Doctor's Ozone Reviews

Ozone, God's Gift to Humanity
Lecture by J. H. Effenberg, Ps.D., Ph.D.
Turlock, California
"Your Health Reflects The Air You Breath"

Ozone
A blanket of OZONE in the atmosphere is our protection for life on this earth as it screens out the cosmic radiations. This has been our previous explanation in the subject of our lecture entitled lecture No. 1. In the lecture study No. 2, we have discussed OZONE in relation to our air belt acting as a great vacuum cleaner and as God's OZONE generator in action in order to keep the air fresh and clean for the sake of our health and pleasure. In this lecture, lecture No. 3, I will try further to discuss OZONE so that it may become an intimate part of your thinking in relation to your life, the community and as a health modality.

OZONE has a useful scope and is widely used throughout the world. Perhaps more so than any other like therapy. In this lecture, we shall discuss OZONE'S general and special therapeutic value, for OZONE has an outstanding medical history. It is used in operating rooms and wards in hospitals for the purpose of destroying harmful bacteria that constantly filter into the air and render the atmosphere unsterile in so far as surgical procedures are considered. One finds it a matter of standard therapy to protect patients, doctors, nurses and visitors besides its use for sterilization purposes in operating rooms and wards. It is also used by doctors for the treatment of many ailments with gratifying results.

For a great many years the use of OZONE therapy has been neglected because its therapeutic value was not sufficiently understood. However, after such outstanding research authorities as are hereinafter set out, the use of OZONE has become one of common knowledge.

I humbly submit to my readers some of my experiences gained over a period of some 40 years, in relation to the sick and ailing for as a Military Officer, I have had charge of an Army Hospital, in Germany. I also employed myself as a Medical Corps Officer in the Turkish Army. Then again, as a Missionary, I had charge of a large medical institution in Central China sponsored by the Seventh-day Adventists and in my extensive travels through China, Tibet and Mongolia I was able to help many of our suffering fellow men. Thus, in these 40 years I had occasion to study human ailments and learn many things concerning God's wonderful handiwork in relation to the human body and the body's opportunities for restoration. In 40 years of careful study I have concluded that there is nothing of such therapeutic value as that of OZONE. Despite 40 years of observations, I humbly acknowledge that OZONE therapy has such great prospects for alleviating sickness that I feel that we have just scratched the surface of this immensely interesting subject.

In this third lecture series I am submitting to you my reflections on the efficacious use of OZONE and in addition to this, am presenting to you a Compendium of outstanding Doctors and Scientists, who have spent many years in research work with OZONE and who have in their case histories indicated the advantages in the use of OZONE. In the hope that you will feel as I do, that there is a need for OZONE in the life of every single individual, I herewith present to you:

A Compendium of Outstanding Doctors and Scientists as a RESEARCH AND HEALTH FORUM. Represented in this survey are: Allison, D. K., M.D., USA Abbe, Donatient L., M.D., France Aughinbaugh, W. E., M.D., USA Bennett, H. Clark, M.D., USA Caille, August, M.D., USA Carpenter, Frank B., M.D., USA Chamorre, A. T., M.D., Argentine Drinker, Philip, M.D., USA Eberhard, N. M., M.D., USA Hallet, E. S., M.E., USA Howlett, E. S., M.E., USA Glockner, Albert, USA Glosses, Charles Le., D.C., USA Johnston, Geo. A., M.D., USA Justice, O. M., M.D., USA Kaime, Martha, USA Vessel, J. F., M.D., USA Kleinemann, M.D., Germany Kunzemann, Th., M.D., Germany Marke, William, R. Ch., USA Moore, J. Fredrick, M.D., USA Olson, J. C., Ph.D., USA Oudine, G., M.D., France Pribluda, S., M.D., Argentine Quiros, Maria, USA Rideal, E. K., Ph.D., USA Riesbeck, E. W., M.E., USA Rosenaw, M. T., M.D., USA Steward, James, M.D., USA Stockes, Geo., M.D., England Thorp, Clark, Ph.D., USA Thorpe, Sir Edward, LL.D., England Tyler, Richard G., Ph.D., USA Verbon, Leo, M.D., USA White, E. G., H.R., USA

Research Centers Represented in this Survey:
Armor Research Foundation - Institute of Technology, ILL, USA. American College of Physical Therapy - USA Berlin University - Germany Behren Memorial Hospital, Glendale, Calif. - USA Board of Education, St. Louis - USA Bouvicant First Hospital, Paris - France British Army Medical Service, London - England Chicago College of Medicine and Surgery, Chicago - USA Harvard University, Cambridge, Mass - USA Polytechnic Institute, Brooklyn, N.Y. - USA Physical Chemistry University, Illinois - USA Post Graduate Medical School, New York - USA S. California University of Los Angeles - USA Salaberry Hospital, Buenos Aires - Argentine Spaulding General Hospital, Portland, Oregon - USA Western Reserve University, Cleveland, Ohio - USA Washington University, Seattle, Wash - USA

Authority: Dr. Clark Thorp, Ph.D., M.D.
Acting Chairman, Department of Chemistry and Chemical Engineering, Armour Research Foundation, Illinois Institute of Technology.
Subject: Ozone - is Non-Toxic!

In many discussions on the properties and uses of Ozone, it is stated that Ozone is a toxic substance, that is harmful to the mucous membrane, that it is an irritant or that it is a poisonous gas. These statements are based upon the results of experiments which were carried on by workers who were unaware of the true nature of the gas they were investigating. However, recent authoritative investigation have established that pure Ozone is non-toxic even in concentrations as great as 20 to 50 parts per million of air. Ozone containing oxides of nitrogen, on the other hand, can be toxic in higher concentrations such as 1.5 parts per million.

"Although it has not yet been definitely shown why Ozone containing HIGH nitrogen oxides can be toxic, IT HAS BEEN DEFINITELY ESTABLISHED THAT OZONE FREE OR LOW OF NITROGEN OXIDES IS COMPARATIVELY NON-TOXIC." CONFIRMATION WAS MADE IN 1942 by HILL, A PHYSICIAN SPECIALIZING IN INDUSTRIAL HYGIENE.

In 1921, Hill and Aeberly published a series of articles reporting on tests concerning the effects of Ozone, chemically, physically, and physiologically. As a result of these tests a toxic limit for Ozone was established at 1 part per million. It was also stated that 20 parts per million with an exposure of two hours might prove fatal to human beings. After noting the work of Thorp, Hill, realizing that oxides of HIGH levels of nitrogen had been present in his previous test, decided to re-run the test on an identical basis to determine if pure Ozone had higher toxic limits.

AS A FINAL RESULT OF HIS WORK, HILL STATES: "PURE OZONE IS NOT POISONOUS IN ANY SENSE OF THE WORD AS IT BREAKS DOWN IN CONTACT with the mucous membrane and only oxygen remains."

Authority: A. Vosmaer, Ph.D.,
London, England Electrical and Chemical Engineer
Subject: Ozone - for Air Purification - Remarkable power for killing bacteria.

