

Go Green: Growing and Enjoying Leafy Greens Participant Guide

How to Grow Greens in Containers

Follow these tips to grow your own leafy green vegetables:

Selecting containers: Always use pots with drainage holes. Drill your own holes if needed. Recommended minimum size for containers is 12 inches in diameter and 12 inches deep. Always use commercial potting soil in containers. It is free of diseases, provides nutrients, and is designed to drain well.

Planting: If buying kale seeds, be sure to avoid ornamental kale or flowering kale. Greens can be planted in the early spring for a summer garden, and in late summer for a fall garden. Plant seeds 2 to 3 inches apart, and when seedlings emerge, thin them out until you have two or three plants per container, or more, depending on the size of the container. Plant some greens every two weeks if you would like to have a continuous supply to eat.

Watering: When possible, water the plants at the roots rather than on top, to avoid powdery mildew from establishing itself on the plants. Fertilize periodically.

Harvesting: Once the plants are well established, you can harvest the outer leaves of most greens and let the plants put out new growth. When a plant begins to bolt (form a seed head), remove the entire plant. If you want to add some baby greens to a salad, then pick them when very young.

Recipes

Green Smoothie Formula

In a blender, add these ingredients one at a time, running the blender on medium speed:

- 1 cup almond milk or other low fat milk
- 2 to 3 cups washed greens (add a small amount at a time, and use mild greens like kale, spinach, or collards)
- Small amount of sweetener, if desired (sugar, agave nectar, honey, stevia)
- 1 small slice of fresh ginger

Turn blender on high speed and then add, piece by piece:

1 to 2 pieces of fruit (banana, apple, or pear), cut into chunks 3 or 4 ice cubes, if desired for added thickness. Drink immediately.

Basic Pesto

Pesto is the name for a thick spread or sauce made from herbs or greens, with nuts or seeds, grated hard cheese, garlic and oil. It can be served on crackers or bread, or added to a variety of foods including baked potatoes, pizza, salads, and pasta. Tender herbs or greens make the best pesto, including arugula, spinach, cilantro, basil or parsley.

- ¹/₄ cup nuts or seeds (pine nuts or sunflower seeds, walnuts, other nuts)
- 3 cloves garlic, peeled
- 2 cups fresh herbs or greens
- ¹/₄ cup grated Parmesan cheese
- ¹/₄ teaspoon salt
- 1/3 to $\frac{1}{2}$ cup olive oil

Finely chop nuts or seeds and garlic in a food processor. Add herbs or greens and chop really fine. Add Parmesan cheese and salt. Mix well. When everything is well blended, add oil and mix all ingredients together. Store pesto in the refrigerator and **use within 4 days** or **freeze** for long-term storage.

Crunchy Baked Kale Chips

- 1 bunch fresh kale (about 8 cups, chopped)
- 1 tablespoon
- Canola oil or olive oil
- 1/2 teaspoon salt

Wash kale leaves. Cut leaves off of thick stem and **thoroughly** dry leaves in a salad spinner or by blotting with paper towels. Discard stems. Tear or cut leaves into bite sized pieces. Place in large bowl. Drizzle oil over kale and toss to coat well. Place kale leaves onto cookie sheet. Sprinkle with salt. Bake at 350 degrees until edges brown, about 10-15 minutes.

Recipe sources for more leafy green explorations in your kitchen:

Albi, J. and C. Walthers (1996) Greens Glorious Greens!, St. Martin's Griffin.

Atlas, N. (2012) Wild about Greens, Sterling Publishing

Belsinger, S. and C. Dille (1995) *The Greens Book*, Interweave Press. Ramsey, D. and J. Iserloh (2013) *Fifty Shades of Kale*, Harper Collins.

Romanelli, L. (1997) 366 Healthful Ways to Cook Leafy Greens, Plume Books

Sebben-Krupka, T. (2013) *The Complete Idiot's Guide Greens Cookbook*, ALPHA Books

Sampson, S. (2013) The Complete Leafy Greens Cookbook, Robert Rose, Inc.

Thomas, C. (2006) Melissa's Great Book of Produce, John Wiley and Sons.



Also check out our <u>www.foodhero.org</u> website for these greens recipes: Kale and Cranberry Stir-fry, Fish and Spinach Bake, Kale Dip with Veggies, Greens with Carrots, Popeye Power Smoothie, Spring Green Salad, and Pasta with Greens and Beans.



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Extension Service

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Preventing and reversing disease by generating **Ni**tric **O**xide with WHOLE FOODS

What is NO?



NO stands for Nitric Oxide, a combination of one molecule of Nitrogen and one molecule of Oxygen NO

What NO is not

not nitrous oxide, "Laughing gas" used in the dentist's office N₂O



not nitrogen dioxide, an air pollutant NO2

What does NO Do? NO is a chemical messenger that signals

- arteries to relax and expand
- immune cells to kill bacteria and cancer
- brain cells to communicate
- oxygenation of tissues

protect bones from osteoporosis

reduce formation of blood clots

• reverse erectile dysfunction

help protect skin from sun damage
reduce risk of developing dementia

NO can:

- prevent high blood pressure
- keep arteries flexible
- lower cholesterol
- limit swelling and pain of arthritis
- prevent, slow or reverse arterial plaque
- reduce risk of diabetes and complications like kidney disease, blindness and limb amputations

Where do we find NO?

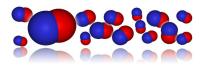
We make NO in our bodies from nitrates and nitrites in our food

I thought nitrites and nitrates were dangerous?

Nitrites and nitrates found naturally in our food contribute to making NO. Nitrates and nitrites added as a preservative to meats, can make nitrosamines which are carcinogens. Amines from protein, in the presence of saturated fat and cooked at high temps can create nitrosamines. Foods to avoid would include cured and smoked meats like lunch meats, hot dogs and bacon. Eating raw veggies does not contribute to cancer-causing nitrosamines.

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Which foods make NO?





vegetables, especially dark green leafys beets and some fruits

High NO producers

Kale, Swiss chard, arugula, spinach, chicory, wild radish, bok choy, beet, lettuce, cabbage, mustard greens, raw cauliflower, parsley, kohlrabi, carrot and broccoli

Medium NO producers

Coleslaw, asparagus, celery, watercress, artichoke, eggplant, strawberry, potato, garlic, tomato, vegetable juice, vegetable soup, melon



Low NO producers

String beans, figs, prunes, sweet potato, raspberries, raisins, bananas, cherries, onion, bean sprouts chickpeas, red wine

Boosting NO production

- 1. Have RAW greens at every meal or at least daily
- 2. Cooking and dehydrating destroy NO-building capacity
- 3. Accompany greens with a source of Vitamin C
- 4. Consume foods high in polyphenol antioxidants like dark colored fruit, (berries), red wine or grapes, and dark chocolate (65% cacao or more)
- 5. Include exercise in your daily routine, 30 minutes is recommended
- 6. Fish oil and other unsaturated oils boost NO production
- 7. Refrain from using mouthwash since it can decrease NO production by at least 1/3



Steer clear of L-arginine supplements that boost NO. They can be harmful, especially if you are over 40.

References

<u>No More Heart Disease</u>, Louis J. Ignarro <u>The Nitric Oxide Solution</u>, Nathan Bryan and Janet Zand

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