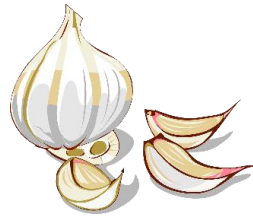


GARLIC GARDEN – A FALL PLANTING PROJECT



Can garlic scare away blood-sucking vampires and evil spirits? In the book *Dracula*, written by Bram Stoker in 1897, garlic is mentioned many times as protection against vampires. Garlic and vampire folklore have roots in the Middle Ages in Europe, but similar legends are also found earlier in many other cultures. Maybe garlic's pungent odor and strong taste could scare a vampire away, but it is actually a beloved vegetable that has many beneficial properties!

Garlic grows from a bulb and is related to onions, shallots, leeks, and chives. Its scientific name is *Allium sativum*. Like most bulbs, the top of the plant is above ground and produces green stalks, flowers, and tiny bulblets. These parts of the plant are edible but the bulb, which is found in the soil, is the most commonly used part. Each bulb has many sections, called **cloves**, often 8 to 15 in a single bulb.

Garlic is easy to grow. It has been raised for food and used as medicine for several thousand years. Garlic was used by the ancient Egyptians who fed it to the slaves working on the Great Pyramids to make them stronger and capable of doing more work. An ancient Egyptian document called the *Ebers Papyrus* lists 22 different medicinal uses for garlic! It was also used as food and medicine by the ancient Chinese, Greeks and Romans.

Garlic is used to flavor all kinds of foods throughout the world. Current research has shown that garlic has many health benefits, such as its ability to reduce blood **cholesterol** (a waxy fat-like substance) and fasting **glucose** (sugar) levels. It also has proven antibacterial and antifungal properties.

Garlic doesn't have much of a smell until it is peeled and sliced. When garlic is cut, a chemical called **alliin** and an enzyme, **alliin lyase**, combine and produce an organic sulfur compound called **allicin**. This gives garlic its strong smell and provides many health benefits. Allicin is only one of as many as 40 other compounds in garlic that may contribute to these benefits.

ACTIVITY: Plant garlic outdoors this fall for a delicious and healthy summer harvest

Materials:

- One or more organic garlic bulbs, available from garden centers or online nurseries. Supermarket garlic bulbs are not a good choice unless they are specifically sold to grow because they are sometimes treated with hormones to prevent sprouting.
- Small spade or shovel
- Ruler
- Sunny area in your garden or...
 - If you don't have a place to plant your garlic outdoors, you can use a deep pot filled with potting soil, and place it in a sunny spot.





Procedure for planting outdoors:

1. Find a sunny spot in your garden, and prepare the soil. Dig it up to a depth of about 6 inches.
2. Add compost or organic material to the soil, mix it up, then smooth it out.
3. Separate each clove of garlic from the large bulb, leaving the papery skin on the cloves.
4. Lay them out and count them
5. With a small trowel, dig small holes 3 – 5 inches deep and 6 – 8 inches apart, one for each clove.
6. Place one clove in each hole with the pointy end pointing up, root pointing down.
7. Cover with soil and an inch or two of mulch.
8. Water if the soil is dry.
9. Be patient and now let nature do its work.

What happens next?

1. Garlic takes about 6 months to mature. If there is normal rain and snowfall, you won't need to do a thing with the bulbs during winter. If it is very dry, occasionally give them some water. The soil should be damp, but not waterlogged, or the bulbs will rot.
2. During the spring and early summer, keep them watered as you would with any other kind of plant. When the leaves are green, they will grow stronger if you feed them some vegetable fertilizer.
3. In late June or early July, when the leaves stop growing, it is time to stop watering.
4. When about ½ of the leaves turn brown, your garlic is ready to harvest!
5. Use a shovel or trowel to gently lift your garlic, being careful not to slice the head. Each clove you planted will produce a full bulb.
6. Your garlic can be eaten now, or it can be cured (dried out) to store and used for months to come.
7. To cure the bulbs: With the withered leaves still attached, hang in a well-ventilated shady spot (a garage works well) and let them sit for about 2 weeks.
8. Once dried, cut off the stalks, remove a few outer layers of skin and any dirt. Store them in baskets, terracotta pots, mesh or brown paper bags in a cool, dark place.