Ozone owes its fame to its remarkable power of killing bacteria. That is why the world should look upon Ozone as a boon to mankind. No matter how many bacteria there may be, Ozone will take care of them and destroy any amount of any kind. The trouble is that one soon gets used to bad air, and bad odours are not apt to be noticed after awhile; but the fact remains that pure air is more wholesome than contaminated air. In our regular daily life, it is almost an impossibility to provide for fresh air. No amount of ventilation, not even an unbearable draft, will be capable of keeping a room or a place in good condition, unless one takes recourse in ventilating with "ozonated" air. Removal of bad odours by means of air flushing is an absolute impossibility, and yet they should be removed. That is where Ozone comes in. The method of purifying the air by Ozone has the advantage of being fully reliable. Very efficient and inexpensive. In "Ozone, its Manufacture, Properties and Uses"

Authority: Dr. S. Pribluda
Supt. Hospital Salaberry, Buenos Aires, Argentine
Subject: Ozone - for aerobes and anaerobes

For nine years I have utilized Ozone Therapy with truly remarkable results and on numerous occasions I have published the practical results of personal experiences and those of others. Today I wish to return to evaluate all the reference material related to Ozone therapy, stimulated by the presence in our medical centers of the marvelous drug, penicillin.

What is Ozone?
Ozone is a natural gas with bactericidal properties.

Bactericidal Action:
It is effective against aerobes and anaerobes. Those which have the least resistance to the effects are pneumococcus, streptococcus hemolyticus, staphylococcus, e-coli, and diphtheria. In general, one ozonation of a few minutes is sufficient to sterilize a culture of aerobes; 15 or more for anaerobes. Subtilis and streptococcus viridans, as well as spore forming anaeroves are more resistant. THE ACTION OF OZONE IS ON THE BACTERIA, THEIR TOXINS, AND THEIR NUTRITION PRODUCTS (ENZYMES). The sterilizing action of Ozone does not depend on the number of germs, but rather on the medium of cultivation, on their vitality, the concentration of Ozone and the duration of its application. It is more active :

1. in liquid media than solid,
2. when in greater concentration and
3. when the time of application is longer.

In "La Semana Medica"

Authority: Dr. Charles Leland Glosses
General Health Clinic,Los Angeles
Subject: OZONE-for Arthritis

Ozone has several uses:

1. As an extremely active oxidizing agent.
2. As an effective disinfectant and germicide.
3. Clinically, it has been found effective in dissolving and breaking up various abnormal deposits, such as that of Arthritis, Nephrolithiasis, or Cholelithiasis. In chronic arthritis the lowered carbon dioxide tension results in an anoxia (oxygen deficiency) brought about by a lack of stimulation for oxygen-carbon dioxide exchange. Lack of oxygen results in a degenerative process that leads to hylinization and later, calcification. Clinical evidence has shown results in the use of Ozone in both acute and chronic inflammatory conditions. It has been known to break up certain calcifications in arthritis. It sounds reasonable to assume that in the demand for oxygen in an acute process, if oxygen was administered in some rapid form, as Ozone, the augment of an already laboring normal oxygen supply would be of benefit. In the case of a chronic condition as arthritis (the normal tissue accepting only what oxygen it needs), if additional oxygen would be introduced into the abnormal, oxygen depleted tissue, the process would be reversible and result in a removal of the abnormal deposits and a return to normal or near normal. In "Theoretical Consideration of Ozone Therapy"

Authority: Dr. S. Pribluda
SUPT. Hospital Salaberry, Buenos Aires, Argentine
Subject: OZONE-for Asthma
Is Ozone Therapy Effective in Asthma?

New trials upon asthmatics; men and women, having distinctly chronic asthma, have led us to this conclusion: OZONE HAS THERAPEUTIC EFFECTS ON ASTHMATICS. Although it relieves them for greater periods each time, during which they are not fatigued, each was obliged to resort to Ozone therapy for one, two or more months. Many asthmatics considered them selves cured by a month of treatment, externally characterized by the total disappearance of dyspnea and paroxysms. How Long will this Symptom-Free Period Last? We do not know precisely. Several patients have gone six to eight months without an attack...we need a period of two or three years without relapse to consider such a case "cured" however. What is the Action of Ozone in Asthmatics? It is possible to consider it a Bulbar action...more probably Ozone modifies the allergic state by its properties of oxidizing energy over the intermediate products of metabolism. New studies have shown us the actuality of its therapeutic action. It is CERTAIN that ALMOST ALL of the ASTHMATICS IMPROVED UNDER OZONE THERAPY. In "La Semana Medica"

Authority: Hans Kleinmann. M.D.
Germany
Subject: OZONE - for treatment of diseased bodily cavities.

General information concerning new possibilities of using gases in therapeutics. "Whereas, thus far in medicine the use of pharmaco was limited to the use of a solid or liquid state of aggregation, and the use of gas with limited exceptions, priorily was used for diagnostics and mechanical purposes, this work aims to point out what advantages and multifarious possibilities extended employment of gases with pharmacological qualities could offer." I have come to the conclusion that in treatment of infected or general diseased bodily cavities and passages, gases of pharmacological qualities offer absolute advantages. All infections of bodily cavities, which have not been treated locally thus far (Pleur, Peritoneum, Pelvis Renalis) or have been treated with liquid disinfectors (Bladder, urethra, intestines) would be accessible with such gaseous treatments, and considering the effectiveness of the remedy, one must give primarily superiority to the gaseous state of aggregation. Only imagine how exceptionally deep folded and how richly wrinkled a mucous membrane of the bladder is, or how much protection bacteria finds in glandular openings or passages in the urethra: therefore, it is quite clear that a liquid solution which is rinsing the surface only, can have no deeper penetrative effects. It is different with gas. The same will stretch out the folds and penetrate into the wrinkles and passages. Considering all the mentioned conditions, from all known gases, it seems that Ozone is the one that can perform it. It is composed of three atoms of oxygen, and has the tendency to split off one of the atoms of oxygen. In so doing, it is a super-oxidizing agent, leaving as a by-product oxygen only, and this can be harmlessly absorbed by the tissue. This fact has persuaded me more than anything else for my first experimental investigation to use Ozone instead of light solutions of ether, chloroform, halogen, which as a by-product delivers corrosive hydro-acids. In "Treatment with Pharmacologically-active Gases", "The Action of Ozone"

Authority: Ellen G. White,
Health Reformer, World renowned Writer and Reformer.
Subject: PURE AIR for - The circulation of the Blood and Respiration

