

Houseplants add living beauty with foliage and flowers to the inside of your house. But when you add plants to interior spaces, you're not just decorating. These living organisms interact with your mind, body, and home in ways that enhance the quality of life.

Breathing Easier

When you breathe, your body takes in oxygen and releases carbon dioxide. During photosynthesis, plants absorb carbon dioxide and release oxygen. This opposite pattern of gas use makes plants and people natural partners. Adding plants to interior spaces can increase oxygen levels. At night, photosynthesis ceases, and plants typically respire like humans, absorbing oxygen and releasing carbon dioxide. A few plants—orchids, succulents, and epiphytic bromeliads—do just the opposite, taking in carbon dioxide and releasing oxygen. Place these plants in bedrooms to refresh air during the night.

Releasing Water

Plants release moisture vapor, which increases the humidity of the air around them. They release roughly 97 percent of the water they take in. Place several plants together, and you can increase the humidity of a room, which helps keep respiratory distresses at bay. Studies have documented that using plants in interior spaces decreases the incidence of dry skin, colds, sore throats, and dry coughs.

Purifying Air

Plants remove toxins from air—up to 87 percent of volatile organic compounds (VOCs) every 24 hours according to NASA research. VOCs include substances like formaldehyde (present in rugs, vinyl, cigarette smoke, and grocery bags), benzene, and trichloroethylene (both found in man-made fibers, inks, solvents, and paint). Benzene is commonly found in high concentrations in study settings, where books and printed papers abound. Modern climate-controlled, air-tight buildings trap

VOCs inside. NASA research discovered that plants purify that trapped air by pulling contaminants into soil, where root zone micro-organisms convert VOCs into food for the plant.

Improving Health

Adding plants to hospital rooms speeds recovery rates of surgical patients, according to researchers at Kansas State University. Compared to patients in rooms without plants, patients in rooms with plants request less pain medication, have lower heart rates and blood pressure, experience less fatigue and anxiety, and are released from the hospital sooner.

Another large study discovered that adding plants to office settings decreases fatigue, colds, headaches, coughs, sore throats, and flu-like symptoms. In another study by the Agricultural University of Norway, sickness rates fell by more than 60 percent in offices with plants.

A British study found that students demonstrate 70 percent greater attentiveness when they're taught in rooms containing plants. In the same study, attendance was also higher for lectures given in classrooms with plants.

Potting Soil

The ideal potting mix for most indoor plants is solid enough to anchor roots, but loose enough to allow quick root growth, good drainage, and the free flow of air. It should also retain moisture without getting soggy. Also, houseplant potting mixes traditionally contain no soil at all; instead, they're made of peat moss, vermiculite, perlite and, perhaps, pine bark and composts. Peat moss is light and absorbs lots of water, keeping the growing medium moist. Perlite and vermiculite act as spacers so that roots can grow freely. They also keep the soil from compacting and becoming waterlogged. We believe the **Fafard line of potting mixes** most closely satisfies all of these requirements. Ask us which is best for your plant.

Watering

If you've enjoyed indoor houseplants for any length of time, you've probably lost a plant or two. Insufficient and excessive watering are among many reasons a plant might fail despite what seem like pampered conditions. In some cases, pampering may be precisely the problem!

Water serves as an important transport medium, allowing nutrients to travel from soil to plant cells. But too much water in the soil layer forces air from the root zone, reducing the plant's oxygen supply. Unfortunately, there is no simple rule dictating how often houseplants should be watered. Some plants, adapted to bog or swamp life, enjoy soaking wet conditions. Other plants—the succulent family, for example—have adapted to long periods of dryness between heavy watering. Soil medium and pot type also influence how efficiently a container holds moisture. Once you discover how much water your plant prefers, however, watering becomes a simple routine.

Fertilizing

Fertilize only during the growth period, typically spring and summer. Plants that require periods of dormancy should never be fertilized while they are "asleep." Some indoor tropical plants are in constant growth, so they require fertilizers all the

time. Large and fast-growing plants need more fertilizer than small and slow-growing ones.

Refrain from fertilizing water- or light-deprived plants because the sudden onslaught of nutrients could actually kill them. Address their basic needs first. When they have recovered, that's when they can properly absorb fertilizer nutrition. Note that plants that thrive in low light require little or no fertilizer.

Always read fertilizer package formulation and instructions. Choose formulas designed for houseplants, container gardens or indoor plants. As a general fertilizer, we recommend **Osmocote** or **Dynamite**. Some very specific fertilizers are labeled for specific species of plants such as orchids, African violets, cacti, succulents, etc. Ask us for help in selecting the right product. Carefully follow the recommended application in terms of quantity, frequency and delivery. It's better to under-fertilize than over-fertilize because too much can be harmful, even fatal, to the plants. Watch for signs of over-fertilization like yellowing, deformed or burned leaves. To remedy an accidental over-fertilization, take the houseplant to the sink or outdoors and water it thoroughly, letting the water flow through the soil to "wash" the extra nutrients off.

Aloe	<i>Aloe vera</i>	Purifies air; removes benzene, formaldehyde & trichloroethylene
Bamboo Palm	<i>Chamaedorea elegans</i>	Purifies air; removes benzene, formaldehyde & trichloroethylene
Boston fern	<i>Nephrolepis exaltata</i>	Humidifies air; use in living spaces; mist plants often
Bromeliads	various genera	Releases oxygen at night; use in bedrooms
Cactus	various genera	Cacti may contain compounds that counter the effects of electromagnetic pollution and radiation emitted from computer screens.

Chinese Evergreen	<i>Aglaonema spp.</i>	Purifies air; removes benzene, maldehyde & trichloroethylene
Dragon tree ¹	<i>Dracaena marginata</i>	Purifies air; removes formaldehyde, benzene, toluene and xylene; use in living spaces
Ficus tree ²	<i>Ficus spp.</i>	Purifies air; removes benzene, maldehyde & trichloroethylene
Lady Palm	<i>Rhapis excelsa</i>	Purifies air; removes benzene, maldehyde & trichloroethylene
Orchids	various genera	Release oxygen at night; use in bedroom
Peace lily	<i>Spathiphyllum spp.</i>	Removes mold from air; use in bathroom & damp areas
Philodendron	<i>Philodendron spp.</i>	Purifies air; removes formaldehyde; use in living spaces & homes with new floors, walls & pets, etc.
Pothos	<i>Epipremnum aureum</i>	Purifies air; removes benzene, maldehyde & trichloroethylene
Schefflera	<i>Schefflera spp.</i>	Purifies air; removes benzene, maldehyde & trichloroethylene
Snake plant	<i>Sansevieria trifasciata</i>	Purifies air; removes formaldehyde and carbon monoxide produced by fuel-burning appliances; use in living spaces, kitchens and bedrooms with wood stoves
Succulents	various genera	Release oxygen at night; use in bedroom
Spider plant	<i>Chlorophytum comosum</i>	Purifies air rapidly; removes formaldehyde; use in living spaces
ZZ Plant	<i>Zamioculcas zamiifolia</i>	Easy to grow!

¹ Other dracaenas with similar properties: Janet Craig (*Dracaena deremensis* 'Janet Craig') and Corn Plant (*Dracaena fragrans* 'Massangeana').

² Includes Rubber Tree (*Ficus elastica*), Weeping Fig (*Ficus benjamina*) and Fiddle Leaf Fig (*Ficus lyrata*).

Note: Some houseplants can be toxic in different ways and to different degrees. If you have pets that have a habit of eating, chewing or otherwise tampering with plants, please consult a veterinarian for more information on specific plants.

