

Protective Diet Class #323

Seed to Harvest Hydroponics featuring Eggless Egg Salad Lettuce Wraps

Learn how to create a salad grow room to gain independence amidst rising produce costs and food shortages. These simple, hands-off, Protective Diet Homestead winter gardening techniques will have you growing organic lettuce in the comfort of your guest room.

Announcements

- Engage in our official support group, [Protective Diet Living \(PDL\)](#). Join [Live Chats & Coaching Hour](#) for personal assistance.
- Shop <http://www.protectivediet.com/azure>, the organic farm that delivers near you, for low-cost, high-quality [PD staples](#).
- Take advantage of current savings on [Protective Diet Plant-Based Broth Mix](#).

Vocabulary

Hydroponics

Kratky Method

Nitric Oxide

Gut Microbiome

Polyphenols

Action Steps for Hydroponic Winter Gardening

- Get inspired with a review of Protective Diet Homestead’s outdoor [Garden Success](#) in the 2022 growing season.
- Move your garden indoors for the winter to maintain fresh food independence in your own [salad grow room](#).
- A set of sturdy shelves or a dresser can hold hydroponic supplies, buckets of fresh growing greens, and seedling starts.
- Ideal room temperature for this winter garden project is cool (about 68°). Find a space, gather supplies, and follow four steps:

Start Seedlings

- Drill one hole in the bottom of each plastic seedling cup
- Label each cup—write the seed-type and planting date w/marker on masking tape
- Fill each cup with fresh organic potting soil, sprinkle the soil surface with about 6 seeds, and cover with a dusting of potting soil
- Place cups in drip tray and pour in enough water to cover the bottom of the tray
- Allow seedlings to draw water through capillary action from the bottom up
This will keep the seeds in place and allow for even watering
- Drain the tray if all the water is not soaked up by the next day
- Place seedling trays under [grow lights](#) for 18 hours a day (4am to 10pm)
- Check on them once a week (Be patient! They WILL sprout)
- Water again when the top of the soil in the cups is no longer moist
- Repurpose a 1 gallon vinegar bottle to store water in your grow room
- Plant starts will grow well for 1-3 months if watered and thinned as needed
- Stop watering seedlings a few days before transplanting to allow the soil to dry

Protective Diet Seed Favorites

Baker Creek Seeds

- Ice Queen Lettuce
- Tango Lettuce
- Red Leaf Lettuce
- Purple Lady Bok Choy

True Leaf Market

- Little Caesar Romaine Lettuce
- Herbs: Parsley, Chives, Cilantro

Supplies for This Step

- Drip Trays—foil baking pans (or repurposed baking sheets)
- Pots—reusable plastic Solo cups (or repurposed salad boxes)
- Labels—masking tape & marker
- Organic Potting Soil
- Purchased or Collected Seeds: (Lettuces, bok choy, kale, herbs)
- Electric Drill (with hole bit)
- [Grow Lights](#) & [Outlet Timer](#)

Prepare Hydroponic Buckets using the “Kratky Method”

- Collect and thoroughly wash discarded frosting buckets from your local bakery
- Drill hole(s) in lids—(4 holes for herbs & bok choy, or 1 hole in center for lettuce & kale)
- Label each bucket—write the seedling-type & planting date using a dry erase marker
- Fill each bucket with 1 gallon of water, add 3 scoops of [MaxiGrow](#) hydroponics solution and top off with 1 more gallon of water
- Transfer seedlings to hydroponic buckets by placing them in pool noodle plugs:
Cut a pool noodle into 2” segments. Cut an additional fragment and carefully wrap it around the seedling stem. Insert the wrapped seedling, roots first, into a segment of pool noodle. Insert each seedling assembly snugly into a hole in the bucket lid
- Make sure the water reaches the bottom of the root, but leave a gap of air at the top

Supplies for This Step

- Buckets & Lids (2-gallon)
- Drill Bit (2” hole)
- 2” Pool Noodle
- Dry Erase Marker
- [MaxiGrow 10-5-14](#) Solution

