

Ozone O3

Ozone - Table of Contents

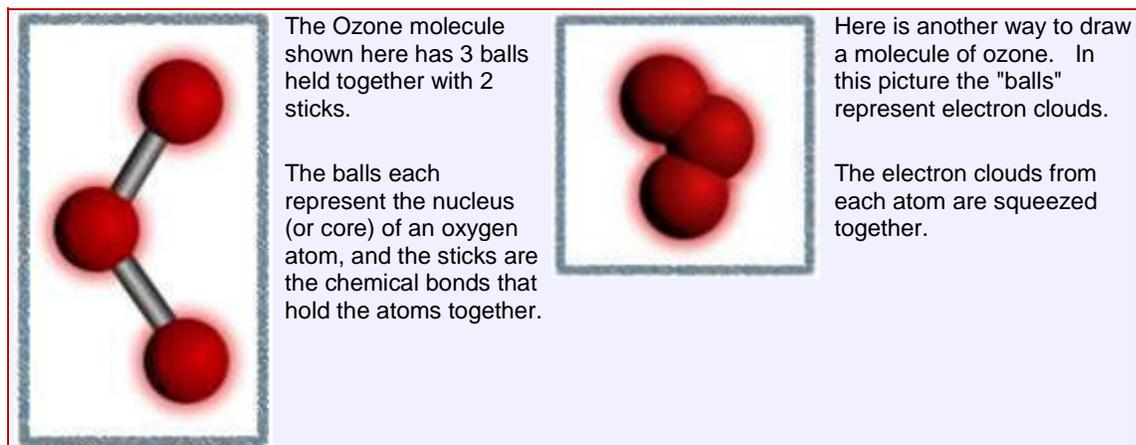
- [What is Ozone?](#)
- [Medicinal Ozone Therapy](#)
- [Is Ozone Safe?](#)
- [Oxygen, Ozone, & Cancer](#)
- [Ozone and Water](#)
- [How does Ozone work in the body?](#)
- [Treatable diseases with ozone?](#)
- [Personal Opinion - The FDA, AMA](#)
- [Articles on Ozone Therapies](#)
- [Ozone Reference List](#)

What is Ozone?

Ozone is a relatively simple molecule, consisting of 3 oxygen atoms bound together. Ozone is O₃, whereas the oxygen we breathe is O₂.

It is formed from molecular oxygen (O₂) by ultraviolet and extreme ultraviolet photolysis followed by recombination of atomic oxygen (O) with O₂. It may also be formed by passing an electrical discharge through gaseous oxygen. It is characterized by a unique odor that is often noticed during electrical storms and in the vicinity of electrical equipment. The name ozone is derived from a Greek word meaning "to smell".

Ozone is oxygen in its most active state and is an extremely potent oxidant that has been shown to possess broad spectrum antimicrobial activity. Ozone is not just another disinfectant. Ozone is a true sterilant. It has the ability to completely destroy not only bacteria, but also viruses, spores, fungus, mold, mildew, cysts, and many other contaminants while at the same time breaking down dissolved organic materials by oxidation. When ozone (O₃) breaks down it naturally reverts back to oxygen (O₂).



Ozone Therapy

Ozone therapy is simply a way to safely *oxygenate* your body's cells. There are several ways to get oxygen to the cells such as Ozone therapy addresses the key issues in almost all disease conditions:

- **oxygen delivery**
- **circulation**
- **immune system function**

The use of ozone (oxygen) has been proven to treat illness of nearly every type. Unlike healthy human cells that love oxygen, the disease causing viruses, bacteria, fungi and parasites (including the HIV and cancer virus, cancer cells, arthritis microbes, colds and flu, and West Nile virus carried by mosquitoes) – like most primitive lower life forms - are almost all anaerobic (use sugar to survive instead of oxygen). That means these **microbes and cancer cells cannot live in high oxygen concentrations**. Yes, that's right, cancer cells and HIV die when exposed to oxygen.

