

The Breath of Life (and Health)

Maintaining Health in the Face of Atmospheric Pollution and Declining Oxygen Levels

Breathing is so basic and automatic, most of us don't even think about it. However, no substance is more important to your life than oxygen, because without it you could only live a few minutes. Still, it's surprising that few people think about breathing and the quality of the air they breathe as a means of improving their health. There is reason to be concerned, however.



Some experts believe that the human race is being slowly suffocated by means of atmospheric pollution and a gradual decline in atmospheric oxygen. We're all familiar with the controversy surrounding the impact of fossil fuel combustion and rising carbon dioxide (CO₂) levels in our atmosphere. Regardless of your position on this issue, it is a fact that both atmospheric oxygen and indoor oxygen levels are declining.

Air Quality and Oxygen Levels

For thousands of years, the oxygen level in the earth's atmosphere held relatively constant at about 21 percent. Today, it has fallen to between 20–20.5 percent, and the oxygen level in many urban areas has fallen to as low as 18 percent. In order to function properly and maintain good health, the human body needs an oxygen level of at least 19.5 percent. When it falls below this level, the body functions poorly and becomes vulnerable to disease.

And, it's not just atmospheric oxygen levels that are of concern. In the United States, government regulations and commercial building standards strive to maintain indoor oxygen levels of 19.5 percent, but real-world oxygen levels in many commercial buildings often fall below this minimum standard due to a lack of monitoring devices and oxygen deficient outdoor air.

Air Pollution and Your Health

Air pollution is an ongoing concern for millions of Americans—especially those who live in or near big cities. Each year, cars, power generators and factories release tons of pollutants into the atmosphere. Those toxic gases and particles can have lasting effects on people's health.

The National Resources Defense Council estimates that air pollution causes 64,000 deaths each year from pulmonary disease and lung cancer. Air pollution can also cause children to lose up to 20 percent of their lung capacity. The National Institutes of Health reports that children exposed to pollution at a young age are four times more likely to develop asthma by adulthood.

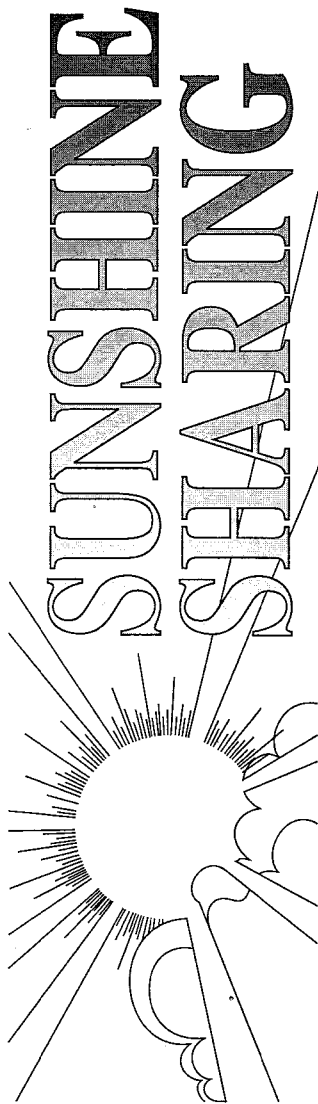
The American Heart Association reports that living in areas with heavily polluted air can reduce your life by an average of 1.8–3.1 years. Air pollution can contribute to hardening of the arteries, increased risk of heart attack and stroke and problems with normal blood clotting. High levels of pollution can also raise carbon monoxide levels in the blood, which can lead to impaired brain function and even death.

An Invisible Problem: Indoor Air Pollution

Unfortunately, outdoor air pollution is not your only problem. The air inside your home can become even more polluted than the outside air. Since the 1970s, homes and offices have been built more airtight to conserve energy. The downside of this is that sealed buildings don't circulate as much fresh outside air, which contributes to a buildup of indoor air contaminants. Indoor air pollutants fall into three main categories: particulates, microbes and volatile organic compounds (VOCs).

