

Air improved by fresh air definitely a

[Environment](#), [Air](#)



Air is vital to maintain life and serves to ensure constant supply of oxygen to the body through the process of respiration. Apart from supplying the life-giving oxygen, air performs many other functions in the body i. e.

it carries sound and smell and helps in regulating the body temperature. The air may contain disease producing micro-organisms, dust, smoke and chemicals which may be harmful to the body and may lead to different kinds of diseases. Pure air is necessary for healthy living. Fresh air acts like a tonic. It stimulates digestion, improves metabolism, strengthens the nervous system and increases the body resistance against diseases.

When all these body systems are improved by fresh air definitely a person will feel healthy and cheerful. So the air we breathe in must be pure.

Composition of Air:

Air is a mechanical mixture of gases and not a chemical compound. The composition of air may vary from place to place but normally the pure air has the following composition: Oxygen 20. 95% Nitrogen 79. 00% Carbon dioxide 0.

03 to 0. 04% The remaining amount is made up of some gases like argon, neon, krypton, xenon and helium which occur in traces. Along with these, air also contains water vapours and suspended impurities like dust, soot, bacteria, spores and vegetable debris etc. The composition of fresh air generally remains constant due to certain factors that (a) Movement of air dilutes and takes away the impurities. (b) The atmospheric temperature and ultraviolet rays present in sunlight oxidises the organic matter and kill the

bacteria. (c) Rain removes the suspended and a gaseous impurity thus helps in cleaning the atmosphere (d) Green plants play a great role in the purification of air due to their chlorophyll content. They take up carbon dioxide from the atmosphere and give off oxygen. This process is reversed during night time.

The exchange of oxygen and carbon dioxide by the plants always goes on thus the atmosphere remains clean. The outdoor and indoor composition of air always differs because the outdoor air is the fresh air whereas indoor air is always affected by the occupants and their activities. A crowded room may be more suffocating due to consumption of oxygen and release of carbon dioxide by all the occupants. Moreover body smells are added to the air and there is an increase in temperature and humidity due to breathing.

Air Pollution:

The term air pollution is applied when there is an excessive concentration of foreign matter in the air which is harmful to health. Now a day it is a major problem affecting the atmosphere and health of the public. Increasing urbanisation and industrialisation are the main causes of air pollution.

The other major sources of air pollution are: (i) Process of respiration in men and animals where carbon dioxide is released to atmosphere especially in rooms occupied by a number of persons. (ii) Industries are a big source of air pollution especially chemical, fertilizer and metallurgical industries. Brick kilns are other sources of air pollution. (iii) Burning of coal, oil or agriculture waste produces gases like sulphur dioxide, carbon dioxide and smoke which lead to air pollution. (iv) With increased industrialisation and urbanisation the

number of vehicles has tremendously increased specially in urban areas which are one of the major causes of air pollution. Air pollution from the vehicles is very dangerous because the vehicles move from place to place causing pollution everywhere and giving you trouble at home, in the office, in the shopping centre or on the road. The vehicles like buses, trucks, tractors and railway engines etc.

which run on diesel emit more smoke and looks more obnoxious but the vehicles like cars and two/three wheelers which run on petrol are more dangerous since these vehicles come in close proximity with the public, even in houses and streets. The smoke emitted by petrol vehicles contains carbon monoxide — a poisonous gas. When the engines of vehicles are not properly adjusted or tuned they cause even more pollution.

(v) Decomposition of animal and vegetable matters leads to air pollution. After decomposition they emit very offensive and poisonous gases in which bacteria, moulds and fungi grow very rapidly. (vi) Natural sources like dust, pollens, fungi and bacteria also cause air pollution. Pathogenic micro-organisms or related diseases are present in the vicinity of patients only and not in the atmosphere.

(vii) Insecticides and pesticides sprayed on plants cause air pollution. (viii) Nuclear energy programmes also pollute the air. Although more than 100 pollutants have been identified but smoke, suspended particles, gases like carbon monoxide, sulphur dioxide, hydrogen sulphide, and oxides of nitrogen, chlorides, fluorides and cancer producing substances are the major pollutants of air.