CIRCULATION In order to have good health, we must have good blood: for the blood is the current of life. It repairs waste, and nourishes the body. When supplied with the proper food elements and, when cleansed and vitalized by contact with PURE AIR, it carries life and vigor to every part of the system. The more perfect the circulation, the better will this work be accomplished. At every pulsation of the heart, the blood should make its way quickly and easily to all parts of the body. Whatever hinders the circulation forces the blood back to the vital organs, producing congestion, headache, cough, palpitation of the heart, or indigestion is often the result. RESPIRATION In order to have good blood, we must breathe well. Full, deep inspiration of pure air, which fills the lungs with oxygen, purifies the blood. They impart to it a bright color, and send

it, a life-giving current, to every part of the body. A good respiration soothes the nerves, it stimulates the appetite and renders digestion more perfect and it induces sound, refreshing sleep. The lungs should be allowed the greatest freedom possible, their capacity is developed by free action; it diminishes if they are cramped and compressed. Superficial breathing soon becomes a habit, and the lungs lose their power to expand. Thus an insufficient supply of oxygen is received. The blood moves sluggishly. The waste, poisonous matter which should be thrown off in the exhalations from the lungs, is retained, and the blood becomes impure. Not only the lungs, but the stomach, liver, and brain are affected. The skin becomes shallow, digestion is retarded; the heart is depressed; the brain is clouded; the thoughts are confused; gloom settles upon the spirits; the whole system becomes depressed and inactive, and peculiarly susceptible to disease. PURE AIR The lungs are constantly throwing off impurities, and they need to be constantly supplied with Fresh Air. Impure air does not afford the necessary supply of oxygen, and the blood passes to the brain and other organs without being vitalized. In "Ministry of Healing"

Authority: Prof. Richard G. Tyler
Professor of Sanitary Engineering,University of Washington, Washington
Subject: OZONE - for treatment of chemical wastes.

University of Washington researchers have announced an Ozone process for treatment of chemical wastes which promises to become highly important. The process is ATTRACTING NATIONAL ATTENTION BECAUSE IT ELIMINATES THE USE OF CHLORINE. Which is becoming scarce. Ozone, a form of oxygen can be made from air. The Ozone treatment is of particular interest to the Pacific Northwest because it eliminates chemical products poisonous to fish life. The University experiments have been conducted with cyanide wastes. Cyanide is one of the deadliest poisons. The wastes, resulting from many industrial processes, usually are treated with chlorine. But the products of the chlorination process also are bad for fish. Laboratory tests, conducted by a research group under the leadership of Richard G. Tyler, Professor of sanitary engineering, indicate that the OZONE TREATMENT CAN ELIMINATE ALL DANGER TO FISH LIFE and that the cost, with large installations, will be no greater than for the chlorine treatment. As a result of the experiments: 1. The Boeing Airplane Co. is planning a pilot Ozone plant for treatment of its cyanide wastes. 2. Engineers planning a new waterworks for Fairbanks, Alaska. 3. Engineers also proposing Ozone treatment for the City's water supply. If enough Ozone is pumped into a cyanide solution, such harmless products as bicarbonates (baking soda, for example) and nitrogen result. The University experiments also are being directed toward substituting Ozone for chlorine as a bleaching agent. Wood pulp bleached with chlorine eventually takes on a yellowish or brownish cast, noted by all who have consulted old newspaper files. Professor Tyler hopes Ozone bleaching may remedy this. But before carrying these experiments further, he will have to enlist a new research crew. William Maske, research chemist, and M. J. Westin and Willard Matthews, research fellows, made up the team carrying on the cyanide waste. project. In "Seattle Times" May 25, 1951

Authority: August Caille, M.D.
Professor: Children's Diseases Post-Graduate Medical School, New York, N.Y.
Subject: OZONE - for Chlorosis

Increase of Oxyhemoglobin, Case Histories

The period of my observations extended over five months. Altogether this report embraces 22 cases. The salient points in the cases treated with OZONE inhalations are as follows: Case 4. Chlorosis ant Anemia. E.V., 11 years old. Extreme anemia Cold skin. No appetite. Daily headache. No marked improvement after iron and arsenic. Vital capacity 90. Oxyhemoglobin 7%. OZONE inhalation twice daily for 15 minutes, for two weeks. Followed by a very great improvement. 11% oxyhemoglobin. Vital capacity 120. Warm skin. Good appetite. No headache. Case 5. E.H., 22 years old. Oxyhemoglobin 8%. General condition and treatment as in case 4. After two weeks inhalations, 10% Oxyhemoglobin and general condition very good. Case 6. Severe anemia since birth in a sickly looking and emaciated girl of 11 years. 5% oxyhemoglobin. Skin and mucous membranes white. General condition bad. No improvement after change of climate and iron, arsenic, phosphorus, etc. OZONE, 3 times daily for 10 weeks. Great change noticeable. Good color, warm skin, good appetite, no headache, great ambition to work and study. 10% oxyhemoglobin. Case 7. Chlorosis. K. W., 19 years old. Menses acant, every 8 to 10 weeks. All other symptoms of great anemia present. Duration of illness 4 years. 8% oxyhemoglobin. OZONE inhalations daily for 10 weeks, during which time the menses appeared twice at proper intervals. 3% increases in oxyhemoglobin. Case 8. Chlorosis. C. B., 20 years old. Much like case 7. No noteworthy improvement after iron. 8% oxyhemoglobin. OZONE inhalations daily for three months. Complete cure. 3% gain in oxyhemoglobin. Case 9. Chronic Bronchitis and Great Anemia. A. A., 40 years old. 8% oxyhemoglobin. After daily inhalations for 2 months, great improvement in regards to anemia. Case 10. Chlorosis and Nervous Prostration. E. S., 241 years old. Daily inhalations of OZONE for 4 weeks increased the oxyhemoglobin 3% and made further treatment unnecessary. No relapse after 2 months. Case 11. Anemia and Chronic Naso-pharyngeal Catarrh. A. R., 20 years old. Oxyhemoglobin 9%. Cured after inhaling for 2 months and ended local treatment of Naso-pharynx. 3% gain in oxyhemoglobin. Case 12 Chlorosis of long standing. E. K., 22 years old. Inhalation three months. All symptoms removed or much improved. 3% gain in oxyhemoglobin. Case 13. Anemia in Tuberculosis of Cutis. M. C., 22 years old. Unable to attend to business. No effect from usual drugs. After three months inhalations is in excellent general condition, but the skin affection remains stationary. 2% increase in oxyhemoglobin. Case 14. Extreme anemia from chronic lead poisoning. After 50 inhalations oxyhemoglobin increased 3%. No relapse after two months.

Pertussis: Seven cases, Children ranging from 18 months to 7 years. Each

case well marked and of average severity. Two to three inhalations given daily. All cases discharged alter two weeks, except one which lasted four weeks. The improvement became manifest after the first three or four inhalations, as regards the severity and frequency of the spasmodic attacks. The children slept better during the night after OZONE inhalations, than before the treatments, and the youngest children under observation usually went to sleep after each inhalation. (Whooping Cough) CONCLUSIONS: Daily Inhalations of Ozone Increases the Quantity of Oxyhemoglobin in the Blood from 1% to 4% in a Short Time. In Pertussis, OZONE inhalations have a very distinct curative effect as regards the duration and severity of the disease. In Chlorosis and anemia, Ozone inhalations are exceedingly valuable from a therapeutic stand point and give better and prompter results than any other form of medication. Atmospheric medication is readily secured, making this probably a valuable procedure in the treatment of Diphtheria, Scarlet Fever and other infectious diseases. I am convinced that it would be a value in Pernicious Anemia. The anemia children who came under treatment were very sick, especially the one case I referred to, in which everything had been tried, and it was really remarkable how soon this child picked up and became better in every way after inhaling OZONE. I was thoroughly surprised at the result. In "Report to the American Society:" Boston, Mass.

