

## AYURVEDA FOR PREVENTION OF DISEASES DUE TO AIR POLLUTION

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## ABSTRACT

“Pollution” refers to the introduction of harmful substances or contaminant into the environment, causing adverse effects, it can be in the form of air, water, soil or noise pollution and has serious consequences for ecosystem, human health and climate change, efforts to reduce pollution involve policies regarding technological advancement and individual action to protect the environment and promote suitability. Air Pollution can cause a wide range of health issues, affecting various organs and system in the body apart from its effects on environment by damaging forest, lakes and river. Ayurveda, the traditional system of medicine in India, emphasizes a holistic approach to health and wellbeing. While Ayurveda does not specifically address modern pollution but it promotes practices that can contribute to overall wellbeing and indirectly collective efforts to reduce effects of pollution. These includes *Aahara* (plant based diet) or Home remedies, *Dincharaya*, *Rutucharya*, *Sadvritta*, *Yoga*, *Pranayama*, Environmental awareness. This research article harness to manage How Ayurveda offers sustainable solution to combat air pollution.

**KEYWORD:** Pollution, *Aahara*, *Dincharaya*, *Rutucharya*, *Sadvritta*, *Yoga*, *Pranayama*.

## INTRODUCTION

Air pollution is a major issue around the world. The quality of air that we breathe directly effects lung health and the functioning of the respiratory system. Lung cancer is a hazard in gas industry, asbestos industry.<sup>[1]</sup> The poisonous gases in the air, combined with the smoke and particulate matter has worsened to a point that the very air we breathe has become our poison. Air pollution is due to the release of toxic fumes, gases, smoke and dusts in the atmosphere. It requires proper town planning and zoning to reduce this hazard.<sup>[2]</sup>

## AIM

To study *Ayurvedic remedies* to prevent health hazards from air pollution.

## OBJECTIVES

To study health hazards of air pollution.

To study role of immunity to prevent health effects of air pollution.

## Ayurveda for prevention of health hazards of air pollution

Ayurveda delivers a few practices which can help reverse the harmful effects of air pollution to a great amount and help people breathe easy.<sup>[3]</sup>

- *Nasyam* is a simple yet effective *Ayurvedic* treatment to prevent the entry of harmful substances through inhalation. Simply put 2 drops of ghee or oil in your nostrils every morning and night. This acts as a barrier, preventing pollutants from entering the respiratory system.
- Oil pulling is another *Ayurvedic* practice which can be prepared every morning for best results. Gargle with Sesame Oil / Coconut Oil for about 10 minutes, after your morning brushing routine. This purges the mouth of any particles which may be present because of mouth breathing. It also strengthens the mucous lining in the mouth, and avoids entry of toxic allergens.
- *Pranayama* is the most significant *Ayurvedic* practice which can help prevent the harmful effects of air pollution. It makes stronger the lungs and expands respiratory It also boosts immunity, thereby helping the body to fight any harmful substances

which may have entered the body. This can be done for a few minutes every day for the best results.

- Another important *Ayurvedic* purification practice you can include in your routine is *Swedana*. *Swedana* is sweating it out with the help of herbal steam or warm compresses on oiled skin. It helps to eliminate the chemicals which may be accumulated in the body in the form of “*ama*”. Steaming the face with water containing a few drops of eucalyptus oil helps to boost strength of nasal barrier as well.
- A simple *Ayurvedic* practice which can assistance cleanse the body is washing the skin and hair with *neem* water. *Neem* is a powerful *Ayurvedic* cleanser and can remove any residual pollutants.
- Drink an *Ayurvedic* decoction made by boiling *tulsi* leaves in water and adding ginger to it. Allow it to steep and drink this daily to give the body an immunity boost.
- *Triphala* can be taken in powder form as per the instruction of an *Ayurvedic* doctor to protect the body against the effects of air pollution.
- Make a tea with fennel seeds, cumin seeds, coriander powder and ginger. Drink this every day to drastically get better lung function and strong out the respiratory tract.

Air pollution is a global predicament that can be solved by conscious human action against it. So, take small steps against air pollution and practice *Ayurvedic* preventive measures to protect your body from the ill effects of the same. The increase pollution is affecting many and causing several health issues. You need to guard yourself and your family from the growing pollution. There are many steps you can follow to govern the adverse effect of pollution other than wearing a mask. During high pollution levels you must wear a mask to prevent yourself from the toxins. But along with this you can make some needed changes for better protection. *Ayurveda* has given a solution to almost every problem in the most natural way possible. There are some healthy *Ayurvedic* hacks to switch the adverse effect of pollution as well.<sup>[3]</sup>

### 1. How to strengthen immunity?

To strengthen immunity, you require a diet rich with antioxidants to protect the body from the effects of the pollutants. Right food is an important input to sufficiently handle the impact of pollution on our health, since there is little that can be done to reverse the problem externally. A diet for better immunity must contain-

- a) Vitamin C: Amla, guava, lemon, berries, tomato, carrots, kiwi and apples
- b) Vitamin E: It is found in almonds, basil or cloves
- c) Beta carotene: Sources of beta carotene are coriander, fenugreek, lettuce and spinach
- d) Omega 3 fatty acid: It can be found in walnuts, chia seeds, flax seeds and clarified butter or ghee

## 2. Home remedies

### a) Turmeric and honey

Take one-fourth table spoon of turmeric and mix it with half a table spoon of honey. Have this before going to bed. This mixture is a time tested solution for building strength and immunity.