On average, each cubic foot of untreated air contains 20 million particles of materials such as dust, pollen, cigarette smoke, dead skin cells and pet dander. Ninety-nine percent of this particulate matter is invisible to the naked eye. Particulate matter can irritate sensitive lung tis-

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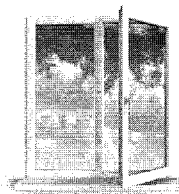
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sues if levels get too high, and some people have allergic reactions to various types of particulate matter.

Microbes consist of bacteria, protozoa, and fungi or mold. These are most problematic in humid environments. Obviously, people may become sick due to high levels of these airborne microbes.

Finally, VOCs are gases released into the air from paint, preservatives in wood and building materials, and chemicals in carpets and fabrics used on furniture. These chemicals often reach very high concentrations in new homes, which need to be aired-out to get rid of these chemicals. Cigarette smoke, cleansing chemicals, pesticides, hair sprays and other products also introduce gaseous pollutants into a building's air supply. These chemicals can cause numerous health problems from headaches and respiratory problems to hormonal imbalances and cancer.

Improving Indoor Air Quality



Studies tell us that we spend roughly 90 percent of our time indoors, so it makes sense for us to do things to reduce the level of indoor pollutants in the air we breathe. Here are some things you can do.

Use high quality filters in your air conditioning/heating system to trap airborne particulate matter and change those filters regularly. When outdoor air quality is good, open the windows to refresh indoor air. Use non-toxic, natural cleaning products. If you burn candles, do so only for brief periods and replenish the room with fresh outdoor air afterwards. If you use air fresheners, avoid products that use synthetic fragrances and aerosols, as these pollute indoor air. To freshen the air in your home, use essential oils rather than chemical-based air fresheners.

If you keep a pet in the house, keep it clean, well-groomed and out of the bedroom. The reason for this latter recommendation is that pet dander can cause congestion and impair your breathing, which can cause you to lose sleep.

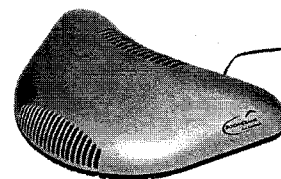
Other recommendations to assure better indoor air quality include using low-VOC or VOC-free floor coverings, paint and finishes, dusting and vacuuming regularly, using carbon monoxide detectors and testing for the presence of radon gas.

Studies show that houseplants can be very useful for reducing indoor air pollution. Plants not only absorb pollutants, they also increase the oxygen supply in the home. Studies suggest that some of the best plants for this purpose are:

Aloe vera, areca palm, baby rubber plant, bamboo palm, Boston fern, kimberly queen fern, Chinese evergreen, corn cane, dwarf/pigmy date palm, English ivy, ficus, gerbera daisy, golden pathos, janet craig plant, lady palm, dragon tree, moth orchid, mums, peace lily, philodendron and snake plant. So, keep some plants in your home and office to help clean and refresh your indoor air.



The Boomerang Air Sanitizer



The Boomerang Air and Surface Sanitizer is another option for improving indoor air quality. This portable device for home or office kills airborne microbes and neutralizes pollen and particulates to make the air you breathe cleaner and more conducive to health. It also helps neutralize indoor odors of all types.

The technology used in the Boomerang was developed for NASA. It utilizes a special Silver+Photo Catalytic Oxidation (PCO) cell. The cell contains nano-sized metal catalysts—silver, nickel and copper as well as rhodium and titanium—which react with photons from ultraviolet (UV) light to create millions of redundant oxidizers. These include super oxide ions, hydroxyl ions, hydro peroxide ions and ozonide ions, all of which have been demonstrated to kill or neutralize airborne organisms, including airborne bacteria, mold spores and fungi.

These particles also land on surfaces like counter tops and sinks, preventing the growth of microbes and keeping these surfaces sanitary. The Boomerang can be used in homes where mold is growing to neutralize and destroy the mold. It can also help the body to fight infection when placed in the room of a sick person.



Besides disinfecting the air and sanitizing surfaces, the Silver+PCO cell also neutralizes many airborne VOCs and particulates. It ionizes and oxidizes dust, pollen, tobacco smoke and pet dander. So, it not only sanitizes the air to prevent the spread of infection, it also cleans the air of chemicals and particulate matter.

