you and your family eat directly affect your health. A fruit and vegetable home garden provides assurance that your food has been grown and handled without any toxic chemicals. Ingesting these chemicals can create serious health consequences. Over time, repeated consumption of non-foods can cause toxicity in the bloodstream. Fruits and vegetables grown in an organic environment are chemical-free. When you switch to a diet that is rich in organic foods, you are dramatically reducing your risk of ingesting cancer-causing agents.

Planting your own organic vegetable garden will also save you money! Buying organic produce at farmers markets and health food stores can get pretty pricey. But by growing your own, you save money at the store and if you preserve your crops over the winter months there will be no need to purchase ‘green house’ vegetables from the store.

Planting Instructions

1. Place your germination disk in a separate container. Each germination disk requires 2½ cups of lukewarm water to fully hydrate.
2. Place moist germination mixture into your pots.
 - Each seed pack is intended for 3 growing pots.
 - You can plant your seeds in all the coconut coir pots at one time, or save half the seed packs soil, and pots and plant at another time.
 - **Sweet Peppers:** Place your seeds on top of soil in 3 coconut coir pots. Lightly press your seeds 1/8th of an inch into the soil.
 - **Bush Cucumbers:** Place your seeds on top of soil in 3 coconut coir pots. Lightly press your seeds ½ inch into the soil.
 - **Tomatoes:** Place your seeds on top of soil in 3 coconut coir pots. Lightly press your seeds ¼ of an inch into the soil.
 - **Green Beans:** Place your seeds on top of soil in 3 coconut coir pots. Lightly press your seeds ½ inch into the soil.
3. Place your coconut coir pots in the provided biodegradable germination bags and seal them with a rubber band.
4. Place your pots in the germination bag on a windowsill or in bright light.

5. Seeds will sprout in 1 to 2 weeks. Refer to seed packs or the Growing and Care Information provided for specific plant information.
6. Remove your pots from their germination bags after the plants are about an inch tall.
7. Be sure to keep soil moist during germination stage.

Transplanting Your Plants

You can transplant your vegetables out in the garden after all fear of frost has past. You will want to provide your tomatoes with some support to help maintain upright growth. Your beans can be given a trellis or other structure to climb on. You will want to dig a planting hole that is wider and deeper than the pot you are planting. Place loosened soil in the bottom of your planting hole. You can also add fertilizer to the planting hole. Next place your biodegradable coconut coir pot into the planting hole and fill in the hole with the remaining soil.

Plant Information

Bush Cucumbers

Growing and Care Information

Bush cucumbers should be planted 10 to 14 days before transplanting outdoors to ensure that the taproot is not damaged. With the coconut coir pots being planted right in the ground, you will not disturb the roots. Bush cucumbers require full sun and loose, well-drained soil. For optimal plant growth, the air temperature should be 65 to 75 degrees Fahrenheit. Water your Bush cucumber plants with 1 to 2 inches of water per week. When fruits begin setting and maturing, adequate moisture becomes especially critical.

Plant Information

Bush cucumbers are a tender, warm-season vegetable that produces best when given proper care and protection. Like it’s cousins in the melon family, bush cucumbers commonly climb along rocks, logs, and low shrubs, sometimes spreading up to 3 meters!

Harvesting Instructions

Cucumbers should be picked while they’re still green and tender; about 50 to 70 days after planting. If they are left on the vine to get bigger or until they turn yellow, their taste becomes bitter. Cucumbers are at their highest quality when uniformly green, firm and crisp.

Fun Facts

- Because cucumbers are mostly water, they are not as high in nutrients as other vegetables. Cucumbers are actually 95% water!
- The cucumber is a member of the gourd family along with melons, squash and pumpkins!
- Cucumbers originated in India, where they have been grown for over 3,000 years.
- Florida produces the most cucumbers in the United States.

Tomatoes

Growing and Care Information

Tomatoes are heat-loving plants that need a long warm growing period to grow from seed to fruit. Generally, the best time to start your seeds is about 6 to 8 weeks before the last expected spring frost date, transplanting your seedlings outdoors about 2 weeks after that date. Tomatoes need warm conditions to start germinating. So keep your coconut coir pots in a warm place like a windowsill. For germination, keep your tomato container moist, but not soggy. If your container gets too dry, you’ll need to set it in a pan or bowl of water so the plant can soak the water up from the bottom. Expected germination takes 5 to 10 days. Remember to remove your plant from the windowsill at night during the germination period; cold night air stunts germination. As soon as any seedlings

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Plant Information (continued)

begin to emerge above the soil level, remove from germination bag and place plant in direct light right away. In 3 or 4 weeks, or when the weather outdoors has warmed up into the 50 degree range at night, it's time to acclimate your seedlings to outdoor conditions. Start by setting your plants outside in a shady spot for a half day at first, then 2 or 3 full days. Then gradually move them into full sun, starting with mornings and then full days. After your plant has acclimated to outdoor weather conditions, it's time to transplant your tomatoes outside!