Authority: Dr. Leo Verbon
Director Spaulding General Hospital, Portland. Oregon
Subject: OZONE - for Sinusitis and Head Colds, Colitis, Arthritis and for deodourizing Patients rooms.

"For de-odourizing patient's rooms, the Ozone generator is invaluablee". "In SINUSITIS and HEAD COLDS we use OZONE as a STANDARD TREATMENT. It is an accepted fact that Ozone inhibits bacterial growth, and our use of Ozone generators in connection with the treatment of colitis and arthritis cases has amply demonstrated this to us.

Subject: OZONE - for Cardia Vascular renal disease

There is hardly a condition that we have treated in this hospital where Ozone has not benefited them. An outstanding case in mind suffered from Cardia vascular renal disease. The dropsical condition of the lower extremities was very pronounced. The patient could not lie in bed, had to remain in a sitting position practically all the time in order to be able to breathe. After placing an Ozone generator in the room, his breathing, heart action and color of the skin improved remarkable. Although he did have other treatments for his condition, WE CONSIDER THE AID THE OZONE HAS GIVEN HIM, ONE OF THE GREATEST CONTRIBUTING FACTORS. At the present time the patient's condition is so improved that the heart action is practical normal, he sleeps comfortable in a normal reclining position, and the dropsical condition has cleared up. In "Cosmoray"

Authority: George Stocker. M.D., C.M.G., M.R.C.P. Major R.A.M.C.
Subject: OZONE - for treatment of Consumption

OZONE INHALATION TREATMENT OF CONSUMPTION AND CATARRH
The difficulty and trouble required to obtain a good result has hitherto led to the unpopularity of this method in the medical profession, and want of a proper understanding of the right way in which to carry out the inhalation treatment has sometimes led to bad results when it has been tried. Some years ago, Hass showed that it was possible to thoroughly impregnate the air of a closed room with volatile antiseptics so that a patient using the room could not avoid drawing the substances right down into the lung during the ordinary process of breathing. His experiment made it apparent that this principle was one of great importance AND ONLY WANTED A SUITABLE INVENTION OF AN APPARATUS TO BE OF VERY GREAT USE IN THE TREATMENT OF DISEASES OF THE LUNGS AND AIR PASSAGES. IT IS UNQUESTIONABLE THAT EVERY METHOD OF INHALATION TREATMENT MUST BE CONTINUOUS IF IT IS TO BE EFFECTIVE. Some of many case histories listed: Female, age 23. Two brothers and one sister had died of consumption. The patient suffered with cough, muco-purulent expectoration and had haemoptysis. Tubercle bacilli were present in small quantities. She was under treatment for one month. The purulent character of her sputum and the tubercle bacilli quite disappeared. The haemoptysis ceased and the patient gained 4 pounds in weight. Male, age 22. Several near relations died of consumption. Patient had large cavities in the apices of both lungs, repeated haemoptysis, profuse muco-purulent expectoration, night sweats, and severe cough. His average evening temperature was 102 and tubercle bacilli were present in large quantities. He was six months under treatment; at the end of this time his evening temperature was normal; the haemoptysis had ceased, the expectoration was healthy and the tubercle bacilli had disappeared and he gained 10.5 pounds in weight. The cavities had cicatried and contracted so much that the top of the left chest was fixed. The most remarkable results of this system of treatment are to be seen in 1. the reduction of the temperature, and 2 . diminution and disappearance of the tubercle bacilli. It may be stated that the patients had the usual meals, breakfast, lunch, tea and dinner or supper; in fact, had ordinary diets and the so-called "stuffing" system was not practiced. In "Case Records" and "British Lancet"

Authority: E. W. Reisbeck. M. E., Ozone Research Authority
Subject: OZONE - for destroying Odours

ERADICATION OF OBJECTIONABLE ODOURS

"Ozone destroys all odours that are present. It does not merely mask them. The destruction of odours is impossible when air is circulated only, or when oxygen is used. This fact has been proven in cold storage warehouses, where all kinds and any food products are stored. Odours are not present regardless how strong they might be, or where they may originate, if only low concentrations of Ozone is used." In "Air Conditioning and Ozone Facts"

Authority: Dr. Philip Drinker, School of Public Health, Harvard University "As a deodourant for odours and stenches of organic origin, OZONE has long proven effective and we can only confirm this general opinion"

Authority: Milton J. Rosenaw, M.D.

"Ozone destroys organic odours," Ozone is a deodourizer of powerful stenches, such as from garbage incineration and fat rendering." When the odours from chimneys cause public nuisance Ozone has commercial use fullness. In "Preventive Medicine and Hygiene"

"Editorial"
OZONE HAS A STRONG PENETRATING ODOUR WHICH IS PERCEPTIBLE WHEN IT IS PRESENT IN THE ATMOSPHERE IN CONCENTRATIONS AS DILUTE AS ONE PART IN 100 MILLION PARTS OF AIR BY VOLUME.

The effect of Ozone was thought in the past to be a masking action but more recently the tendency is to hold that it is purely an oxidizing process. Most odours encountered in ventilation problems result from hydrocarbon compounds suspended in the atmosphere in minute quantities as the result of human or animal respiration and from various organic processes. THESE HYDROCARBONS ARE IMMEDIATELY OXIDIZED UPON COMING IN CONTACT WITH OZONE, THE RESULTING PRODUCTS BEING WATER AND CARBON DIOXIDE, BOTH ODOURLESS. This process is effective in completely removing the scent of odours, if the reaction is complete, which requires that the Ozone be in such a manner as to insure its even distribution throughout the air. In "Heating and Ventilation Magazine"

"Refrigeration and Air Conditioning"

"In the sales, cooler, fresh and sweet air at times would be a distinct selling advantage. OZONE seems to offer the solution of this and other problems of pure air in the meat packing plant. In fact, it is being widely used in cold storage plants to correct the very situation objectionable in the meat packing plant. In "Refrigeration ant Air Conditioning"

Authority: George A. Johnstone, M.D., Medical Director of Behrens Memorial Hospital Glendale, California
Subject: OZONE - for eradication of objectionable odours

TO WHOM IT MAY CONCERN:

I have tested the Calozone Ozone Generator in the Behrens Memorial Hospital for the eradication of objectionable odours. In the tests that I have completed the following results were observed: Unpleasant odours are not masked or covered up, but are literally destroyed. The results in an ordinary room are almost immediate. Where clean, fresh air is desirable, this machine has a definite contribution to make to the Medical World.
Sincerely, George A . Johnstone, M.D. Medical Director

NOTE: "Calozone Ozone" and "Vitazone Ozone" Generators are one and the same machine, manufactured by the same company. "Result of Personal Investigation"

Authority: Homer Clark Bennett, M.D., M.E., Ph.D.
Subject: OZONE - for Insomnia, Hay Fever, Bronchitis, Tuberculosis, Anemia, Dyspepsia, Constipation, Headaches, Inactive Liver and Kidneys, Syphillis.

