The passive Deep-Water Culture System (DWC) is the lowest cost, easiest to set up and maintain and easiest to expand. It is portable and versatile for indoor and outdoor year-round gardening. No electricity is needed for the system—no pumps, no tubing, no filter. Use tap water and only hydroponic fertilizer. No weeding. No soil diseases. No heavy lifting. No pesticides. No herbicides. Take control of what you eat.

Plants grow in air, not soil. Fill your container with the nutrient solution so it just touches the bottom of the net pot, which includes the perlite/peat/seed or seedling. As the plant and root system grows, the water level drops, providing more air space for the plant to thrive. As long as the roots are in half or a third of the solution, you do not need to add more water. Once a month dump and replace the remaining solution to about half-full. Add fertilizer based upon the amount of cold water you added. Keep the air space. Done. You want simple? You got it!

Got winter? Frozen ground? Grow inside--tomatoes, peppers, eggplants, bush squash, salad greens and more in buckets and totes. Use a standard shop light. Use LED bulbs with a Kelvin rating between 4100K (warm) and 6500K (cool). Cramped for space? Use shelving units. Set totes or buckets on each shelf. Attach the lighting unit on the underside of the shelf above the plants. With six totes you could grow at least 60 salad greens. Maximize your space outside. Grow vertically. Use 6-foot SCH40 PVC tubes to grow 12 plants per tube, 60 plants per unit.

No room? No time? No excuse. Use half-gallon containers to grow salad greens and herbs. Start with salad greens and progress to tomatoes, peppers and more as you get comfy and enjoy eating healthier, fresher veggies and herbs. And get the kiddies involved. Have fun!

Material and Supply Options:

- Only use food safe containers with the numbers-1, 2, 4 or 5 or SCH40 on PVC tubes.
- Use half-gallon to 6-gallon buckets, or 10-gallon totes or 4” diameter PVC tubes.
- Use Styrofoam in your water feature to create a floating aquaponic garden.
- Use net pots (2”) or wide-lip baskets with perlite and peat to grow and support your plants.
- Use hydroponic fertilizer (granular or liquid) on both your hydroponic and soil-based plants.
- Standard shop lighting unit (4’) and standard LED lights (4100K to 6500K) for indoor growing.
- Electricity is for the lights, not for the passive DWC system itself.
- Optional tools: a drill and a two-inch hole saw to create holes for the net pots.

Want the details? Want a DIY project? Want to grow fresh, pesticide- and E-Coli-free veggies and herbs year-round? I invite you to visit my web-site: www.ccigardeningconnections.com.

Got questions? Doubts? Need help? Contact me at: okikumapress@visi.com.

Help stamp out poverty and hunger by buying my book, Hydroponic Gardening The Very Easy Way, directly from me at okikumapress@visi.com. It is also available on Amazon.com and select specialty outlets: UMINN Arboretum, MN Horticulture Society, Midwest Supplies and EcoGardens. Cover photo: Hydroponic Gardening The Very Easy Way.