The use of hydrogen peroxide and ozone in medicine is based on the fact that the accumulation of toxins in the body is normally burnt up by the process of oxidation, a process wherein a substance is changed chemically because of the effect of oxygen on it. Oxidation breaks the toxins down into carbon dioxide and water, and eliminates them from the body. However, if the oxygen system of the body is weak or deficient (whether through lack of exercise, environmental pollution, poor diet, smoking, or even improper breathing), our bodies cannot eliminate them adequately and a toxic reaction can occur. In minor cases, a toxic buildup can lead to fatigue, headaches, etc., while a wide range of deadly diseases can result when poor oxygenation is chronic.

Although used by an estimated 10,000,000 patients in Europe since the early 1960's, the therapeutic use of medical ozone and hydrogen peroxide (technically known as "bio-oxidative therapies") is largely a mystery to North Americans.

In Europe, ozone has been used for 50 years by over 10,000 physicians. Over 6,000 articles on the medical usage's of ozone are in the world literature. However, in America ozone therapy is only taught privately, or in naturopathic schools, so your family doctor is probably untrained in its use. Therefore he/she probably will have no idea (or an incorrect idea) of what you're talking about if you ask about it. So, if you are seeking opinions, always ask your medical professional what actual experience he/she has with ozone therapies – especially if he/she gives you a negative opinion without any facts to back it up. There are no legitimate studies proving *medical grade* ozone doesn't work. (the FDA likes to confuse you by referencing *smog* type ozone in their "studies".)

Ozone has been proven to possess many desired effects:

- **antioxidant capabilities**
- **anti-viral anti-bacterial**
- **anti-fungal properties**
- **an immune system modulator**
- **powerful analgesic properties**

- **supports body detoxification**
- **helps cleanse lymph system**

As this gas cleans up your body the immune system responds, arteries and veins are cleaned, circulation improves with blood vessels unclogged, blood and lymph normalizes, inflammation reduces, bleeding stops, cardiac problems reduce as plaque is oxidized in arteries, the brain and memory respond to the increases in oxygen produced, heavy metals are chelated, tumor metabolism is inhibited and the outer lipid layer of malignant cells is broken down and destroyed.

"...When the body has ample oxygen, it produces enough energy to optimize metabolism and eliminate accumulated toxic wastes in the tissues. Natural immunity is achieved when the immune system is not burdened with heavy "toxic buildup". Detoxification occurs when oxygen is introduced into the system". **Dr. Norman McVea**

"...Insufficient oxygen means insufficient biological energy that can result in anything from mild fatigue to life threatening disease. The link between insufficient oxygen and disease has now been firmly established. The more oxygen we have in our system, the more energy we produce."
Dr. W. Spencer Way: Journal of the American Association of Physicians

"...The large majority of those infectious microbes that cause us so much illness and pain are ANAEROBIC...a big word that means they live and proliferate best in environments where there is LITTLE OR NO OXYGEN". **Dr. Ed McCabe, "Oxygen Therapies: A New Way of Approaching Disease"**

"...Lack of oxygen clearly plays a major role in causing cells to become cancerous."
Dr. Harry Goldblatt: Journal of Experimental Medicine

"...Cancer has only one prime cause. It is the replacement of normal oxygen respiration of the body's cells by an anaerobic (i.e. oxygen deficient) cell respiration."
Dr. Otto Warburg: Nobel Prize for Cancer Research

"...In all serious disease states we find a concomitant low oxygen state. Low oxygen in the body tissues is a sure indicator for disease. Hypoxia, or lack of oxygen in the tissues, is the fundamental cause for all degenerative disease." **Dr. Stephen Levine - Molecular Biologist, "Oxygen Deficiency: A Concomitant to all Degenerative Illnesses"**

"...The true cause of allergy is lowered oxidation process within the body, causing the affected individual to be sensitive to foreign substances entering the body. Only when the oxidation mechanism is restored to its original highest state of efficiency can the sensitivity be eliminated."
Dr. Wendell Hendricks - Hendricks Research Foundation

Is Ozone Safe?

The safety of proper ozone administration is unparalleled. Ozone is a natural "treatment", which means high efficiency and no side effects because it *enhances the natural life forces rather than fighting them*. Our natural intake of oxygen from our once-natural environment's food, air and water is the way Nature intended us to keep healthy and clean, by naturally oxidizing away the microbes and toxins.

In a survey of German ozone therapists, 5,579,238 ozone treatments on 384,775 patients demonstrated a **side effect rate of only 0.0007%**, and the side effects were uniformly minor and not even remotely life-threatening.