"The conditions I would mention especially as being most amenable to OZONE treatment are: Neurasthenia, Melancholis, Insomnia, Hay Fever, Bronchitis, early stages of Pulmonary Tuberculosis, Anemia, Dyspepsia, Constipation, Headache, Inactive Liver or Kidneys, and Syphillis in any stage, and I would say that it is a most valuable adjunct to surgical, electrical and other procedures for the relief or cure of organic disease." In (The Electro Therapeutic Guide)

Authority: Torald Sollman, M.D., Professor Pharmacology & Materia Medica Western Reserve University. Cleveland, Ohio
Subject: OZONE - for Therapeutic Application "Ozone is a polymeric form of oxygen, 03 which decomposes very rapidly with the liberation of oxygen. It is therefore a strongly oxidizing, deodourant and antiseptic. The older methods of preparing Ozone developed irritant nitrogen oxides. The modern generators are free from this defect."

Authority: Frank B. Carpenter, M.D., New York City, N. Y.
Subject: OZONE - for the Nervous System, Insomnia (sleeplessness)

OZONE for the Nervous System "That Ozone is harmless, we have demonstrated over a period of many years in patients of all ages. By its soothing, quieting effect on the nervous system, it relieves Insomnia. It is especially indicated in Asthma and all diseases of the Respiratory Organs." In "Manual of Pharmacology"

Authority: E. W. Riesbeck. M.E., Ozone Research Authority
Subject: OZONE - for Monoxide Poisoning

"Carbon monoxide is a tasteless, odourless and almost colourless gas. The poisonous action of this dangerous gas depends on the fact that it has over 200 times as much affinity for the hemoglobin of the blood than oxygen. Formed by burning gasoline, oil, gas, coal an other combustible material with an in sufficient supply of oxygen, this gas is dangerous to health. It attacks mostly without warning, and the victim in a great many cases, if he becomes aware is too weak to escape. With these facts in mind tests were conducted with various devices de signed to reduce the carbon monoxide content of the air in garages. NONE OF THESE WERE AS EFFECTIVE AS OZONE. OZONE UNITES WITH THIS POISONOUS GAS AND RENDERS IT HARMLESS. Oxygen O2 cannot exert the same action on the carbon monoxide as Ozone 03. Ozone no doubt combines with a greater amount of carbon monoxide-thus forming carbon dioxide, which is expelled during the process of respiration. For this reason the usual headaches are eliminated when Ozone is used in ventilating garages. Poisoning of air by carbon monoxide 1 part of carbon monoxide to 10,000 parts of air-no effect noticed 2 parts of carbon monoxide to 10,000 parts of air-mild poisoning 6 parts of carbon monoxide to 10,000 parts of air-perceptible poisoning 9 parts of carbon monoxide to 10,000 parts of air-headache, nausea 15 parts of carbon monoxide to 10,000 parts of air-Dangerous to life In "Air Conditioning and Ozone Facts"

Authority: Sir Edward Thorpe. LL.D., C.B.. F.R.S., England
Subject: OZONE - for oxidation of exhalations from the Lungs and Skin.

"Another important application of OZONE which has made great progress recently is for the purification of the air of rooms and enclosed places. It is now recognized that the bad effects of the close air of crowded rooms etc. is not due to the excess of carbonic acid or of moisture present, but to TRACES OF VARIOUS ORGANIC EXHALATIONS COMING FROM THE LUNGS AND SKINS OF PEOPLE AND ANIMALS PRESENT. These traces of organic matter are readily oxidized by Ozone, as to be harmless, and even beneficial when breathed. It has been found that the introduction of small quantities of Ozone into close air has been the result of removing stuffiness and unpleasant effects, and making the air pleasant and invigorating."

Large numbers of installations have been put into houses, hospitals, theatres and other public buildings and the process has just been adopted on a large scale for the purification of the Central London Tube Railway. It has also been adopted with advantage in cold storage houses, slaughter houses, and factories where unpleasant smelling work is being carried on, for deodourizing generally and in Paris, in connection with the disinfection of clothing. In "Dictionary of Applied Chemistry"

Authority: Noble M. Eberhard, M.D., A.M., Ph.D., Formerly Director of the Department of Electro Therapy, Chicago College of Medicine and Surgery
Subject: OZONE - for Oxygenation of Blood and tissues increasing oxyhemoglobin.
"Ozone increases the oxygenation of the blood and tissues, thus increasing oxyhemoglobin and also increasing the number of red blood corpuscles. There are some diseases of the respiratory organs, including tuberculosis, infectious diseases and all conditions, where imperfect oxidation and impaired nutrition are present, where OZONE is beneficial. An OZONE spray has been demonstrated to be healing in all forms of ulcers, etc. OZONE is especially effective in consumption." "IF I COULD HAVE ONLY ONE REMEDY, I WOULD PREFER TO TAKE MY CHANCES WITH OZONE." In (A Working Manual of High Frequency Current)

Authority: George Stocker, M.D.. C.M.G., F.R.C.S., R.A., M.C.
Subject: OZONE - for Gas Poisoning

The idea of using Ozone inhalation in the treatment of cases of poison gas was first suggested to me by long experience of this treatment in diseases of the air passages, such as pneumonia, bronchitis, bronchientacis, etc., and also of cavities in the lungs and in empyena; by this most successful results were obtained.

I considered poison gas as a producer of what may be called a mechanical Pneumonia, as opposed to the more ordinary forms resulting from cold causes etc., and requires the same treatment.

The principal effects of Ozone are:

1. as a complete germicide
2. a strong factor in the formation of oxyhemoglobin and
3. a powerful stimulant to the heart.

2. When prepared from atmospheric air, with proper ozonizers, and care fully administered, it is absolutely NON-IRRITATING. If these precautions are not observed, it may produce irritation instead of relief. Ozone should be inhaled directly from the ozonizers air-tight chambers, such as are used in hospitals for the treatment of tubercular cases, are cumbersome and inconvenient, and not suitable for the advanced front. Ozone is a very evanescent body and soon loses its power and becomes oxygen again, and for these reasons should be inhaled direct from the ozonizer.

Ozone should be thus inhaled from 10 to 15 minutes at each application. The number of applications being dependent on 1. the severity of the case 2. the toleration of it by the patient and 3. the relief afforded. It must be remembered that the sooner Ozone is inhaled, even though for a short time at first, the better the result will be. THE OBSERVED EFFECTS OF OZONE IN GASSED CASES ARE: 1. It relieves the cough, dyspones and pain. 2. It assists the expulsion of the glutinous mucous from the air passage. 3. It stimulates the heart's action and reduces its intermittence when this symptom shows. 4. In many cases of gassing, the mental condition of the patient is affected, they become dull, stupid and apathetic. OZONE RELIEVES AND BANISHES THESE CONDITIONS. In "British Lanset"

Authority: E. W. Riesbeck, M.E., Consulting Engineer, Chicago
Subject: OZONE - for Pneumonia
Let me quote a few cases on record:

Case No. 1.