### b) Ginger, basil and honey

Half a table spoon of juice extracts of basil leaves mixed with honey and 5 drops of ginger juice can be consumed on an empty stomach in the morning.

### c) Jaggery

It is one of the most effective remedies for air pollution. Jaggery has anti-inflammatory properties and it can be added in the diet in various ways.

### d) *Neem* leaves

*Neem*, with anti-bacterial and anti-fungal properties, builds immunity while cooling down the body. It detoxifies and removes the impurities from the blood.

### e) Ghee or clarified butter

It is good for digestion and has detoxifying properties. Presence of omega 3 fatty acids in Ghee supports your immune system. It is also anti-inflammatory and a rich source of antioxidant which makes it a must have. It promotes an alkaline environment in the body, when your diet, especially in India happens to be more acidic overall. Alkaline environment makes it difficult for diseases and ailments to manifest in the body.

## 3. To purify the air

Research displays that some house plants can take in toxins from the air and purify the air .it includes bamboo, Erica palm, peace lily and money plants. Other methods may include use of beeswax candles, salt lamps or essential oils containing rosemary, thyme, oregano, tea tree, lemongrass and cinnamon. *Ayurveda* has given details about various plants and measures in combating environmental impurities and sanitizing the environment.<sup>[4]</sup> The ubiquitous and sacred *Tulsi* (*Ocimum tenuiflorum* L.) plays a vital role in absorbing pollutants. *Neem* (*Azadirachta indica* A.Juss.) leaves boiled in water have detoxification properties beneficial for skin and hair. Turmeric having an anti-inflammatory property protects lungs from the toxic effects of pollutants.

*Haritaki* (*Terminalia chebula* Retz.) and ginger (*Zingiber officinale* Roscoe) too are beneficial for respiratory ailments. *Triphala*, with honey, reinforces immunity, restoring balance to the system. The herb *Pippali* (*Piper longum* L.) with honey purifies lungs and assists easy breathing. Likewise, the smoke emitted from burning like *Laksha* (*Laccifer lacca*), *Haridra* (*Curcma longa* L.), *Ativisha* (*Aconitum heterophyllum* Wall) and *Haritaki* is recognized to purify toxic air.<sup>[5]</sup> *Shobhanjan mooladi agad* may be used for treating those affected by such pollution.<sup>[6]</sup> incidentally, in the past, many of these

*Ayurvedic* drugs were part of grandmother's vast repertoire of home remedies that fortified households against various ailments.

According to *Ayurveda*, three *doshas* four main *doshas* govern the functions of the body. Things such as our diet, our lifestyle as well as our environment impact the balance between the *doshas* in our body. The types of *Doshas* in our body are *Vata*, *Pitta*, and *Kapha*. The belief is that every individual is born with a unique combination of *doshas* that influence a person's physical and mental traits. As cited before, our environment can have an impact on the balance between our *doshas*. Air pollution leads to an imbalance between the *Vata* and the *Kapha dosha* in the imbalance in both the *doshas* leads to an increased formation of mucus that can clog the nasal passage and aggravate pre-existing issues. While some of the keys prescribed in *Ayurveda* may not be a long-term solution to the problem, they provide relief in the short term.

### Pranayam

Another method is the *Kapalbhati* breathing exercise that can be done at the start of your day. To start this breathing exercise sit easily and straight. Next, put your palms on your knees.<sup>[7]</sup>

1. Take a deep breath in.
2. As you exhale, pull your navel back towards the spine. Do as much as you easily can. You may keep your right hand on the stomach to feel the abdominal muscles contract.
3. As you relax the navel and abdomen, the breath movements into your lungs automatically.
4. Take 20 such breaths to complete one round of *Kapal Bhati*.
5. After completing the round, relax with your eyes closed and note the sensations in your body.
6. Do two more rounds of *Kapal Bhati*.

### Yoga

Some of the other exercises that can be done are *anulom vilom*<sup>[8]</sup> and other yoga exercises that are recommended for strengthening the respiratory system.<sup>[9]</sup>

Here are some other things that you can do to improve your breathing –

- To reduce the indoor air pollution, grow indoor plants that have air-purifying properties. Bamboo, jade, and money plant are some plants that are easy to take care of and have also got health benefits.
- When you step outside the house, you should wear a mask
- Avoid peak traffic hours when it comes to going outside.

### DISCUSSION

Polluted air is not just impacting our present but is impacting our future as well. While there are a couple of major sources of air pollution, we as persons can still make a major difference in improving air quality. For

example, when it arises to vehicles, there is a need to switch to electric vehicles or try to carpool as much as possible. Another option is to use public transport. Some of the other lifestyle changes would include buying seasonal fruits and vegetables.

### CONCLUSION

Incorporating *Ayurvedic* principles into our daily life, we should involve a holistic approach to reduce air pollution. By embracing natural remedies, sustainable practice and mindful living we can protect our environment and create a cleaner, healthier planet for generations to come. *Ayurveda* serves as a timeless guide, reminding us of our intrinsic connection with nature and urging us to preserve it for sustainable future.

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