

What are Microgreens?

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Microgreens and baby greens are very young, tender plants. They are used as salad toppers, add-ins for smoothies, or garnishes on many types of dishes. Microgreens are younger than baby greens, and the plants are harvested for eating at different times. Microgreens add color, texture, and interesting flavors to meals. Microgreens are gaining popularity among chefs, so more farmers are growing them. They are easy to grow and can be grown indoors at home.

Microgreens are the next size up from seed sprouts. The first green leaf-like structures to emerge on a seedling are the cotyledons. Seedlings have one or two cotyledons, and they are not typically the same shape as the mature leaves. The leaf-like cotyledons may also be different colors such as purple or red. Microgreens are harvested for eating when the first leaf *after* the cotyledons, or the first true leaf, emerges. Many edible plants make excellent microgreens, including plants whose greens are not often consumed, such as carrots. Many lettuces do not make good microgreens because they are too fragile. Common and successful microgreen seeds include arugula, basil, beets, broccoli, dill, radishes, and mustards, but there are many others. They each add a unique flavor and texture to any dish. The flavor is often similar to the taste of the mature plant but tends to be more subtle.

Growing your own microgreens at home is easy. Use a soilless potting media, such as a peat moss-based mix with vermiculite or perlite. Put about an inch of moistened potting media into a sterile tray with drainage holes in the bottom. Sow seeds across the entire tray or plant in rows and gently press into the media. Larger seeds such as peas, sunflowers, and corn benefit from having a thin layer of moistened media placed on top of them, but most don't need it. Some harder seeds like beets and cilantro will germinate more easily if they are soaked in water for a few hours or overnight before sowing. It is easiest to sow just one type of seed in each tray, but if you like variety, consider growing different types or different cultivars of microgreens in the same tray. Pick those that germinate and reach harvest size at about the same time. Keep seeds moist until they germinate. After germination, keep moisture in the media by watering from below (setting the tray in another tray with water for an hour or so). Avoid watering the microgreens directly because a stream of water may dislodge the seeds, and the practice may also introduce diseases.

Microgreens are ready to harvest in 7-21 days (depending on the type) and when they've grown about 2-4". Harvest by cutting the plant above the soil line. Use clean scissors to cut them and gently place the harvested microgreens into a clean container. Use immediately or store them in a closed baggy or other container in your fridge.

Baby greens can work for microgreens, too; baby greens are simply older versions of microgreens and may reach upwards of 6". Plants grown as baby greens are typically more familiar to us as greens: spinach, lettuces, kale, beet greens, and others. We only eat the leaves

from baby greens, and they are often used in salad or mesclun mixes. Unusual greens and herbs add different colors and flavors. Some to try are amaranth greens and chervil. These are also relatively easy to grow, though they may need some additional feeding to reach ideal size. Try green peas – the leaves taste just like the peas, plus peas will continue growing even after the first harvest, so unlike most plants, you may get multiple harvests from your peas.

Give microgreens a try! For information on growing microgreens, see <http://gardeningsolutions.ifas.ufl.edu/plants/edibles/vegetables/microgreens.html>

For information on sprouts and food safety, go to <https://www.clemson.edu/extension/food/food2market/factsheets/7-the-food-safety-of-sprouts-factsheets.html>

The Virginia Cooperative Extension Horticulture Help Desk is available to answer questions. Currently the best way to reach is via email at mgarlalex@gmail.com. The physical office is currently closed due to Covid-19 but once reopened, is available at the Fairlington Community Center, 3308 S. Stafford Street, Arlington, VA. Hours are M - F, 9 AM – noon.

Benefits of Microgreens!

Microgreens are high in nutrition and contain 4-40 times more nutrients by weight than their fully grown counterparts. (National Center for Biotechnology Information or NCBI, an affiliate of the National Institutes of Health).

They contain polyphenols. Polyphenols prevent the build-up of harmful free radicals. This is associated with reduced risks of heart disease, cancer, and Alzheimer's Diseases. (NCBI)

Microgreens improve heart health. Animal studies show that eating microgreens may help reduce heart disease risk factors such as excess weight, bad LDL cholesterol and triglycerides.

They may reduce risks of chronic disease. Studies show that those that eat their vegetables may have lower risks of certain cancers, inflammation, heart disease, diabetes, and obesity. (NCBI)

Microgreens are easy and fast to grow.

Gardeners do not need to invest in a full garden or even have a backyard to grow microgreens.

All they need is water, soilless mix, seeds, and a light source.

Most microgreens are ready to harvest in 7-14 days after germination, though some may require another week.

You can grow and enjoy microgreens year-round, since they grow indoors.