Houseplants – the Living Air-Machine

Emerging research suggests indoor plants are more than just a decoration. They're good for our mind, body and soul.

They have been proven to

- remove carbon dioxide and air-borne toxins
- supply oxygen that improves concentration and our sense of well-being (allowing us to be more focused, creative, attentive, healthier and happier)
- provide humidity to dry rooms
- ferns love benzene, a VOC (volatile organic compound) produced by tobacco smoke
- common products like paints, tobacco smoke, synthetic upholstery, printer inks and even carpets emit noxious gases - houseplants can remove up to 87 percent of airborne toxic gases emitted from these products including the degreasing solvent trichloroethylene (TCE), which can get trapped in airtight buildings and accumulate over time

The more time we live and work indoors, which is most of the day, the more we need houseplants surrounding us for our health and well being.

Most of us spend 90 percent of our lives indoors. According to the EPA, indoor air typically contains two to five times more pollutants than outdoor air and can be up to 10 times more polluted, especially if you've recently installed carpet or painted!

Dr. Bill Wolverton, a retired NASA scientist and author of "How to Grow Fresh Air", conducted a landmark study for NASA to find ways to clean air in space bases and vehicles.

Wolverton discovered how plants improve air quality by naturally "filtering and absorbing" up to 87 percent of airborne toxins called volatile organic compounds (VOCs) such as ammonia, formaldehyde and benzene, as well as tobacco smoke, all of which are found in many homes and offices. "Indoor plants help purge the air of airborne toxins with the same efficiency as the rainforest in our biosphere," Wolverton says.

Houseplants clean the air by absorbing toxins into the root zone, where they're turned into nutrients for the plants. "Good" microbes found naturally in and around plant roots also play an integral role in breaking trapped chemicals down into a source of food for themselves and the plant.

"Research I've conducted has proven the ability of houseplants to remove airborne chemicals from the indoor environment," Wolverton says. "Humidity is increased, airborne microbes are suppressed and fewer dust particles are found in rooms containing plants."

Wolverton recommends at least two or more medium to large houseplants for every 100 square feet.

An upshot of Wolverton's research was the discovery of certain plants that are top picks for their toxin-filtering abilities, including

- Spathiphyllum (peace lilies)
- Dracaena (spike)
- Philodendrons
- Golden pothos
- Spider plants
- Palms
- Ferns
- Schefflera
- Anthuriums
- Diffenbachia
- Orchids
- English Ivy

Corporations and offices are catching on that adding indoor plants does wonders for employee health and morale. Ongoing worldwide studies reveal that office worker productivity increases and absenteeism decreases when live plants are present. Plants also have a psychological and physiological calming effect that helps reduce stress and lower elevated blood pressure and pulse rates. In addition, plants in the workplace significantly reduce "sick building syndrome," which has vague symptoms such as fatigue, headaches, itchy skin and respiratory complaints.

Besides cleaning our air and providing oxygen and health benefits, plants add instant beauty and liven up any space.