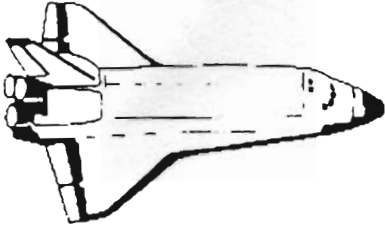


HEALTH BENEFITS



Health Benefits Research undertaken by the National Aeronautics and Space Administration (NASA) proves that plants are capable of cleaning indoor air of volatile organic chemicals



According to Dr. William Wolverton, NASA's principal investigator in this research, "Low levels of chemicals such as carbon monoxide and formaldehyde can be removed from indoor environments by plant leaves alone, while higher concentrations of numerous toxic chemicals can be removed by filtering indoor air through the plant roots surrounded by activated carbon. The carbon absorbs large quantities of toxic chemicals and retains them until the plant roots and associated microorganisms degrade and assimilate these chemicals."

Bioregeneration Bombarded with toxic fumes from carpets, furniture, office cleaning products, and copy machines, among other offenders, the average employee is inundated with formaldehyde from particle board, facial tissues, and paper towels, and trichloroethylene (TCE) from ink, and paints



Improve indoor air quality--plants clean pollutants from the air.

According to the EPA, "employees who work in buildings of manmade materials inhale over 300 contaminants every day."

Over 15 years ago, NASA became aware of the potential indoor air pollution problems associated with manned space flights, shuttles and space stations. Interest in the use of plants in improving the quality of air led to studies that culminated in a recent two-year research program

The research was aimed at finding out whether plants in a sealed, controlled environment could successfully eliminate common household and work-related pollutants, such as formaldehyde, benzene and TCE.



Researchers found that one potted plant per 100 square feet of floor space can help clean the air in the average home or office. In more sophisticated approaches, new building designs can incorporate plant-filtering systems built into atriums, lobbies and walkways

BEST PLANTS...



Which Plants Work Best Virtually every tropical indoor plant and many flowering plants are powerful removers of indoor air pollutants. The following chart lists the plants in the NASA study that most effectively removed pollutants in the air

POLLUTION SOURCES	SOLUTIONS
<i>Formaldehyde</i> Foam Insulation Plywood Clothes Carpeting Furniture Paper Goods Household Cleaners	Philodendron Spider Plant Golden Pothos Bamboo Palm Corn Plant Chrysanthemum Mother-in-Law-Tongue
<i>Benzene</i> Tobacco Smoke Gasoline Synthetic Fibers Plastics Inks Oils Detergents	English Ivy Dracena Marginata Janet Craig Chrysanthemum Gerbera Daisy Warneckii Peace Lily
<i>Trichloroethylene</i> Dry Cleaning Inks Paints Varnishes Lacquers	Gerbera Daisy Chrysanthemum Peace Lily Warneckii Dracena Marginata

Plants not only beautify indoor environments, they make them healthier to live in. Properly designed indoor planting can provide an inexpensive, refreshingly low-tech means of removing pollutants from the air in commercial and residential settings