"October 15. Pneumonia and Asthma patient 72 years old was transmitted to the hospital by ambulance. Temp. 105.2, pulse and respiration way above normal at arrival. The case was desperate and the doctor decided to place the patient in the air conditioned OZONE ROOM. During the next 6 days, temperature, pulse and respiration dropped gradually so that on Oct. 21, the temp. was 97.4, pulse 70, and respiration 23. Patient was discharged from Hospital, October 25.

Case No. 2.
"Patient admitted to the hospital Feb. 3, suffering from DOUBLE PNEUMONIA and placed in a private room. Feb. 5, his temp. reached 105.6, pulse 128, respiration 50. This desperate case was transferred Feb. 5, at 8 p.m. to the air conditioned OZONE ROOM. Within ONE hour, temp., pulse and respiration began to drop and the patient walked OUT OF THE HOSPITAL on February 14. Case No. 3. "A double pneumonia case became critical on July 1, at 7:30 p.m. when his temp. reached 103.8. pulse 140, respiration 58. Within 45 minutes after he was transferred to the air conditioned OZONE ROOM, his temp. and respiration began to drop rapidly. On July 7, his temp. was 98.6, pulse and respiration normal. Patient was discharged from hospital, July 12. These are just a few cases which prove the power of OZONE used in conjunction with properly conditioned air to be of help to the medical profession. In "Air Conditioning and Ozone Facts"

Authorities:
James Steward, M.D., Director of Hygiene
E. S. Hallett, Chief Engineer, Board of Education, St. Louis
Subject: OZONE - Indispensable in Schools

During the influenza epidemic in St. Louis, the most critical and advanced cases were transferred to an open air school, which made for high percentage of mortality. In one particular ward, experiments were made with ozonized air on cases approaching or at the crises period of the diseases where patients were able to inhale at all, they WERE AT ONCE RELIEVED AND SUCCESSFULLY CARRIED OVER THE CRISIS. Two schools were then used for an experiment, one with OZONIZED air and another with ordinary air. Both schools contained approximately the same number of rooms. The following cases of sickness were observed and tabulated:

CONDITION	OZONIZED AIR	ORDINARY AIR
Tonsilitis	13	57
Sore Throat	24	60
Colds	46	64
Headache	9	66
Stomachache	0	25
Earache	1	15
Toothache	0	15
Indigestion	0	9
Fever	1	49
The Grippe	0	6
Pneumonia	0	4

Comparing the total days absent we find that in the school where OZONIZED air was used, the school children were absent, due to the foregoing cases of sickness, 475 school days, while in the school where ordinary air was circulated by means of the ventilating system, the school children were absent a total of 1,098 school days. Thousands of lives would be saved every year if homes and schools were equipped with apparatus for the circulation of Ozone. Injected with the air of the building to the extent of one part of Ozone to one million parts of air, it effects approximately 100% purification. In five years that Ozone has been used in the Public Schools of St. Louis, TUBERCULOSIS CASES HAVE BEEN REDUCED 50%, ALSO OTHER DISEASES HAVE BEEN MATERIALLY REDUCED. In "Report to National Warm Air, Heating and Ventilating Association"

Authorities:
Dr. S. Pribluda. M.D.
Dr. T. A. Chamorro. M.D., Hospital Salaberry, Buenos Aires, Argentine
Subject: OZONE - for Rheumatic Pains

We have had the opportunity of treating with real success a large number of rheumatic patients with Ozone therapy. Many of these patients had retrogressed under other treatments. For two years, Professor Dr. T. A. Chamorro tried the effects of Ozone in diverse illnesses. In each of these cases Ozone provided a temporary analgesic in the painful areas of the body (see: "More experiments with Ozone in child birth and gynecology" by Dr. T. A. Chamorro, La Semana Medica.) What is the action of Ozone on rheumatism? Why is it analgesic? It is difficult to determine its true action for its introduction into the organism destroys it, and opposed to other pain-relieving agents (of complex chemical compositions) it does not undergo great transformations in the body which would permit the study of intermediate states; however, Ozone is O3, and decomposes into atomic oxygen, a normal element of the body. Its behavior is that of nascent atomic oxygen which has acquired a large amount of radioactive energy, accumulated during the time of its production in the generating apparatus. Does the Ozone act through its oxidizing and radioactive properties? These properties tend to oxidize the intermediate products of metabolism; however, there exists a factor which contradicts this theory. At times the analgesic effect is almost instantaneous, more frequently when the subcutaneous method is used in the "locus dolenti." There is a direct action on the sensitive "filetes" IN THE SKIN IN DIRECT CONTACT WITH THE OZONE WHOSE DIFFUSIBILITY IN THE CELLULAR TISSUE IS QUITE MARKED. Leaving to one side its pharmaco-dynamic action, we will enumerate that which happens to the patient upon the injection of Ozone gas. There is a perfect tolerance of doses of from 150 to 450 cc. The only vexation reported was a sensation of distention, depending on the region injected, the elasticity of the skin, and the amount of cellular tissue under the skin. This was accompanied by a sensation of warmth varying with the concentration of Ozone.

The distension and warmth disappear in a few minutes, leaving an agreeable analgesic sensation, elasticity in the infiltrated zone, in neighboring area, and also in regions of inervation from the nerve near the injection. The duration of the initial improvement, which permits almost immediate physiological use of the injected area in variable hours to days, and when the pain returns it is lessened. In all the cases we have observed that the patients reappear at consecutively greater time intervals. At the beginning they come back two or three times a week and rapidly lengthen the intervals, returning once a week or every 10 or 15 days. Many considered themselves cured after two or three weeks, others visited the Clinic once a month or once every two or three months.

WE ARE ABLE TO SAY THEREFORE, THAT OZONE THERAPY ALLEVIATED THEM FOR GREATER PERIODS EACH TIME, OR THAT THEY WERE CURED IN A SHORT TIME. NOT ONLY WERE THEIR PAINFUL RHEUMATIC AFFLICTIONS IMPROVED, BUT THERE WAS AN EVIDENT GAIN IN THE GENERAL STATE, CHARACTERIZED BY AN IMPROVEMENT IN THE PHYSICAL ASPECT, AND A GREATER ACTIVITY, PHYSICALLY, PSYCHOLOGICALLY AND SEXUALLY.

We have observed these results in chronic rheumatism, and other rheumatisms of gonococcial origin embodied in the clinical records of the Gynecology Service, and one case of epilepsy where the sedation of the pain and the functional impotence was immediate. We have also treated two cases which regressed after having been cured by hot baths and which Ozone rapidly improved. Methods of application: Subcutaneous, intramuscular. and intravenous

The subcutaneous method has proven to be the most effective, with the least pain and the most rapid action.

RESUME:

1. Ozone is highly effective as a treatment for rheumatic pains, it rapidly alleviates them and permits functional recuperation.
2. It is innocuous and does not have symptoms of intolerance.
3. There are no contra-indications.
4. It improves the general condition.
5. It is convenient and economical.