For another simple, dirt-free, indoor activity, visit this [video link](https://youtu.be/FzoVhI4n01E): ECscienceexploration, "Early Childhood Science: Planting Garlic (and Other Stuff) with Children" <https://youtu.be/FzoVhI4n01E> (also listed and marked with * under **Additional Resources** at the end of this document)





Garlic plants in spring



Mature plants beginning to dry out in July









Harvesting bulb with a spade









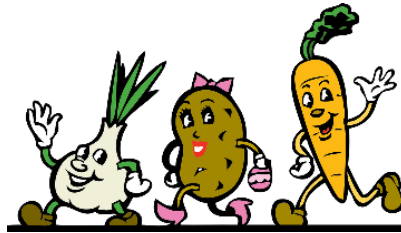
Ready to dry

Garlic Facts:

-  There are two main types of garlic, "softneck" and "hardneck".
-  "Softneck" garlic has a floppy stalk. Most garlic sold in stores is the "softneck" variety.
-  "Hardneck" garlic has a stiff stalk and forms edible scapes, flower stems, and blooms.
-  Garlic is also known as the "stink rose"!
-  Garlic is most nutritious if you let it sit for 5 – 10 minutes before heating. This gives the allicin a chance to start working.
-  Always add garlic last when cooking. Too much heat can decrease the nutrients.



-  According to the Cleveland Clinic, soaking your feet in garlic water can help fight athlete's foot fungus!
-  Fear of garlic is called **Alliumphobia**.
-  A mixture of crushed garlic and water sprayed on your roses can get rid of aphids.
-  Scientist, Louis Pasteur, demonstrated the antiseptic effects of garlic in 1858.
-  In World War II, garlic was used to help soldier's wounds heal faster. It was called "Russian Penicillin".
-  April 19th is National Garlic Day!



Hope your home-grown garlic is the best you have ever tasted! If you would like to do this again, you can save some of the cloves from next summer's harvest and plant them next fall!

ADDITIONAL RESOURCES

Books available from the Washoe County Library System:

The Best-Ever Step-by-Step Kid's First Gardening: Fantastic Gardening Ideas for 5-12 Year Olds, from Growing Fruit and Vegetables and Fun with Flowers to Wildlife Gardening and Outdoor Crafts by Jenny Hendy

The Book of Kale and Friends: 14 Easy-to-grow Superfoods by Sharon Hanna and Carol Pope

Gardening Lab for Kids by Renata Fossen Brown

Garlic, an Edible Biography: The History, Politics, and Mythology Behind the World's Most Pungent Food: with Over 100 Recipes by Robin Cherry

The Garlic Lovers' Cookbook: From Gilroy, Garlic Capital of the World by Gilroy Garlic Festival Committee

The Nitty-Gritty Gardening Book: Fun Projects for All Seasons by Kari Cornell

Videos:

Burpee Gardens, "How to Plant Garlic" <https://www.youtube.com/watch?v=T-77GT98-HE>



*ECscienceexploration, "Early Childhood Science: Planting Garlic (and Other Stuff) with Children"

<https://youtu.be/FzoVhI4n01E>

Gardening WITH KIDS, "How to Plant Garlic, How to Grow Garlic, Fall Planting" <https://youtu.be/eI0YH5WHoHc>

True Food TV, "How Does it Grow?" <https://vimeo.com/100341226>

Websites:

Southern Exposure Seed Exchange, Garlic and Perennial Onion Growing Guide

<https://www.southernexposure.com/garlic-and-perennial-onion-growing-guide/>

University of Minnesota Extension, Growing Garlic in Home Gardens

<https://extension.umn.edu/vegetables/growing-garlic>

