Houseplants for your health

HOUSEPLANTS ARE GOOD FOR YOUR INDOOR SPACES .... AND OUTER SPACE TOO! In the late 1980s, a study by the American space agency NASA and the Associated Landscape Contractors of America (ALCA) concluded that common houseplants such as bamboo palms and spider plants not only make indoor spaces more attractive, they also help to purify the air by removing polluting chemicals!

While it was originally intended to find ways to purify the air for extended stays in orbiting space stations, the study proved to have implications for us down here on Earth as well.

Newer homes and buildings, designed for energy efficiency, are often tightly sealed to avoid energy loss from heating and air conditioning systems. While it's a well known fact that plants convert carbon dioxide into oxygen through photosynthesis, the NASA/ALCA study showed that many houseplants also remove harmful elements from the air. NASA and ALCA spent two years testing 19 common houseplants for their ability to remove common pollutants from the air.

Most houseplants are adapted to tropical areas, where they grow beneath dense leafy canopies. So they are ultra-efficient at capturing light and in processing the gases necessary for photosynthesis. They can also absorb other gases, including potentially harmful ones. The NASA study tested primarily for three chemicals: *Formaldehyde* is used in many building materials including particle board and foam insulations. Additionally, many cleaning products contain this chemical. *Benzene* is a common solvent found in oils and paints. *Trichloroethylene* is used in paints, adhesives, inks, and varnishes.

While NASA found that some of the plants were better than others for absorbing these common pollutants, all of the plants had properties that were useful in improving overall indoor air quality. NASA also noted that some plants are better than others in treating certain chemicals. For example, peace lily and bamboo palm were effective at treating all three chemicals, as was gerbera daisy, although it is not a true houseplant. Mother-in-law's tongue, the dracaenas warneckei and marginata, golden pathos and green spider plant worked well for filtering formaldehyde. Here is NASA's list of the most effective plants for treating indoor air pollution:

Peace lily (spathiphyllum 'Mauna Loa'). **Bamboo or reed palm** (chamaedorea sefritzii). **Gerbera daisy** (gerbera jamesonii). **Heartleaf philodendron** (philodendron scandens 'oxycardium'). **Elephant ear philodendron** (philodendron domesticum). **Cornstalk dracaena** (dracaena fragrans 'Massangeana'). **English ivy** (hedera helix). **Spider plant** (chlorophytum comosum). **Janet Craig dracaena** (dracaena deremensis Janet Craig). **Warneck dracaena** (dracaena deremensis Warneckii). **Weeping fig** (ficus benjamina). **Golden pathos** (epipiremnum aureum). **Selloum philodendron** (philodendron selloum). **Chinese evergreen** (aglaonema modestum). **Snake plant** (sansevieria trifasciata). **Red-edged dracaena** (dracaena marginata).

For an average home of under 2,000 square feet, the NASA study recommends using at least 15 samples of a good variety of these common houseplants to help improve air quality. They also recommend that the plants be grown in six-inch containers or larger.