

A Simpler, Healthier Life with Plants and Fresh Air

Years ago (oh, thank goodness!) the cool days and colder nights signaled the autumn ritual of removing screens and hanging storm windows. Then along came the triple-track mechanism and the process changed to simply pushing up screens and pulling down a second window to provide another barrier to the cold outdoors. Now life is even simpler thanks to the technology of double-pane insulated glass. No more fuss as winter winds begin to blow.

The improved quality of windows and home insulation resulted in minimal amount of outside air entering our homes. This is certainly a good idea as the price of heating fuel escalates. However, when we look at the increased items within our homes that emit chemical pollutants (carpeting, paneling, paint, dry-cleaned clothing, pressed wood products, adhesives, synthetic materials, cleaning supplies, computers and other electronic devices) our health and well-being are in jeopardy. Experts estimated that we spend up to 90% of the day inside and the prolonged exposure to these chemical pollutants escalates complaints of allergies, asthma, fatigue, headaches, chemical hypersensitivity, respiratory infections and cancer. The Environmental Protection Agency (EPA) ranked indoor air pollution as one of the top five threats to public health.

But, the good news is that plants can change the quality of the air we breathe. One of the most important, and yet simplest step to improve the indoor air quality, is to include a variety of plants throughout the home and office. The National Aeronautics and Space Administration (NASA), while creating a sustainable, closed ecological life-support facilities conducted extensive studies on how foliage and flowering plants clean the air of pollutants. (See next page for study details.)

When considering the things that improve quality of life, plants do not usually come to mind. Plants are generally a part of our interior design for aesthetic reasons. Bringing in a little color from nature, we use plants to soften sharp corners, to brighten the dark days of winter and to provide a tranquil environment. Plants instill a feeling of peacefulness. Research has shown that cultivating plants indoors and outdoors may be the best medicine available for improving mental and physical well being. However, plants do so much more. They provide us with healthy air and the precious oxygen we breathe. The production of oxygen results from photosynthesis – the process by which green plants use light to convert carbon dioxide and water into energy. The living process of animals would deplete the levels of oxygen if plants did not replenish it.

Formaldehyde is the most common toxin found in indoor air. Sources of this chemical pollutant include adhesives, caulking compounds, ceiling tiles, draperies, fabrics, facial tissues, floor coverings, gas stoves, grocery bags, paints, paper towels, particleboard, permanent-press clothing, plywood, stains, varnishes and upholstery. The ability to remove formaldehyde from the air is the benchmark for rating the ecological benefits of a variety of plants.

The presence of airborne microbes (mold spores) and low relative humidity are also determining factors in the quality of the air we breathe. Dry air irritates sensitive membranes of the upper respiratory tract, increasing susceptibility to viruses, mold, dust and allergens. Plants release phytochemicals that suppress mold spores and bacteria. They are also natural humidifiers. The drier the air, the more moisture a plant gives off through the process of transpiration.

Research data proves the effectiveness of plants in improving indoor air quality. Houseplants are an essential component to our physical and mental health. They are nature's air purifiers.

The plants listed in the sidebar are quite tolerant of the indoor environment. They have the capability to release moisture into the air and remove a variety of chemical toxins. Except for the Gerbera daisy, which requires full sun, these plants do well in semi-shade? Generally, plants that bloom, bear fruit or have variegated foliage need more light than the green foliage plants.

Houseplants require care. Unless fed regularly with fertilizer, potted plants, whether indoors or outdoors, can develop nutrient deficiencies. A healthy plant provides a healthy environment. Houseplants are not a luxury, but an essential component to simple, healthy living. Taking care of houseplants is a life management skill anyone can develop.

NASA spent considerable time and effort testing the effectiveness of house plants in the removal of air toxins. The following lists sources of common pollutants and solutions.

Formaldehyde

Sources: Adhesives, carpeting, fabric, floor coverings, foam insulation, furniture, household cleaners, paints, paper goods, particle board, plywood, stains and varnishes.

Solutions: Boston Fern, Gerbera daisy, Bamboo palm, Rubber plant, English ivy, Peace Lily, Schefflera, Spider plant

Benzene

Sources: Ceiling tiles, detergents, gasoline, inks, oils, paints, particleboard, photocopiers, plastic, stains and varnishes, synthetic fibers, tobacco smoke and wall coverings.

Solutions: English Ivy, Peace Lily, Gerbera daisy, Chrysanthemum

Trichloroethylene

Sources: Adhesives, dry cleaning, duplicating machines, inks, lacquers, paints, printers and photocopiers

Solutions: Gerbera daisy, Peace lily, Chrysanthemum

Xylene/Tulene

Sources: Adhesives, caulking compounds, ceiling tiles, computer screens, floor coverings, paints, particleboard, photocopiers, printers, stains and varnishes and wall coverings.

Solutions: Areca palm, Dumb cane, Dragon tree, Corn plant, Peace Lily

Alcohols

Sources: Adhesives, carpeting, caulking compounds, ceiling tiles, cosmetics, duplicating machines, floor coverings, paints, particle boards, stains and varnishes, and wall coverings.

Solutions: Lady palm, King of hearts, Lily turf, Arrowhead vine, Peace Lily

From clutter and chaos to CONTROL and CALMNESS – That's right, you, too, can get and stay organized all year. It is just a matter of making a promise to yourself and keeping that promise of controlling clutter, putting things away, reduce items from coming into your life. Or will you continue to do the same thing over and over again expecting a different result? Contact Judith Ann Kirk for help in learning life management skills. It is about making wise choices and changing behavior. <mailto:Info@JudithKirk.com>