

- **I want to try 'in-ground' composting. Is this a good idea and why?**

Trench or hole composting is used for a number of reasons. Soil structure and composition are improved and enriched with a marked increase in earth worms and other beneficial soil organisms over time. This improves the vigour and overall health of plants. In addition, it is a good method to use if you don't have room for a composter or don't have a sunny location to place a compost bin or pile. It is invisible, doesn't produce odours and takes very little effort. You don't have to turn and layer it as you would an above ground compost pile. It does not attract critters such as squirrels, rats and mice, racoons and the neighbourhood cats and dogs, as they are not able to access the compost. Compost holes only require four easy steps (in fact only three if you substitute store-bought compost instead of kitchen scraps). The materials required are minimal: a shovel or spade, kitchen scraps and other compostable materials or store-bought compost. No activators are needed to speed up decomposition. The holes or trenches are a simple method for building the soil in any garden. In addition, in raised beds, the soil is typically soft, so the holes are easy to dig.

The 'How' to do it and things to consider:

Dig a trench or hole, put in the kitchen and/or yard waste, and fill the trench or hole in. You can enrich your soil weekly—even daily if your kitchen produces enough compostable waste.

Over time the waste is turned into decomposed, organic matter or humus containing millions of microorganisms and there is nothing better for your plants. Once you've collected one to two quarts of kitchen waste, chop up any large pieces with shears or your spade but don't run it through a blender or compact it. The vegetable and fruit scraps you've collected will be broken down by bacteria that works aerobically. In other words, the bacteria require oxygen in order to decompose.

Dig a hole wherever you'd like to improve your soil. It could be in your flowerbeds, vegetable garden, raised beds or somewhere you'll sow seeds or plant seedlings. It could even be the site where you plan to plant a tree.

Trench composting works well in larger vegetable gardens and involves digging a trench approximately 12 to 18 inches deep, filling it with roughly 4 to 6 inches of yard waste and/or kitchen scraps and then back filling with the soil you removed.

Trenches can be used either in a rotation cycle, where you would divide the garden into zones; an actively growing zone, a path and a trench composting zone. Each year you would rotate the zones, allowing you to compost the whole vegetable garden in 3 years.

Illustration from The Farmers Almanac with permission from
<https://thegardeningcook.com/trench-composting/>

The second method is to dig trenches in between the vegetable rows. This works well if you grow your vegetables in evenly spaced rows. Over time as everything breaks down and the compost will nourish nearby plants.

In the fall after harvesting the vegetables, use this technique in the areas where you have grown heavy feeders, like corn or squash. The following spring most of the material will have decomposed and you will be ready to plant again.

For smaller gardens, the trench composting system may not work well due to lack of space. Instead, you can use hole composting, which works in vegetable, flower, and perennial beds, near shrubs and just about anywhere where you can dig an 8" to 18" deep hole without too much root disturbance of nearby plants.

During both the dormant and active growing seasons, dig holes in the garden beds (annual and perennial) and bury kitchen and yard waste. In just a couple of years of composting using this method, there should be a noticeable difference in the health of the soil, and in the number of earth worms.

If you have a lot of kitchen waste and room for more than one hole, try the two-hole compost method.

First, dig a hole between the rows in your vegetable garden or in your flower bed. Dump one to two quarts of compostable materials into the hole and then fill it with dirt acquired from digging a second hole. Fill the second hole with more kitchen scraps and top it off with dirt, either from the first hole or from a third one.

If you are planning a new tree or shrub create a compost hole for it either in spring or summer.

Simply dig a hole about a foot deep in the spot where you intend to plant the tree.

After adding kitchen waste and covering the waste with soil, top the hole with mulch.

Mark the compost hole with a stick, flag, stake or some other identifying mark.

By spring planting time, the soil in the hole will be friable and rich, perfect for providing nourishment to the newest member of your landscape.

Materials to include for trench or hole composting: Try to aim for a mix of vegetable scraps and plant waste mixed with 'brown' items such as paper, cardboard, hay, straw, dead leaves and so on, for each hole or trench. For a long trench or multiple holes, you can mix everything in a big wheelbarrow, container or even on a tarp before emptying it into the dug areas.

Any or all of the following can be composted: dead leaves; kitchen scraps (fruit and vegetable scraps, including vegetable peelings like potato, turnip, parsnip, onion, carrot and yam peels; fruit peelings, such as apple, peach, pear & banana peels; vegetable & fruit cores, such as cabbage, lettuce, pear & apple cores; trimmings from mushrooms, lettuce, potatoes, celery and carrots; and nutshells); tea leaves and coffee grounds together with tea bags and coffee filters (provide nitrogen); crushed eggshells (add calcium and improve drainage); paper, including brown paper bags; fresh garden waste from trimming and weeding (avoid weed seed heads); wood chips; corrugated

cardboard; fresh grass clippings; sawdust; manure; corn stalks and husks; hay; dry straw.

You can also collect items of household waste beyond kitchen scraps. For instance, black & white newspapers (shredded), cardboard egg cartons (torn into small pieces), wood ash and vacuum dirt are good 'brown' additions to your compost hole. You can even empty your hairbrush and your pet's hairbrush into your compost bucket. Hair contains nitrogen, which plants love.

Do not include meat, bones, grease and dairy products. Not only do they attract animals, but they take a long time to decompose.

Don't include any materials that might harbour disease, such as pet faeces and diseased houseplants. Also avoid adding items that contain ingredients that are potentially toxic to plants, such as coal ash and color newspaper supplements.

Sources:

<https://peterboroughmastergardeners.com/2018/05/28/trench-or-hole-composting>

<http://www.dirtygardening.com/in-ground-composting.html>

<https://compost.bc.ca/wp-content/uploads/2015/06/5-Trenching.pdf> (a non-profit organization with charitable status providing composting and ecological gardening education to CRD residents)

<https://www.farmersalmanac.com/what-trench-composting-123957>