



Grow Fresh Herbs or Flowers

with this simple, easy to make and use hydroponic system

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MAKING YOUR OWN INDIVIDUAL HYDROPONIC CONTAINER

Materials included in this kit:



- 2 inch plastic net pot
- Coconut coir growing media (perlite, pebbles)
- Cotton wick
- Nutrients (Jack's water soluble 15-0-15 plant food)
- Seeds or seedling plant
- Pre-painted 1-quart, regular mouth Mason Jar with ring

Materials required to make additional containers:



- 1-pint or 1-quart Mason jars (or other suitable containers)
- Net pots or mesh (use 2 inch net pots for regular mouth jars; 3-in for wide mouth jars)
- Tape or sandpaper
- Paint (Spray chalk paint with a clear coat sealer works well and dries quickly)
- Dechlorinated water
- Nutrients
- Growing medium (coconut coir, perlite, pebbles, clay pellets, sand)

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Steps:

1. Place a thin piece of tape vertically on the side of the jar.
 - Alternately, you can skip this step and use sandpaper in Step 3.
2. Paint the jar evenly and let it dry between coats.
(Note: one can of chalk paint can cover 12 quart-sized jars with two coats). The paint will help prevent algae from growing inside the container in too much sunlight.
3. Remove the tape after the paint has dried completely.
 - If you skipped Step 1, use sandpaper to expose a vertical strip of glass. The exposed area will allow you to monitor the nutrient level for your plant.
 - Keep that side turned away from sunlight.
4. Spray the jar with clear coat to help protect the finish.
 - For an artistic look, sand the paint away from the embossed areas of the glass before applying clear coat.
5. De-chlorinate tap water by letting it set for at least 24 hours prior to use.
 - You may instead buy a gallon of purified drinking water or use collected rainwater.
6. Measure the wick to be as long as the jar, then cut accordingly.
7. Attach the wick to the pot by feeding it through one of the slots.
 - The wick material can be anything that will absorb water, such as rope or a cut up wash towel. We recommend natural cotton rope.
 - Plastic net cups work best, but can be substituted with other netting materials.
 - The material must be able to support itself and the plant that it will hold.
 - It must also allow air flow.
8. You will need to add a filter if your growing medium is fine—either inside the net pot or attached around it with a rubber band—to prevent the growing medium from falling into the water.
9. Add the growing medium to the plastic net cup with the wick in place.
 - If you use coconut coir, thoroughly moisten it before adding it to the pot.
 - If planting a seedling, add enough growing medium to cover the wick and wait to add the rest after seating the plant in the pot.
10. **If you plan to start with a seedling, skip this step.** Add the seed to the growing medium and lightly cover it with the medium.
 - You will need to water from the top with the de-chlorinated water until the seed germinates.
 - Add enough water to keep the growing medium damp until the sprout is 1-2 inches in height. Keep an eye on the water level. Don't overflow the container!
 - Soaking the seed in water before planting it in the pot may speed up the germination process.
 - If you have already started your plant beforehand, let it grow for a few weeks then place the seedling in the net with the wick wrapped around the bottom of the plant. Secure everything in place with moist growing medium.



11. Mix the nutrient solution using de-chlorinated water and water-soluble plant food.

Recommended mixture ratio	
Fertilizer	Water
1- 2 teaspoons	1 gallon = 16 cups = 128 fl oz
½ -1 teaspoon	Half gallon = 8 cups = 64 fl oz
¼ - ½ teaspoon	1 quart = 4 cups = 32 fl oz
Up to ¼ teaspoon	1 pint = 2 cups = 16 fl oz

- If you find it easier to pre-mix a gallon of solution, keep it stored in a dark, cool space—safely away from children and pets.
 - Not enough nutrients will starve your plant, but too-high concentrations will also kill it.
 - For leafy greens in shade, a nutrient of 15-0-15 works best.
 - For flowering plants, something rated as 20-20-20 will do.
 - Try to find a nutrient solution that indicates that it is complete, or your plant may end up missing something it needs to thrive.
 - You may want to experiment to find a mixture that works best for the plant and its location (light and temperature).
12. Fill your jar with nutrient solution until the level is a little below the bottom of the plastic net cup.
- Only a truly aquatic plant will survive if its roots remain submerged.
13. Place the plastic net cup in the mason jar and fasten it down with the ring. You now have your own hydroponic wick growing system.
14. Don't forget to occasionally check the solution level. The wick should remain immersed.



Make as many units as you like. Decorate them, add tags, have fun with them! You can place them in windowsills or provide artificial light. Herbs and lettuce are excellent choices for this project, but most small-statured plants will work. Keep them in your kitchen window sill for use when cooking, or just enjoy the beauty of a green plant. If you have pets or small children, you may want to anchor the unit appropriately to prevent accidental spills.

Enjoy!