In America on the other hand, over a **1,000,000 patients are hospitalized annually due to side effects of prescription medication, and over 100,000 of such individual die from such drug usage**. If just *one* person in the US dies even indirectly from the usage of a vitamin product or an herbal concoction, the FDA quickly moves to outlaw accessibility to such a product, but they remain blinded to the carnage wrought annually by our pharmaceutical industry. Considering that about 100,000 Americans a year die from FDA approved pharmaceutical drug reactions and interactions, ozone therapy is amazingly safe.

Oxygen, Ozone, and Cancer

"Oxygen kills cancer cells."

Doctor Otto Warburg is a 2-time Nobel Prize winner, in 1931 and 1944 (Hitler kept him from accepting). He got the Nobel Prize for proving that the cause of cancer is not a mystery.

Remember that when you do not have enough oxygen, your cells are constantly filling with toxicity (in some people quicker than in others). The little healthy cell gets covered with garbage, and washed in toxic fluids constantly because it's surrounded by dirty fluids. The garbage piles up until it denies the cell 60 percent or more of its oxygen requirements. **This is one of the the root causes of cancer.**

Imagine your cells are like an orange covered in oil. Now hold your breath. When you feel short on oxygen, breathe. How long did it take to need more oxygen? This simply illustrates that all your cells need oxygen, that bad, all the time. If you cover up the cell (orange) with garbage, you block the oxygen from getting into the cell. If you cover it with enough toxicity - so much that 60 percent of the oxygen it needs constantly is not there - then that cell will be so short of breath that it's respiratory mechanism will be damaged. In other words, if the oxygen's not there and the cell is trying to breathe, it will become so damaged that it can't breath anymore. And when the cell can't breath because of the damaged respiratory mechanism, it mutates to survive. This poor little healthy cell drops "31 steps"... down to the level of a green plant-type cell that just grows and grows. The cell has lost all its higher functions: it no longer heals or regulates things, it no longer makes hormones, it no longer digests your food. Whatever part of the body this mutating cell is in, it is dropped down to the level of a plant-type cell that just grows and grows and grows. Cancer.

Another well-known German, Dr. Hans Nieper, an ozone-using doctor in Hanover, reports that in his medical practice on colon cancer he sees an interesting assemblage of American VIP's. **Dr. Nieper states:**

"You wouldn't believe how many officials or relatives or acquaintances of FDA officials come to see me as patients in Hanover. You wouldn't believe directors of the American Medical Association, or American Cancer Association, or the presidents of orthodox cancer institutes. That's the fact."

Side note: Testing your body's [pH](#) is a simple way to generally to know how well Oxygenated your body is.

Acidic = Low Oxygen ♦ Alkaline = Oxygen

Two-time Nobel Prize winner Dr. Otto Warburg. Here are excerpts from an article based on a lecture delivered at Stuttgart on May 25, 1955 before the German Central Committee for Cancer Control. It was first published in German [Naturwissenschaften 42, 401 (1955)]. This translation was prepared by Dean Burk, Jehu Hunter and W.H. Everhardy of the US Department of Health, Education and Welfare, Public Health Service, National Institutes of Health, Bethesda, MD.

"The era in which the fermentation of the cancer cells or its importance could be disputed is over, and no-one today can doubt that we understand the origin of cancer cells if we know how their large fermentation originates, or, to express it more fully, if we know how the damaged respiration and the excessive fermentation of the cancer cells originate.

"But, even for cancer, there is only one primary cause. Summarized in a few words, the main cause of cancer is the replacement of the respiration of oxygen in normal body cells by a fermentation of sugar".

"Because no cancer cell exists, the respiration of which is intact, it cannot be disputed that cancer could be prevented if the respiration of the body cells would be kept intact."

"But nobody today can say that one does not know what cancer and its prime cause {are}. On the contrary, there is no disease whose prime cause is better known, so that today ignorance is no longer an excuse that one cannot do more about prevention.

"That the prevention of cancer will come, there is no doubt, for man wishes to survive. But how long prevention will be avoided depends on how long the prophets of agnosticism will success in inhibiting the application of scientific knowledge in the cancer field. In the meantime, millions of men and women must die of cancer unnecessarily."