Plant Information

Native to western South America and Central America, the tomato was first discovered in 1519, by Cortez growing in Montezuma's gardens. Cortez brought the tomato seeds to Europe where they were planted as an ornamental plant, but never eaten. Because of the tomatoes close resemblance to the deadly nightshade, tomatoes were thought to be poisonous by Europeans who were suspicious of this bright, shiny fruit. There are over 7,500 varieties of tomatoes grown currently, with various ways to prepare and eat them. Tomatoes are rich in lycopene and grow 3 to 10 feet tall. Consumed throughout the world, the tomato is believed to benefit the heart and when cooked and has been found to help prevent prostate cancer.

Harvesting Instructions

Tomatoes fully ripened have a much fuller flavor than tomatoes that are picked early and then allowed to ripen. Tomatoes also have a tendency to crack if they stay on the vine too long, so pick your tomatoes at the peak of redness, or even a tad before. Wash and dry your tomatoes before storing, unless you're planning on storing your tomatoes for over a week, then a windowsill or bowl will work fine. If you end up with too many tomatoes to eat at one time, canning, freezing or drying are good methods for storage. When the end of the season arrives and you still have green tomatoes on the vine, you can actually cut the vines off and hang them intact, upside down, in a dark place. Your tomatoes will ripen this way!

Fun Facts

- The tomato is the world's most popular fruit.
- Tomatoes are used in many food products. They can be eaten raw, cooked, steamed, or dried.
- You will need to supply your plants with a trellis or "cage" to help support the plant as it grows.

Sweet Peppers

Growing and Care Information

In order to grow healthy sweet peppers it's best to plant your seeds in late winter and then transplant them outdoors after the soil and air have warmed up in the spring. Pepper seeds are slow to germinate so be sure to start them at least 6 to 8 weeks before the weather starts warming up. Sweet pepper plants cannot tolerate frost and will not grow well in cold, wet soil. They thrive in well-drained, fertile soil that is watered properly. Use a starter fertilizer when transplanted and provide 1 inch of water per week throughout the growing season. Uniform moisture is essential.

Plant Information

The green pepper is a tender, warm-season vegetable and one of the most popular garden varieties. Green peppers are crisp and refreshing consumed raw and a good source of vitamin A and C. Low in calories and high in very important mineral—potassium. Green peppers are used as a main ingredient in Louisiana Creole and Cajun cuisine as well as Italian and Mediterranean cooking.

Harvesting Instructions

Green peppers can be harvested from July to October. These peppers are usually picked when they are fully grown and mature

— about 3 to 4 inches long, firm and green. Remember, sweet peppers become sweeter as they mature. When harvesting, do not pull or tear a pepper from the plant. Try using a sharp knife or scissors to cut the stem from the plant. Harvesting regularly will encourage the plant to keep blossoming and setting fruit, especially early in the growing season.

Fun Facts

- All peppers are rich in vitamin C, but red peppers contain more than twice as much vitamin C as green peppers.
- Green and red peppers come from the same plant. As the green pepper matures, their color changes from green to red as they ripen and become sweeter. That's why red peppers are sweeter than green peppers!
- You might think that peppers are vegetables, but they are actually fruits!
- Peppers come in many colors, including green, yellow, red, even brown and purple!

Green Beans

Growing and Care Information

Start your green beans seeds 4 to 6 weeks before the last frost. After placing green bean seeds in your soil, be sure they get plenty of warmth for germination. Adequate moisture is especially important for flower bud formation and pod set. Too much or too little water or excessive heat could cause blossom and pod drop. Green beans prefer warm soil and full sun. Once your green beans reach 3 to 4 inches tall you can transplant them outdoors. Placing a stake or trellis in the ground will help support the green bean vines as they grow.

Plant Information

Green beans are a very popular warm season crop, bred especially for the sweetness of their pods. With over 130 varieties, green beans can be a variety of colors including red, green, and even purple. There are two major groups of green beans, bush beans and pole beans. The bush bean variety is about 2 feet tall and produces all of its fruit in a short period of time, and then ceases to produce.

Harvesting Instructions

Your green beans will be ready for harvest in two months. Harvest your green beans once they have reached a mature length and before bulges start appearing in the pod. The pod should be crisp and snap when you break them in half. Store your green beans unwashed and in plastic bags in the refrigerator for up to 3 days. Do not wash them before refrigerating this will cause your green beans to spoil.

Fun Facts

- The green bean is a tender, warm season vegetable that ranks second in popularity in home gardens.
- Bush green beans produce an upright sturdy plant with little or no runners.
- The first "stringless" bean was bred by Calvin Keeney in 1894.

Company Information

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