



Hygiene for Healthy Ageing **Vinod Kumar, MD** **Professor Emeritus** **Alzheimer's & Related Disorders Society of India**

Over the years, the word “hygiene” has expanded beyond the scope of just preventing infectious diseases. We also hear words like sleep hygiene, social hygiene, mental or emotional hygiene, information hygiene, occupational and industrial hygiene, etc. This paper outlines the importance of following hygienic practices in maintaining health and managing medical conditions, with special reference to ageing individuals.

Traditional medical hygiene. Hand washing can slow the spread of infections. Vaccinations (medical hygiene), sleep hygiene, and bowel hygiene are also important to maintain health. Scientists continue to look for their possible links between infective pathogens and non-communicable diseases as well. For example, vaccines have been developed to interrupt viruses that cause liver cancer and cervical cancer.

Modern world hygiene. Numerous chemicals are involved in the manufacture, transport and storage of high-fragrance soaps, shampoos, hair sprays, perfumes, after shaves, and nail polishes, as well as in plastic wares, metal, cans etc. These can act as endocrine disrupting chemicals (EDCs) and disturb our hormonal balance. EDCs can leach into food and drink from their containers. Few countries regulate the manufacture of these products with permissible limits of EDCs. Try to avoid them.

Indoor pollution hygiene. Worldwide, environmental pollution (outdoor and indoor) is responsible for considerable morbidity, disability and death. Aged and poor persons from low-income countries are particularly vulnerable. Poor air quality resulting from indoor pollution results from numerous sources, e.g. fuel burning, smoking, deteriorating building material, newly installed flooring and upholstery, personal and household cleaning products, and air conditioning devices. High temperature, humidity and moisture also contribute. Long-term exposure to pollution can cause respiratory diseases, stroke, heart disease, diabetes, cancer, etc. Basic strategies against indoor pollution include removal of the polluting source, proper ventilation, installing air purifiers, and going green.



Common Indoor Air Problems



Moisture



VOCs and Chemicals



Smoking



Dust



Pet Dander

Anti-pollution plants. Several plants can help to reduce pollution.

For example, the Areca Palm (*Chrysalidocarpus Lutescens*), also called the living room plant, absorbs formaldehyde, carbon dioxide and carbon monoxide from air and gives clean oxygen in the house. Keep four plants of shoulder height in the house. Its leaves need to be cleaned every day, and plant to be kept in the sun once in 3-4 months. →

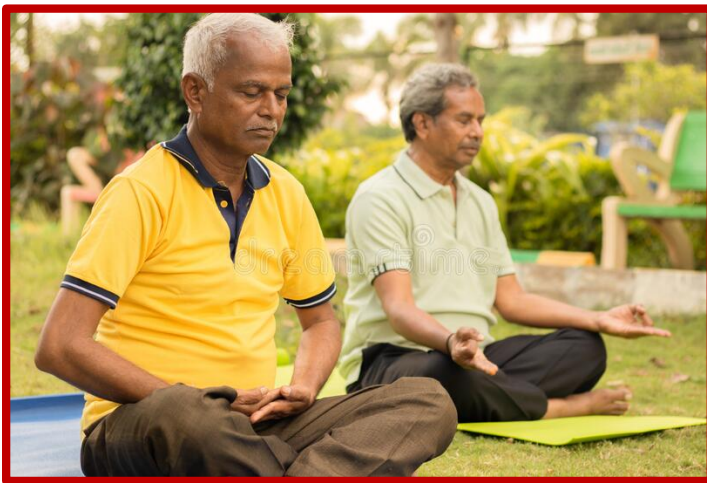


← Mother in law's tongue plant (*Sansevieria Trifasciata*), also called bedroom plant or snake plant, can convert carbon dioxide into oxygen. Six plants up to the height of 3 feet can be kept in the house.

The Money Plant (*Epipremnum Aureum*) cleans the chemical toxins from the air, including trichloroethene, toluene, xylene, benzene, and formaldehyde, and it releases fresh air into the atmosphere. →



Emotional and spiritual hygiene. Hormones are ubiquitous and are all encompassing regulators, not only of our physical and cognitive functioning but also our emotional and spiritual functioning. We can promote positivity, improve our mood and



quality of life, and mitigate stress and disease through the mediation of hormones such as oxytocin (love hormone), dopamine (feel good hormone), endorphin (pain relief hormone), melatonin (sleep hormone), and serotonin. We also can combat the stress hormone, cortisol. Common practices that can help include yoga, pranayama or breathing exercises, meditation, praying, pilgrimaging, and ethical living. Socializing, developing relationships, laughing, watching Mother Nature, listening to music, and engaging in group exercise are also useful.

Hygiene through NCDs Vaccines. Many NCDs are considered a result of chronic long-term inflammatory state in which the host is unable to get rid of the offending pathogen. Success with using hepatitis B and HPV vaccines to protect against liver cancer and cervical cancer has stimulated scientists to look for other viral links for chronic diseases and conditions. For instance, our immune system can be made to see fat cells of an obese person as a threat and attack them with our leucocytes. Also, nicotine when bound to antibody cannot cross the blood brain barrier and therefore cannot reach the brain to cause addiction to tobacco in a smoker. Research is on for vaccines for many other NCDs, e.g., type 1 diabetes, pancreatic cancer, prostate cancer, hypertension, Alzheimer's disease, Parkinsonism, multiple sclerosis etc. However, as of now, NCDs vaccines will not be for population at large, but for NCD patients. Are these therefore the drugs for treatment or in real terms the true vaccines? NCD vaccines are likely to be less efficacious and more expensive when compared to traditional true vaccines against infections.