How does Ozone work?

Ozone and Free radicals

Free radicals are atoms or molecules with unpaired electrons... an unavoidable occurrence in bio-chemical reactions. There could be no life without free radicals. Some free radicals are dangerous. The properties of free radicals vary widely. Some are toxic to all living cells, while others only to the most vulnerable cells. Singlet oxygen (O1) is a highly reactive free radical that acts as a scavenger of other free radicals. The oxygen (O1) reacts with them to render them harmless, thereby protecting cells from damage.

Healthy cells have an enzyme coating around them that protects them from the action of oxygen. These enzymes are *catalase*, *reductase*, *super-oxide dismutase* and *glutathione peroxidase*. Disease microbes have no such coating and are therefore destroyed by oxygen. By this elegant mechanism, ozone distinguishes between friends and foes and attacks only invading pathogens, and cells that have been damaged and infected, thereby losing their coating.

Bio-oxidative therapies provide the body with active forms of oxygen. Once in the body, the hydrogen peroxide or ozone breaks down into various oxygen subspecies (free radicals) which contact anaerobic viruses and microbes (i.e. viruses, microbes, fungi, parasites which have the ability to live without air, as well as diseased or deficient tissue cells). It oxidizes these cells while leaving the healthy cells alone. When the body becomes saturated with these special forms of oxygen, it reaches a state of purity wherein disease microorganisms are killed, while the underlying toxicity is oxidized and eliminated.

Anti-oxidants

Antioxidants are often prescribed to be taken along with the use of ozone. These are not opposites that cancel each other out, but rather, a thoughtful optimization, since most antioxidants have very specific tasks. They have been shown to help protect marginally healthy cells from general free radical damage. Example: Vitamin E is active at the cell membrane. Vitamin C is itself a radical that can speed the electron flow through oxidation. Superoxide dismutase in particular has helped reduce a variety of disorders... normally it is among the body's most plentiful enzymes. In any case, antioxidants do not address the cause of the problem, which is oxygen starvation at the cellular level, which causes the cells to be too weak to make the enzymes that protect them in the first place.

Types of diseases that can be treated with Oxygen therapies such as Ozone?

Bio-oxidative therapies offer a tremendous range of medical applications. According to the **International Bio-Oxidative Medical Foundation** (IBOMF), an Oklahoma-based organization devoted to research and education about these therapies, the following conditions or diseases have been treated with ozone with varying degrees of success:

Heart and Blood Vessel Diseases

- Peripheral vascular disease (poor circulation)
- Cerebral vascular disease (stroke and memory loss)
- Cardiovascular disease (heart disease)
- Coronary spasm (angina)
- Cardioconversion (heart stopped)
- Cardiac arrhythmias (irregular heartbeat)
- Gangrene (of fingers and toes)
- Raynaud's disease ("white finger")
- Temporal arteritis (inflammation of the temporal artery)
- Vascular and cluster headaches

Pulmonary Diseases

- Chronic obstructive pulmonary disease
- Emphysema
- Asthma
- Bronchiectasis (dilatation of bronchus or bronchi)
- Pneumocystis carinii (PCP or AIDS-related pneumonia)
- Chronic bronchitis

Infectious Diseases

- Influenza
- Herpes zoster (shingles)

According to **Frank Shallenberger, M.D.**, who is best known in the U.S. for treating AIDS patients with a holistic protocol including ozone, bio-oxidative therapies have affect the human body in the following ways:

1. They stimulate the production of white blood cells, which are necessary to fight infection.
2. Ozone and hydrogen peroxide are anti-virucidal.
3. They increase oxygen and hemoglobin disassociation, thus increasing the delivery of oxygen from the blood to the cells.
4. Ozone and hydrogen peroxide are anti-neoplastic, which means that they inhibit the growth of new tissues like tumors.
5. They oxidize and degrade petrochemicals.
6. They increase red blood cell membrane disensibility, thus enhancing their flexibility and

- Herpes simplex (fever blister)
- Systemic chronic candidiasis (candida)
- Epstein-Barr virus (Chronic Fatigue Syndrome)
- HIV-related infections
- Acute and chronic viral infections
- Chronic unresponsive bacterial infections

Parasitic infections

Immune Disorders

- Multiple sclerosis
- Rheumatoid arthritis
- Diabetes mellitus Type II
- Hypersensitive reactions (environmental & universal reactors)

Other Diseases

- Parkinson's Disease
- Alzheimer's Disease
- Migraine headaches
- Chronic pain syndromes (due to multiple causes)
- Pain of metastatic carcinoma
- Cancers of many types, including the blood and lymph nodes

effectiveness.

