What is Ozone?

Ozone, a three-atom form of oxygen, is a normal trace element in the earth's atmosphere. Ozone is the strongest commercially available oxidizing agent. Because gaseous ozone is highly reactive, it readily oxidizes organic matter and has a variety of uses such as a bactericide and an algaecide. There are three stages in the life cycle of ozone: generation, oxidation, and decay. Its presence can be detected by its sweet odor even at low concentrations.



How is Ozone Produced?

- 1. Nature produces ozone by solar radiation ionizing oxygen in the atmosphere at high altitudes, in the arctic and over snow covered terrain. The outside air we breathe contains a small amount of ozone
- 2. Ozone may also be produced by electrical discharges. Nature creates ozone, which purifies the air, by electrical discharges or simply by air to air lightning and air to surface lightning.
- 3. Ozone is also formed when hydrocarbons and nitrogen oxides react with each other in the presence of sunlight. Contributing to this method of ozone production are the following: automobiles, industrial emissions from smokestacks, oil wells, refineries, etc...When these chemicals form ozone by photosynthesis, the result is often a major component of smog. Thus ozone can be both an oxidant and an irritant depending upon its chemical makeup or its quantity and quality.

Ozone can also be produced by vacuum cleaners, copying machines, electric trains, some shop tools, electrostatic precipitation, other appliances and ozone generating devices.

Why Use Ozone?

Ozone is a form of oxygen that has been electrically energized. The energy makes ozone more chemically active than oxygen. Most pungent substances are described by chemists as being unsaturated. Unsaturated simply means their molecular structure is not closed; therefore, it will readily combine with oxygen. Ozone actually breaks down polluted molecules such as hydrocarbons into water vapor and carbon dioxide. An ozone generator doesn't hide or mask unpleasant aromas with perfume or chemicals; ozone will attack and destroy, by oxidation, the offending molecules.

Why Use Ozone for Air Cleaning?

Low level ozone (oxidation) is an excellent air purification method. Ozone or activated oxygen is an unstable three-part molecule of oxygen (O³). When ozone meets a pollutant in the air it attaches itself to the pollutant and changes it into harmless compound. Eventually, it will oxidize or neutralize (destroy) it. therefore, low level ozone is an excellent method of eliminating unpleasant odors in the air, destroying pollen and dust particles, and even killing bacteria that may be floating in the air. Activated oxygen also revitalizes and refreshes stale air often found in homes and offices.

Why Use Ozone for Water Purification?

Ozone is the perfect answer to the global clean-water crisis. The US Food and Drug Administration and EPA found that ozone effectively destroys 99.9992 % of pathogens, including giardia and cryptosporidium. The American Water Works Association did research in 1991 that found ozone effectively neutralized viruses, bacteria, amoeba, protozoa and spores in municipal water supplies. At the Second International Symposium on Ozone Applications in 1997, WJ Masschelein, honorary president of the International Ozone Association, summarized some of ozone's other benefits as a water purifier: "Ozone is now used...for taste and odor control, removal of iron manganese...biodegradability of dissolved organic substances, ability to cope with parasites refractory compounds like chlorinated pesticides." Ozone has no known toxicity. Meanwhile, certain government authorities would have the public believe exactly the opposite of the truth: that chlorine is safe and that ozone is a dangerous pollutant. Most major cities still do not ozonate their water, even more reason to take water purification into your own hands.

Why Use Ozone for Body Purification?

Ozone's freely available form is carried by the life-circulating fluids of the body and is one of the most powerful <u>healing agents - if you can get it in your body</u>. The chemical symbol for ozone is O3 or 3 oxygen atoms in one molecule. It is nature's most active purifier and destroyer of bacteria, germs, parasites and worms. Oxygen is the most important element of life. Through oxidation (the union of an element with oxygen, as in digestion, burning or rusting), the universe

maintains itself and breaks down, then re-builds again. We, of course, find this life-giving element as molecular oxygen or O2 (two atoms in one molecule) in the air. There, it is about 21% by volume. A healthy body can inhale and transport enough to maintain itself in good repair.

A sick or diseased body often cannot make use of oxygen efficiently through inhaling it either normally through our lungs or artificially through oxygen tubes because, in most cases, our bodies don't have the necessary biological carriers (minerals, nutrients, blood factors) available due to our poor food supply. As a result the oxidation process (digestion) in the body falls short. Acute, chronic and incurable ills result. Fasting, if done, would help because it allows the oxidation of diseased matter. But fasting is limited as oxygen cannot oxidize all disease causing impurities or foreign matter, such as toxins quickly enough. We would starve before the whole process was completed. Ozone & Oxygen Therapies are an alternative to increasing one's oxygen levels and thereby dissipating the symptoms of dis-ease.