In university studies the Boomerang removed up to 99% of airborne allergens, 99% of airborne bacteria, 99% of airborne viruses, 63% of MRSA (first 24 hours), 99% of mold and fungi, and 99% of odor-causing VOCs.

In numerous field tests the Boomerang effectively neutralized 98.5% of formaldehyde (a VOC from carpets and floor coverings), 73.3% of ammonia, 97% of hydrogen sulfide, 30% of radon, and 30% of net carbon dioxide. The petri dish tests showing dramatic reductions in microbial contamination are impressive.

The Boomerang sanitizes 2,000 square feet of open living space and requires no cleaning or filter re-placement (no maintenance for up to 3 years). It is also lightweight, energy-efficient, and quiet in its operation. If you have problems with indoor air quality at home or at work, consider purchasing a Boomerang unit.

Additional Help and Information

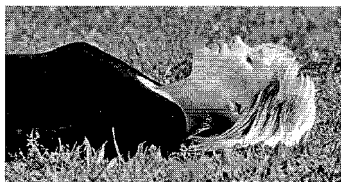
For more information on how to clean up your air and oxygenate your body for better health, contact the person who gave this newsletter to you. You can also consult the following sources:

The Comprehensive Guide to Nature's Sunshine Products by Tree of Light
There is an Art to Breathing by Virginia Zoros Barth

Breathe Deeply for Health

Many natural healers have observed that nearly all chronically ill people are shallow breathers. If we aren't breathing deeply, we aren't getting enough oxygen to maintain optimal health. Low oxygen levels contribute to depression, fatigue, pain and increased risk of infection. Cancer cells also thrive in a low oxygen environment.

After doing deep breathing exercises, people usually feel more relaxed, energized and alert. Their blood pressure often falls by 10 or even 20 points. Many aches and pains also disappear after 10-15 minutes of deep breathing. Deep breathing exercises can also greatly enhance one's ability to heal from many chronic diseases.



Are You a Shallow Breather?

To determine if you are a chronically shallow breather, lie on your back and relax. Place one hand on your abdomen (over your belly button) and the other hand on your chest (over your heart). Now take a deep breath.

If you are breathing properly, the hand on your belly should rise, but the hand on your chest should rise very little, if at all. If the hand on your chest rises and the hand on your belly moves in slightly or doesn't move at all, you're breathing shallowly.

The natural way to breathe is for the diaphragm muscle to contract downwards on inhalation and relax upwards on exhalation. This means that the belly rises slightly as one inhales and contracts as one exhales. If you watch a baby breathing, you will see its stomach rising and falling with each breath. This belly-breathing is the natural way to breathe.

Many adults can no longer belly-breathe. This may be due to a hiatal hernia or to chronic feelings of stress and tension. It may also be due to unresolved emotional conflicts because we tend to hold our breath when we're trying to suppress our emotions. Whatever the reason, most people who are chronically ill and need to be retrained to breathe from the diaphragm. The following exercise can help.

Deep Breathing Exercise

Inhale deeply while lifting your stomach. Exhale sucking your stomach in and pushing as much air out of your lungs as possible. Start by inhaling for the count of four, pausing for a moment and then exhaling for the count of four. You can say to yourself as you inhale, "in-two-three-four" and as you exhale, "out-two-three-four." Practice this type of deep breathing daily for 10-15 minutes.

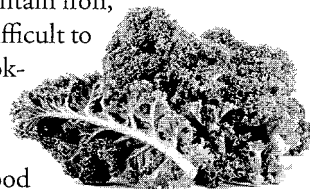
As you strengthen the diaphragm by exercising it in this manner, you can start increasing the length of the inhalation and exhalation. Try to increase both the inhalation and the exhalation to a count of five, then six and so forth. With enough practice a person can actually increase the depth of their breathing until they reach a count of 20 or even 30. As the diaphragm gets exercised in this manner, deep breathing becomes more and more automatic, resulting in richer oxygen levels in the blood and better health.

Pumping Up the Oxygen

Having clean air and deep breathing won't benefit your health if your blood can't carry the oxygen to your cells. Your red blood cells contain an iron-based compound called hemoglobin, which transports oxygen from your lungs to all the cells of your body. A deficiency of hemoglobin, or problems with your red blood cells, can result in hypoxemia (low blood oxygen).

