

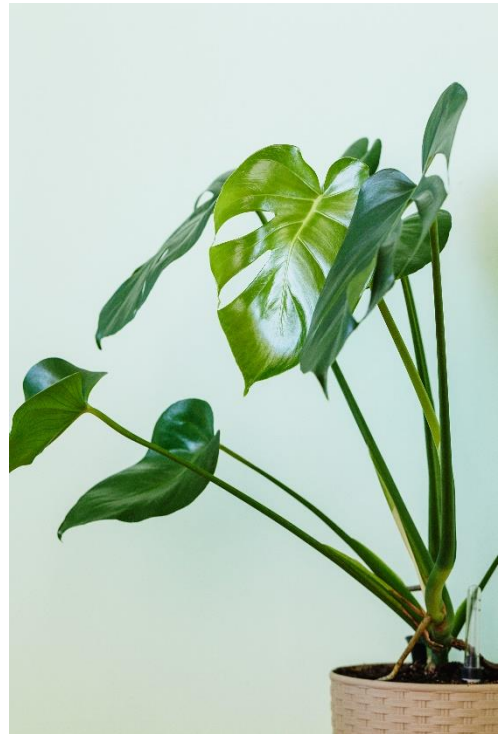
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## Plants and indoor air quality: What we know

many of us spend much time indoors, usually because of indoor occupations and long hours at work – and of course, because of the current COVID-19 pandemic! In any case, we can often overlook spending time outdoors. Being outside can boost your health due to many factors and one of them involves being around plants.

Plants aren't just indoor decorations. Apparently, we can also use them to help bring those outdoor health-boosting qualities indoors by helping to lower any air-borne toxins inside our buildings. These include hazardous particles and potentially toxic gases like carbon monoxide, ozone, and volatile organic compounds from sources such as furniture, paints, carpets, and office equipment.

It's long been known plants have the ability to absorb toxins and improve indoor air quality, although much research still has to be done: Not much is known about which plants are the best to use and how to use them to boost their ability to perform more efficiently indoors. For example, researchers question how leaf shape and size affect a plant's ability to assimilate CO<sub>2</sub>, how much air pollution is actually absorbed by a plant, and how many plants would be needed to reduce air pollution per square meter (the current popular estimate of 1 plant per 100 square feet hasn't been proven).



Plant microbiomes or microorganisms (bacteria and fungi) also need to be better understood. The bacteria and fungi living on the plant and in its soil can help remove airborne pollutants, as well as offer certain properties to enrich our own good health. However, we don't know enough yet to differentiate which of these microbial species are helpful or harmful: Some may trigger allergies or other health issues.

But what do we know? We do know that plants absorb carbon dioxide and release oxygen through photosynthesis. They help increase humidity by transpiring water vapour throughout the microscopic pores in the plant. And plants do absorb pollutants on their external surfaces, roots and in the soil (although how much isn't clear).

To date, there are several plants often recommended to be superior in their ability to help 'clean' indoor air: Golden pothos, Areca palm, Lady palm, Bamboo palm, Dwarf date palm, Rubber plant, Ficus Alii, Boston fern, Asparagus fern, Peace Lily, Ficus tree, Purpleheart, Dracaena, Philodendron, and many others. Some Ivy's and the Spider plant have also been suggested. But again, more evidence is needed to verify the extent of their effectiveness.

If you don't have plants at home or in the office, there is certainly some evidence that buying a plant or two is worth considering. And should future studies prove there is no substantial air quality benefit . . . well, at least the plants can serve as a reminder to spend some time outdoors!

*Eve Lees has been active in the health & fitness industry since 1979. Now retired, she was a Freelance Health Writer for several publications and gave speaking presentations to business and private groups on various health topics. <https://www.artnews-healthnews.com/health-writing>*

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