In "Semana Medica"

Authority: E. K. Rideal, Ph.D., M.A., Past President Physical Chemistry University, Illinois

Subject: OZONE - for Powerful Sterilization

OZONE is a powerful germicidal as was first indicated by Frohlick. Its high germicidal activity is doubtless due to its oxidizing power, and as a dual agent of this character, it has been fairly extensively employed for the sterilization of public water supplies, for the treatment of wounds in hospitals, and for various purposes of sterilization and preservation in industries. Some sterilization is effected by ozonation of air, since a marked reduction is obtained in the bacterial count of the air which has actually passed through the ozonizer and subject to the ultraviolet radiation in the ozonizer is practically sterile, and a consequent improvement in the bacteria naturally expected, in fact obtained. In "Personal Notes"

Authority: Hans Kleinmann, M.D., German Research Authority **Subject: OZONE - Its action on Surface Cultures, Bact. coli - Bacilli** Diphtheria, Staphylococcus and Streptococcus Action of Ozone on Bact. coli 2 hours after vaccination.

Spread: 0.3 ccm solution 1:50000 of a 24 hour bouillon culture upon Endo medium. Two hours air dried, ozonized without pressure.

Ozone Concentration mg./1 hr	Time of ozonation Minutes	Bact. count after 36 hrs. incubation	Mortification Percent colonies
174.3	0	Ca 2-3000	0
174.3	2	60	98
174.3	8	15	99.5

Action of Ozone on surface cultures of Diphtheria Bacilli four hours after vaccination. 0.5 solution 1-50000 of a 48 hour bouillon culture on serum plates. Two hours. Air dried after two hours. Ozonized.

Ozone Concentration mg./1 hr	Time of ozonation Minutes	Bact. count after 36 hrs. incubation	MortificationPercent colonies
174.3	0	1126	0
174.3	2	0	98.1
174.3	8	0	100

Action of Ozone on Staphylococcus, Pyogens Aureus, four hours alter vaccination. 0.3 ccm solution 1010000 of a 24 hour bouillon culture spread on agar plates. Dry one hour. Ozonized after three hours.

Ozone Concentration mg./1 hr	Time of ozonation Minutes	Bact. count after 36 hrs. incubation	MortificationPercent colonies
174.3	0	840	98
174.3	0	0	100

In "Action of Ozone on Pathogenic Germs"

Action of Ozone on non-hemolylic streptococcus, four hours after vaccination. 0.5 ccm solution 1-10000 of a 48 hour bouillon culture of blood agar plates. Two hours. Dried after two hours of ozonation.

Ozone Concentration mg./1 hr	Time of ozonation Minutes	Bact. count after 36 hrs. incubation	MortificationPercent colonies
174.3	0	Ca 2000	0
174.3	2	teril	100

All these tables testify that Ozone, very quickly and energetically, acts deadly on germs, grown macroscopically and dried on a medium soil. The first table shows a mortification of 98% and 99% of the bact. coli within two minutes and this confirms completely the results of Dr. Heise. It also gave evidence that the action of Ozone is very intense on the plates and grows six (6) hours after the vaccination. The other plates, dysentry, streptococcus, staphylococcus, which commonly were ozonized after 3-4 hours after vaccination were absolute steril alter two (2) minutes. According to the results of these experiments as shown in these tables, the disinfectory germical action of Ozone must be considered as most excellent and superior to other methods. In "Action of Ozone on Pathogenic Germs"

Authority: Joseph E. G. Waddington. M.D., C.M., American College of Physical Therapy

Subject: OZONE - for subnormal temperature and equalization of the blood

Cases of suboxidation usually have a subnormal temperature, ranging from as low as 96 degrees; as Health cannot be maintained below the normal standard of 98.6 degrees. THE SOONER THE CLINKERS OF IMPAIRED OXIDATION; DEFICIENT OR INCOMPLETE COMBUSTION, ARE REMOVED UNDER THE DISINTEGRATING AND STIMULATING DRAFT OF OZONE. THE SOONER WILL HEALTH BE APT TO BE RESTORED.

The visual evidence of the effect of Ozone upon oxidation is easily demonstrable by taking the temperature immediately before and after an Ozone inhalation, when a subnormal temperature will invariable show a raise after the inhalation, varying in degree directly with the extent of the subnormality. Infection is usually, if not invariable, the etiologic factor in an elevated temperature, and infections naturally vary intensively in degree of virulence and consequent altitudinous stimulation of the thermal reaction. This being true, we can realize the apparent-though only superficially apparent-paradox of prescribing Ozone not alone for conditions evidencing subnormal body heat, BUT ALSO FOR CONDITIONS EVINCING JUST THE OPPOSITE

EXTREME.

Ozone inhalations, to quote from Tousey, "INCREASE THE PROPORTION OF OXYHEMOGLOBIN if that is subnormal and also the number of red corpuscles, cause an increase in respiratory capacity and A REDUCTION IN WHITE BLOOD CELLS IF THEY ARE IN EXCESS."

Inhalation should be given daily and of a duration from 15 to 30 minutes, depending solely upon the susceptibility of the patient to treatment. Saturation of the system is evidenced by a feeling of cerebral fullness, dizziness, and even nausea if carried beyond a healthful mean. In "Practical Index of Electro and Photo Therapy"

Authorities: Drs. L. Abbe and Oudin, M.D., Paris, France
Subject: OZONE - for Treatment of Pulmonary Tuberculosis

Our observation of treatments of pulmonary tuberculosis by inhalation of OZONE covering three years includes 38 cases, seven being in the first stage and 23 in the second stage, with eight being in the final stage.

ALL WITHOUT EXCEPTION, EXPERIENCED CONSIDERABLE IMPROVEMENT, PERMANENT IN MOST CASES, AND THAT FOR SUCH LENGTH OF TIME, IN 13 CASES THAT WE CAN CONSIDER THEM CURED.

The first result of the treatment is the return of appetite, which soon becomes imperious, obliging patients to eat four or five times each day. Then one sees the lessening of the diarrhea, vomiting and sweats. This triple improvement is soon accompanied by the return of strength ant flesh.

ACCOMPANYING THIS RETURN OF FLESH THERE IS A CORRESPONDING INCREASE OF OXYHEMOGLOBIN, WHICH WAS EXAMINED IN ALL CASES BY HENOQUIES'S PROCESS OF HEMOTOSPECTROSCOPY.

The functional symptoms also improved very favourable and rapidly. The cough became more and more rare until it occurred only at awakening before finally disappearing altogether. The frothy expectorations became more solid and gradually less abundant.

Several of our patients had experienced spitting of blood, even frequent serious. In no case did it occur during the course of the treatment. The sore spots, the difficulty in breathing, disappeared gradually as the conditions improved and the fever also.

Among the patients in the first stage, at the end of two months at the most, there were no longer any abnormal noises. Even among patients in the first stage, we found noticeable stethoscopic modifications, as the disappearance of rales.

To the eloquent figures we have cited, we add only a few words to emphasize the fact that our patients have all, or nearly all, been drawn from the poorer classes, that is to say, living under detestable hygienic conditions, AND HAVE HAD NO OTHER TREATMENT THAN THE OZONE INHALATIONS FOR A QUARTER OF AN HOUR EACH DAY AND THAT FOR A NUMBER OF THEM, DURING A LONG AND RIGOROUS WINTER.