7. Bio-oxidative therapies increase the production of interferon and Tumor Necrosis Factor, which the body uses to fight infections and cancers.

8. They increase the efficiency of the anti-oxidant enzyme system, which scavenges excess free radicals in the body.

9. They accelerate the Citric Acid Cycle, which is the main cycle for the liberation of energy from sugars. This then stimulates basic metabolism. It also breaks down proteins, carbohydrates and fats to be used as energy.

10. Bio-oxidative therapies increase tissue oxygenation, thus bringing about patient improvement.

Ozone and Water

The largest commercial use of ozone is in the purification of water. In Western Europe, over 40 full-scale municipal ozone facilities are installed each year. France alone has over 700 water treatment plants equipped with ozone. Switzerland has over 80 plants online for disinfecting contaminated water and oxidizing organics in heavily contaminated surface waters. Germany has over 70 installations using ozone. As of 1990, there were more than 40 full-scale ozone installations in the United States.

Doesn't it make sense that since your body is two-thirds water, the same water purification principles would directly apply to us? Ozone is simply infused through your body liquids to sterilize and purify them, and your organs filter out the leftover particulates. With that in mind, many alternative homeopaths recommend drinking Ozonated water to help prevent and fight disease.

Both the FDA and EPA certify that ozone destroys 99.9992% of all pathogenic germs, while oxidizing (destroying) 99.9992% of all pollutants in the water at the same time.

Personal Opinion

Despite the fact that both ozone and hydrogen peroxide therapy have been proven in clinical trials (and in regular clinical practice) to be safe and effective in Germany, Austria, Cuba, Mexico, Italy and Russia, very few people have heard about bio-oxidative therapies in the United States and Canada. Although an estimated 15,000 European practitioners legally use bio-oxidative therapies in their practices, the number of physicians using these therapies in

North America is probably fewer than 500. This is partly due to the fact that information about medical ozone and hydrogen peroxide is not provided in medical schools, and students simply do not learn about them. In addition, the medical establishment (and especially provincial and state medical boards) often discourages or prevents licensed physicians from using them in their medical practice. Some, like Dr. Robert Atkins, M.D., (now deceased) the author of the popular book *Dr. Atkins' Diet Revolution*, ***have been threatened with having their licenses revoked if they administer hydrogen peroxide or ozone. Clinics have been closed down and practitioners have been threatened with jail.***

Why is there so much prejudice against these therapies by the medical establishment? A major reason for this lack of interest in bio-oxidative therapies is that ozone and hydrogen peroxide are *non-patentable substances that are very inexpensive to manufacture and use*. In Germany, Russia and Cuba, physicians have successfully treated many serious and chronic conditions (including cancer and heart disease) without expensive surgery. The net cost of the materials for a treatment of autohemotherapy or a medical infusion of hydrogen peroxide is under \$10. Even though physicians must include professional fees and the use of their offices and equipment, bio-oxidative therapies administered in a medical setting cost up to 70% less than traditional therapies, especially for patients suffering from chronic and degenerative diseases. Self-administered treatments by patients themselves, while not recommended, can cost far less. For these reasons, ozone and hydrogen peroxide pose a threat to the continued dominance of the medical establishment: the pharmaceutical industry, medical centers and physicians who are accustomed to providing expensive drugs, complex medical procedures and long hospital stays.

But why don't agencies like the FDA and Health and Welfare Canada encourage clinical trials on these therapies? Because government health agencies are often influenced by the pharmaceutical industry and medical lobbies, objective investigation and development of effective protocols for bio-oxidative therapies have been difficult to undertake. However, the Canadian government has shown a greater willingness to investigate these therapies than American government agencies like the FDA or NIH, as shown by the HIV studies cited earlier. However, like the American press, the Canadian media largely ignored the important findings that ozone can completely remove HIV, hepatitis and herpes viruses from the blood supply.

- End