



## What is Ozone Therapy and How Does it Work

### Bio-Oxidative Therapies in Dentistry

Ozone Therapy Ozone therapy is referred to as a type of Bio-Oxidative Therapy. Oxygen therapy is not new, just forgotten, until now! In 1857 "The Lancet", a British Medical journal published several articles espousing the successful use of medical oxygen. In the 1950's, German doctors began using ozone to treat cancer. Today, we can use ozone for all dental infections to eliminate the infective process and create a condition in your body called, the **biological terrain**, which favors health over disease.

Cancer and other diseases simply cannot survive or thrive in an oxygen-rich environment. A highly oxygenated body is immune to disease and destroys already existing disease.

### Here Is The Key

All Bugs, Bacteria, Viruses, Fungi, Parasites, and Spirochetes, cannot survive in a high oxygen environment. Why? Because:

- Infections in your teeth, periodontal tissue, gums, your failed root canals, bone, and elsewhere in your body are areas that are: devoid of oxygen (this means infections attract anaerobic bacteria which cannot handle an oxidative burst), keep reading!
- SO, when you introduce O<sub>3</sub> into the site, it kills all of the bugs!!!
- Infections are areas that have an acidic or positive (+) charge, thereby repelling other positively charged ions, (like minerals). This is why infected areas continue to demineralize as the minerals cannot flow into the infected area.
- When the "**biological terrain**" is changed in the infected site to an alkaline, negatively charged (-) oxygen-containing environment, not only do the bugs die but the remineralization process begins. It is this negative O<sub>3</sub> charge that kills the bad bacteria.
- Also, since many of the bugs have no antioxidants in their cellular membranes, the ozone creates **peroxide molecules** which explode the bugs membranes.
- It is the application of Oxygen (O<sub>2</sub>) with an additional oxygen atom (O<sub>3</sub>) which makes it highly reactive, thereby causing the creation of peroxide molecules called, Reactive Oxygen Species (ROS). A normal cell can handle this peroxide bombardment, to a point, because normal cells contain antioxidants, but bacteria and the like, do not!

- Thus, OZONE, is the **free-radical oxidative burst** that destroys the bugs cellular membranes, because the bugs can't handle the oxygen. THIS IS VERY GOOD NEWS!

### Ozone Dentistry Tools

The injections of ozone gas are usually quite painless and take just a few minutes to deliver. They need to be repeated every 3 to 7 days depending on the severity of the infection. We now use ozone water for our periodontal program.

In addition, as we flow O3 gas and water over the dentinal tubules in the cavity preparation, we sterilize the tubules and begin the healing process in the area we are treating. The ozone destroys the bacteria involved in the decay and infection process. **Trays can also be made to help you apply the ozone oil at home.**

We create the OZONE WATER and OZONE GAS from medical grade oxygen, for use in our office, with a DOU-120 ozone machine, from *Longevity Resources*. We also use tri-ozonated oil.