Women are more prone to anemia (low levels of iron) than men due to their monthly loss of blood through the menstrual cycle. Iron supplements rarely correct iron-deficient anemia because the metallic iron in most supplements is poorly absorbed. It's much easier to increase iron levels with foods and herbs because the form of iron they provide is easier to absorb.

One of the best sources of iron is red meat. Organic grass-fed beef or lamb are excellent sources. Many dark green leafy vegetables like kale, chard, collard greens and spinach are also good sources of iron. Beans and whole grains also contain iron, but the iron in these foods may be difficult to absorb if they aren't soaked before cooking to reduce phytates, compounds that inhibit mineral absorption.



A natural iron-supplementing food is black strap molasses. This by-product of making sugar is also a good source of B-complex vitamins. Cooking in a cast iron pan can also add iron to foods.

There are also herbs that can help build up the blood. **Yellow dock** has iron-rich compounds and appears to enhance the absorption of iron. **Alfalfa**, dandelion leaves, **marshmallow** and nettles are also herbs that are rich in easily absorbed iron. Taking 12 capsules of alfalfa and 4 yellow dock capsules daily is a great way to increase iron levels. Another option is to take **I-X**, an herbal formula containing iron-rich herbs. Try 6-12 capsules a day to help build up the blood.

Sometimes, the iron deficiency isn't due to a lack of iron, however. Vitamin B-12 deficiencies are a common cause of anemia, especially in people who don't consume any animal proteins. People who don't consume animal proteins should always supplement with **vitamin B12**. For some people, vitamin B-12 shots may be necessary because they have trouble absorbing B-12.

Low stomach acid will also contribute to iron deficiency, as iron requires hydrochloric acid for absorption. If you have trouble digesting proteins or have a lot of intestinal bloating and gas, try taking **PDA** to aid digestion and improve iron absorption. Infections can also cause iron deficiency because bacteria will use up iron in the body. So, if you have an infection, take appropriate remedies for it. Finally, **vitamin C** also enhances the absorption of iron.

Blood Deficiency

In Traditional Chinese Medicine (TCM) there is a concept called blood deficiency, where a person tends to be cold and tired, with a pale tongue and complexion. Blood deficiency may be due to anemia, but it can also involve problems with the liver. According to TCM philosophy the liver builds the blood and weakness of the liver energy will cause blood deficiency. There is a physiological

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Oxygen is the most important nutrient the body needs, but we seldom think of oxygen as something that can help us recover our health.

In this issue of Sunshine Sharing, learn how improving your air quality, deep breathing and enhancing the oxygenation of your blood can help to improve your health and energy.

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basis for this idea, as the liver not only stores blood, it helps to build new blood and provide the blood with nutrients.

Chinese Blood Stimulator is a formula designed to correct blood deficiency. It is particularly helpful for women who suffer from heavy menstrual bleeding. It increases both the quality and the quantity of blood, enhancing energy and oxygenation. It also builds up a weakened immune system and can be helpful for chronic skin conditions, which often trace back to the liver.

Chlorophyll—The Green Blood of Plants

Chlorophyll is the green pigment in plants that harnesses the sun's energy during photosynthesis. It has been called the green "blood" of plants because the chemical structure of chlorophyll is similar to that of hemoglobin. Although chlorophyll is not

converted to hemoglobin in the body, it does appear to have a blood-building effect in humans.

People who are pale and tired often experience a rapid energy pick-up and improved color to their cheeks after taking chlorophyll. One possible reason for this is that red blood cells can clump together, a problem known as agglutination. Agglutination makes blood "thicker" and also reduces the surface area of red blood cells so they carry less oxygen. Chlorophyll appears to reduce this agglutination and help blood flow more freely and carry more oxygen. So, to enhance oxygenation of your body, try adding **Liquid Chlorophyll** or **Chlorophyll ES** to your drinking water as a quick, natural pick-me up.

Finally, people who suffer from wheezing, shallow breathing and weak lungs can strengthen their lungs with **Chinese Lung Support**. This formula can improve lung efficiency and thus aid oxygenation of the body. It's particularly helpful for lung problems associated with cold, dry weather.