



Homemade Hydroponic Growing System - How to Build at Lowest Cost

By Karen Xavier

For those without garden space, indoor gardening can be a rewarding alternative. Imagine growing organic fruits, and vegetables in your home without soil. Hydroponics is an effective means of growing plants with water containing nutrients instead. It offers all the benefits of a greenhouse, using only twenty percent of the space required for soil gardening. To start out as a hydroponic gardener, you can choose one of the many available hydroponic kits, or enjoy the satisfaction of making your own homemade hydroponic growing system.

There are several homemade hydroponic growing system methods. The two simplest methods are the reservoir method, and the flood and drain method.

Five gallon plastic tubs with matching lids work well for either method. Tubs should be opaque in order to prevent light from reaching the nutrient solution, or liquid plant food. Wash containers with vinegar, and then soap and water, to kill any bacteria.

Begin by creating your grow medium. Place seedlings and an inert mixture of perlite, vermiculite, and coconut coir into individual plastic planters. Cut two rows of holes, matching the diameter of the individual planter's size, into the tub's lid. Drop a planter into each hole. Fit the lid, laden with planters, onto its container.

In the reservoir method, the plants will be sitting in a reservoir filled to the roots with nutrient solution. An external air pump will provide a constant, but gentle flow of air bubbles to the solution, providing the roots with oxygen. Cut an additional hole in the lid and pass an airline of tubing from the pump, through the hole, and down to bottom of the container.

For the flood and drain method, a second tub with matching lid will act as the reservoir. This time, instead of cutting that extra hole for the tubing into the lid, cut holes into the sides of each tub. Run the the waterline from tub to tub. Use waterproof caulking to seal the connections. The principle here is based on gravity. When the reservoir is positioned level to, or higher than, the grow medium, the solution will run from the reservoir through the line and flood the grow medium. Reverse the positions to drain it. Plants should be flooded in this manner several times daily.

After setting up the hydration system, lighting will need to be provided. Place your homemade hydroponic growing system in a window that receives direct sunlight. Use a High Intensity Discharge lamp, or fluorescent lamp in the absence of direct sunlight

If you don't have time to build your own homemade hydroponics growing system, pick up a kit. Hydroponic kits include everything needed to begin indoor gardening including nutrients, pH kits, and grow guide. Hydroponic kits are available in any one of the system methods. Choose the one that will work best for you.

Whether you create your own homemade hydroponics growing system or purchase one of the system methods available as hydroponic kits, you will enjoy growing your own produce.

Find out how to quickly build an effective hydroponic growing system on a budget. Grab a ready made kit that would make you project easier, faster and stress free. Chose an easy build homemade [hydroponic kit](#) and all the accessories to save yourself the time and money.

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