Grow Time → Let plants grow under grow lights for 18 hours a day (4am to 10pm) → The bucket contains everything the plant needs for the entirety of its lifecycle → An odorless growth of healthy microbes will populate in the form of algae—it's fine → As the plants grow, they will drink the water and the roots will grow longer in order to reach the receding water. The resulting air space aerates the roots, encouraging growth → Plants can thrive for 1-2 months without replenishing the water	Supplies for This Step <input type="checkbox"/> Grow Lights & Outlet Timer
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Harvest Options → At 1 month you will have a beautiful bucket of leafy greens Regrow → Cut a few leaves off the base of the plant → Lift lid and check water level, add a little water but leave an air gap, replace lid Replant → Let it bolt, collect seeds, cut it off at the crown, pull out the roots and compost them → Use a designated scrubby to clean out the bucket and pool noodle (no need to sanitize) → Replace the stem wrap fragment & insert a new seedling into the clean pool noodle plug → Replace hydroponic solution, insert seedling assembly in lid, label bucket → Plant collected seeds in fresh potting soil to grow more seedlings	Supplies for This Step <input type="checkbox"/> Sturdy Sheers <input type="checkbox"/> Scrubby <input type="checkbox"/> Pool Noodle <input type="checkbox"/> MaxiGrow 10-5-14 Solution <input type="checkbox"/> Dry Erase Marker
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Cooking & Lifestyle Tips

Protective Diet's Family Gut Microbiome Population Project Update:

- We protect our microbiome by keeping our home chemical and fragrance-free. Check out the PD Lifestyle recipes to protect your microbiome and reduce toxic load. Protective Diet Laundry and Dishwasher detergents do the job for a penny a load.
- [The Beauty Broth Hot Pot](#) is a warming and delicious way to get a diversity of plant fiber into the diet on cold winter days.
- If you've been practicing a Protective Diet for a while and you are experiencing intestinal distress, there may be two reasons:
 - Overconsumption—packing in the food will cause gas and bloating. Your microbes are overwhelmed.
 - Lack of Variety—you must eat a diverse Protective Diet with a variety of plant fibers or the microbiome is underdeveloped.
- If you're just getting started, you may experience gas/bloating until you populate healthy gut microbes that digest plant fibers.
- Organic Tofu and Tempeh are high fiber. Other organic soy products ([soymilk](#), and [plant-based yogurt](#)) contain a powerful phytochemical called genistein, which has an angiogenesis inhibiting effect on cancer tumors. It prevents the growth of blood vessels that connect the tumor to the blood supply, so the tumor is starved. Animal proteins (including dairy, whey and protein powders) fertilize cancer tumors and feed angiogenesis, allowing tumors to connect to the blood supply, then grow and spread.
- [Julie Demonstrates a Meal](#) for the Family Microbiome Population Project:
 - [Family-Sized Eggless Salad](#) on [Breadmaker Whole Wheat Loaf Bread](#)
 - [Protective Condiments: Probiotic Pepper Sauce, 7-Day Sauerkraut, Protective Sprouts](#), and Hydroponic Lettuce
 - [Protective Beverages: Blue Chai—Butterfly Pea Flowers](#), Japanese Green Tea, and Mint Leaves create an irresistible blue color that is loaded with anthocyanins, the same phytochemical found in red cabbage.
- We are always [sipping on polyphenols on a Protective Diet](#). They are very low in flavor and high in prebiotics. They help our gut microbes have a little something when our eating is delayed. Most people think of prebiotics as something that comes in a capsule. Not on a Protective Diet. We have them flowing through us through our protective beverages. Make it fun—look for treasures at estate sales to repurpose as glass beverage canisters, dispensers and growlers.
- Pack lunches with outstanding eye-appeal in glass containers. They ask, "What's that?" You say, "That's my hydroponic lettuce."

Encouragement

- Eat well and be well. Do your best. We have all the nutritional information we need here in Protective Diet Education. All we have to do is follow through and apply it every single day and we will all experience exactly what I did. Do all of the suggestions and follow through without a doubt. Put notes in your [Calendar of Achievements](#). Take before and after pictures. You will be celebrating with us. This is a phenomenal way to support ourselves.

"I can't believe I grew heads of iceberg lettuce in my guest room!"

Recommended Recipes

- [Beauty Broth Hot Pot](#)
- [All-Purpose Cleaning Spray](#)
- [Oil-free Egg Rolls](#)
- [Apple Crumble](#)
- [Eggroll Bowl](#)

Recommended Classes

- [#319 Sip on Polyphenol Protection & Intro to Hydroponics](#)
- [#178 All Natural Cleaning](#)
- [#316 7-day Sauerkraut: Small Batch Fermentation](#)