



Ozone Life Technologies

Tel : (012) 998-9936

Fax : (012) 998-9778

P O Box 90311 : Garsfontein : 0042 : SA

E-mail : info@ozonelife.co.za

Head Office

Unit 1A : First Floor : Eastdale Pavilion

Cnr Hans Strydom & Jacqueline Drive

Pretoria : South Africa

### **Ozone has amazing potential for cleaning and healing the body**

Ozone is an **activated, trivalent (three atoms)** form of oxygen. Oxygen is O<sub>2</sub> whereas ozone is O<sub>3</sub>. Over a period of 20-30 minutes, ozone breaks down into two atoms of regular oxygen - by giving up one atom of singlet oxygen leaving a single, reactive oxygen atom. Medical ozone is made when medical grade oxygen is electrically activated (using an ozone generator) to form ozone. Ozone is germicidal, bactericidal, and fungicidal. Oxygen has these properties too, but less strongly. Ozone was discovered by Fridereich Schonbein and was described in a letter written in 1826 ("The Use of Ozone in Medicine" 3rd English Edition, page 22). It has been used in medical and naturopathic medicine since the 1870's.

### **Oxygen is the single most important nutrient for the body**

The body can survive weeks without food, days without water, but only minutes without oxygen. Every cell of the body requires a continuous supply to feed the chemical reactions that generate energy, detoxify both internal and externally derived waste products and maintain production of the structural cell components. Any reduction in the availability of oxygen to the body, whether by poor posture and breathing, deoxygenated water and refined foods, smoking, lack of exercise, environmental pollution or exposure to carbon monoxide, reduces the optimal performance of these essential cellular functions.

As a lack of sufficient cellular oxygen is a major cause of poor health, leading to conditions such as arthritis, low immunity, constant tiredness, regular colds and flu's, hayfever, migraine, low vitality, M.E and so on, when the body is flooded with an activated form of oxygen, namely ozone, people consistently report that these conditions as well as their general health and energy levels dramatically improve.

### **What ozone does:**

**Ozone inactivates viruses, bacteria, yeast, fungus and protozoa, stimulates the immune system, cleans arteries and veins, improves circulation, purifies the blood and lymph, normalizes hormone and enzyme production, reduces inflammation, reduces pain, calms the nerves, stops bleeding, prevents shock, prevents stroke, damage reduces cardiac arrhythmia, improves brain function and memory, oxidizes toxins, allowing their excretion chelates heavy metals; it works well in conjunction with EDTA prevents and reverses degenerative diseases prevents and treats communicable diseases prevents and eliminates auto-immune diseases.**



## How is this accomplished?

- 1. Inactivation of bacteria, viruses, fungi, yeast and protozoa:**

Ozone disrupts the integrity of the bacterial cell envelope through oxidation of the phospholipids and lipoproteins. In fungi, ozone inhibits cell growth at certain stages. With viruses, the ozone damages the viral capsid and disrupts the reproductive cycle by disrupting the virus-to-cell contact with peroxidation. The weak enzyme coatings on cells which make them vulnerable to invasion by viruses make them susceptible to oxidation and elimination from the body, which then replaces them with healthy cells.
- 2. Enhancement of circulation:**

In circulatory disease, a clumping of red blood cells hinders blood flow through the small capillaries and decreases oxygen absorption due to reduced surface area. Ozone reduces or eliminates clumping and red cell flexibility is restored, along with oxygen carrying ability. Oxygenation of the tissues increases as the arterial partial pressure increases and viscosity decreases. Ozone also oxidizes the plaque in arteries, allowing the removal of the breakdown products, unclogging the blood vessels.
- 3. Stimulation of oxygen metabolism:**

Ozone causes an increase in the red blood cell glycolysis rate. This leads to the stimulation of 2,3-diphosphoglycerate (2,3-DPG) which leads to an increase in the amount of oxygen released to the tissues. There is a stimulation of the production of the enzymes which act as free radical scavengers and cell wall protectors: glutathione peroxidase, catalase, and superoxide dismutase. Ozone activates the Krebs cycle by enhancing oxidative carboxylation of pyruvate, stimulating production of ATP. Ozone also causes a significant reduction in NADH and helps to oxidize cytochrome C. Prostacyclin, a vasodilator, is also induced by ozone.
- 4. Formation of peroxides:**

Ozone reacts with the unsaturated fatty acids of the lipid layer in cellular membranes, forming hydro peroxides. There is a synergistic effect with cellular- formed H<sub>2</sub>O<sub>2</sub>. Lipid peroxidation products include alkoxyl and peroxy radicals, singlet oxygen, ozonides, carbonides, carbonyls, alkanes and alkenes.
- 5. Dissolution of malignant tumors:**

Ozone inhibits tumor metabolism. In addition, ozone oxidizes the outer lipid layer of malignant cells and destroys them through cell lysis (break-down). Phagocytes produce H<sub>2</sub>O<sub>2</sub> and hydroxyl to kill bacteria and viruses. The generation of hydroxyl by killer cells is critical to their cytotoxic capability. Ozone stimulates conversion of L- arginine to citrulline, nitrite and nitrate by phagocytes, acting on tumors.

## Is ozone safe to use?

There are thousands of references documented in the medical literature on the safe use of medical ozone therapy or oxygen therapy from doctors and professionals around the world. Here are just a few:

- There are over 3,000 references in the German literature showing its safe, successful use in over 50 years of application to humans during millions of dosages.
- German Medical Soc. has published that 384,775 patients were treated with a minimum of 5,579,238 applications and the side effect rate observed was only .000005 per application! This is the lowest side effect rate in existence.
- Report also stated – "The majority of adverse health effects were caused by ignorance about ozone therapy (operator error)". The Univ. of Innsbruck's Forensic Institute published Dr. Zacob dissertation quoting this in The Empirical Medical Acts of Germany.
- International Ozone Association information and the Machine Manufacturer Reference report over 7,000 MEDICAL DOCTORS in Europe using medical ozone safely and effectively, some for more than 40 years.