

NATURE ACTIVITY

LETTUCE EAT A RAINBOW



Eating a rainbow of fruits and vegetables each day offers numerous health benefits. Repurpose cartons to grow a variety of types of lettuce to introduce the benefits of consuming fruits and vegetables in an array of colors and also to serve as a base to introduce kids to colorful salad creations.

WHAT YOU'LL NEED:

- ☐ Paper cartons
- ☐ Assorted fruits and vegetables representing a variety of colors
- ☐ 3-5 packets of a variety of lettuce seeds
- ☐ Potting soil

TIME: 4-6 weeks if growing your own lettuce

INTRODUCTION:

Lettuce is a cool-weather crop that grows well in lower-light conditions. It is economical to grow and nutritious to consume. Additionally, lettuce varieties are very diverse, offering a wide assortment of textures, flavors, and colors to enjoy. Lettuce is a staple ingredient of salads all over the world. It has been grown and consumed as a food and also as a medicinal herb for thousands of years.

One of the easiest types of lettuce to grow is leaf lettuce. This non-heading type of lettuce can be harvested by picking individual leaves or by cutting the entire plant an inch or so above the soil line. Some varieties are ready for harvest in just a month and a half.

Because it is adapted to low light, lettuce is one of the easiest crops to grow indoors. All you need is a bright, sunny window and/or grow lights, seeds, growing containers, and potting soil.

Since lettuce varieties are available in a wide array of colors and their leaves often serve as a base for salads, growing lettuce also provides the opportunity to introduce the idea of eating a rainbow. Color provides clues about the nutrients in different fruits and vegetables. For example, yellow and orange fruits and vegetables often contain Vitamin C, which helps you fight off colds, and beta carotene that helps your eyesight.

In addition to commonly known vitamins and minerals, fruits and vegetables also contain other health-boosting chemicals known as phytonutrients which are linked to benefits such as reduced risk of stroke, cancer, and heart disease. Many of these phytonutrients are also the pigments responsible for the color of fruits and vegetables, which is why color can be linked to health benefits. Plants have pigments to protect them against environmental factors (such as excessive sunlight) and from harmful byproducts of plant processes like photosynthesis. Thus, when we consume fruits and vegetables, we receive benefits from the phytonutrients that are similar to what they provide to the plant — protection from environmental factors and cell-damaging chemical byproducts. Therefore, by eating fruits and vegetables in a diversity of colors, you are ensuring that you are consuming a variety of vitamins and phytonutrients.

To make sure you get all the vitamins and nutrients you need, nutritionists came up with the concept of “Eat a Rainbow” of fruits and vegetables. They recommend eating at least one red, one orange/yellow, one green, one blue/purple and one white fruit or vegetable each day.

Along with growing colorful lettuce leaves, students can also learn how lettuce can be used as a base to create healthy “rainbow salads” full of fruits and vegetables in colors across the spectrum.



Presented by



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INSTRUCTIONS:

STEP 1

Prepare your cartons to use as growing containers by washing and drying thoroughly. If you have smaller cartons, you can open up the top to make a container. If you have a larger carton, you may also be able to cut off one side and position it horizontally for planting. Make a few holes in the bottom of your carton to drain excess water.

STEP 2

Fill your cartons with moistened potting soil. You want the soil to feel like a moist sponge, but you do not want it to be so wet that water can be squeezed out of it. You may need to alternate adding water and soil until the optimum moisture is achieved.

STEP 3

Sprinkle the seeds on the potting soil surface. Because the seeds of lettuce are so small, you may want to help young children with this step or they may over plant. Barely cover the seeds with a scattering of soil. Don't bury the seeds completely; lettuce seeds germinate best when exposed to light.



STEP 4

Place your containers in your window or under lights and keep the seeds and soil moist. If using grow lights, keep the bulbs on for 14 hours a day, adjusting the height as the plants grow.

STEP 5

Water as needed. If the leaves turn pale green or yellow, give the plants some organic liquid fertilizer when watering, being sure to follow the manufacturer's instructions. (Check the seed packet for the proper hue for each variety; some types of lettuce have light green leaves, while others may be deeper green, or even red.)

STEP 6

Once the leaves on the greens are a few inches tall, you can start harvesting. Remind your gardeners that you won't be growing full heads of lettuce like the ones you might buy at the store. The idea is to harvest a few leaves at a time from each plant and then let them grow again. That way, the plants won't take up too much space and you'll get multiple harvests.

STEP 7

Using scissors, simply cut the greens 1 inch above the soil line, leaving a few larger leaves in the center to keep plants healthy. As long as you have left some leaves intact, you should be able to harvest again in a couple of weeks. After a few harvests the plant stems may get thick and the leaves may remain small. This indicates it's time to compost the potting mix and roots, and start over. If you prefer, you can let the plants grow larger and then harvest all at one time.

STEP 8

You can enjoy your lettuce on its own or use it as a base for a colorful salad.

RAINBOW SALAD INGREDIENT IDEAS:

Red: beets, cherries, cranberries, radishes, raspberries, red apples, red peppers, strawberries, tomatoes

Yellow/Orange: carrots, corn, grapefruit, oranges, peaches, pineapple, squash, yellow pears, yellow pepper

Green: avocados, broccoli, celery, cucumbers, green apples, green beans, green cabbage, green grapes, green onions, green pears, green peppers, kiwi, lettuce, pears, peas, spinach, zucchini

Blue/Purple: blackberries, blueberries, eggplant, purple cabbage, purple grapes, raisins

White: cauliflower, onions, jicama, turnips, white corn

STEP 9

Garnish with salad dressing (optional) and then enjoy!