WE ARE ABSOLUTELY CONVINCED, AND SEVERAL CASES ACTUALLY OBSERVED, ENABLE US TO AFFIRM, THAT BY LONGER AND MORE FREQUENT INHALATIONS, THERE CAN BE OBTAINED THERAPEUTIC RESULTS MUCH MORE RAPID, MORE COMPLETE AND STILL MORE CONCLUSIVE. In "Report to Paris Congress for the Study of Tuberculosis"

Authority: E. W. Riesbeck, M.E., Nationally Famous Consulting Engineer
Subject: OZONE - for Water Purification
Various tests have proved that water treated with Ozone is almost sterile, because Ozone- 1. Kills the bacteria in the water; 2. Removes practically one-half of the organic matter carried in solution; 3. Discoloration is eliminated; 4. As well as bad taste. leaving the water wholesome and pleasant to drink.

During a controversy between engineers and medical men in Europe, it was decided that the medical men should conduct exhaustive tests in order that true facts might be established. Rigid tests and examinations of drinking water taken from various sources throughout Germany, all of which had been treated with OZONE were conducted. The drinking water so tested was taken at various intervals during the entire year. The bacteria count of this treated water was never more than 10 per cc. and in most cases was less. Not satisfied with these tests, the medical men contaminated the drinking water with different kinds of bacteria, starting with 20,000 bacteria per cc. and increasing the bacteria count to 60,000 per cc. IN SPITE OF THIS HIGH POLLUTION, ALL BACTERIA WERE KILLED BY THE OZONE. NOT UNTIL THESE EXPERIMENTS WERE REPEATEd TIME AND AGAIN OVER A PERIOD OF YEARS, DID THE MEDICAL PROFESSION ACKNOWLEDGE THAT, IN THEIR OPINION, OZONIZED WATER WAS PRACTICALLY STERILE. In "Air Conditioning and Ozone Facts"

Authority: Dr. Donatient L. Abbe, M.D. Chief, Electro-Therapy Department, 1st Hospital Bouvicant, Paris, France
Subject: OZONE - for Whooping Cough

The first use of OZONE in whooping cough was made in 1890, under my advice by Dr. Hellet of Clichy. Since that time there have been several publications on the subject, in France and elsewhere, first by my friend Dr. Derecq of Paris, by Prof. Doumer of Lille and by Dr. Caille of New York; then, more recently, by Dr. Delherm of Paris, Dr. Thielle of Rouen and Dr. Bordier of Lyons. For my own part, I have published at various times in collaboration with Dr. Oudin, numerous observations of whooping cough promptly relieved and cured by OZONE. My personal experience rests on over one hundred

cases during ten years. In all these cases, and especially those treated from the outset of well developed whooping cough, I have obtained amelioration prompt and rapid at first, and later a complete cure. In a time little longer than that ordinarily covered by a very light attack, the result has been constant. This constancy and continuity of action enables us to be still more strongly affirmative than we were earlier in our researches and we do not hesitate to say that OZONE is a remedy par excellence for whooping cough. If less favorable results have been obtained by some experimenters, their lack of success arises not from any failing on the part of OZONE, but from the use of faulty apparatus or from defective application. The treatment would be rendered complete by maintaining an ozonized atmosphere in the patient's room. In "Clinical Reports" Journal de Medicine de Paris

Authority: John F. Kessel, M.D., Donald K. Allison, M.D., Martha Kaime, Maria Quiros, Albert Glockner Department of Bacteriology and Parasitology School of Medicine, University Southern California

Subject: OZONE THERAPY - for Cysts of Endamoeba Histolytica
Ozone has been known for years to be a highly effective oxidizing agent. It has been used extensively in Europe.

While certain of the early work with Ozone indicates its bactericidal properties, few quantitative tests have been reported, and WITH THE EXCEPTION OF STUDIES IN THIS LABORATORY no records are known to the author which compare the bactericidal effects of CHLORINE AND OZONE nor the effects of chlorine and Ozone on protozoan cysts or viruses.

A comparison of the cysticidal and bactericidal effects of chlorine and Ozone is made at pH levels ranging from 5 to 9. One hundred cysts per cc. were selected as a standard dosage for the experiments, the bacterial count accompanying this dosage ranging between 500,000 and 1,000,000 per cc. chlorine residuals of 0.5 to 1.0 p.p.m. were compared with Ozone residual of only 0.3 p.p.m. at time intervals ranging from two to 240 minutes at temperature of 27 C.

The bactericidal and cysticidal times required by OZONE producing a residual of only 0.3 p.p.m. were SEVERAL TIMES LESS THAN THOSE required by chlorine producing residuals of 1.0 p.p.m. Thus, in both bactericidal and cysticidal studies Ozone was several times more effective than either H. T. H. or gaseous chlorine.

In "American Journal of Tropical Medicine"
OZONE - At the Roundtable Discussion

Question 1:

Is Ozone a poisonous gas, a toxic substance and harmful?
Answered by: Clark Thorp, Ph.D., M.D.
Recent authoritative investigations have established, that pure Ozone is Non-Toxic even in concentrations as great as 20 or 50 parts per mill. of air. A. Hill, M.D. Pure Ozone is not poisonous in any sense of the word as is breaks down in contact with the mucous membrane, and only Oxygen remains. Th. Kunzemann, M.D. Casual toxic sign are only theoretically thinkable THROUGH OTHER unclean gaseous BY-PRODUCTS. Clark Thorp, M.D. Ozone containing oxide of nitrogen, can be toxic in concentrations as low as 1.5 p.p.m. T. Sollman, M.D. The older methods of preparing Ozone developed irritant nitrogen oxides, but the modern generators are free from this defect. F. B. Carpenter, M.D. That Ozone is absolutely harmless we have demonstrated over a period of many years in patients of all ages.

Question 2:
Wonder why Ozone has not been used more in America, whereas it has been used extensively in Europe and South America?
Answered by: E. W. Riesbeck, M.E.

"One of the reasons why the successes obtained with Ozone in Europe have not received wider publication in America is perhaps due to the fact that lectures, test data, etc. are given in German or French." Th. Kunzemann, M.D. "Moreover, the use of Ozone for therapy has been made difficult through inadequate apparatus, but the new Ozone technique has overcome this difficulty." Donatient L. Abbe. M.D. "If less favourable results have been obtained by some experimenters, their lack of success arises NOT from any failing on the part of OZONE. but from the use of FAULTY APPARATUS or from DEFECTIVE APPLICATION." John F. Kessel, M.D. The extensive use of Ozone in this country has been retarded because-

a. of the high cost of power, and
b. the low efficiency of the older type of Ozone generators Now, the cost of electrical power has greatly decreased and the efficiency of Ozone equipment greatly improved. The picture of production shifts strongly in favor of Ozone.

Question 3:

Is Ozone really effective in killing bacteria in air and water?

Answered by: A. Vosmaer, Ph.D.

"Ozone owes its fame to its remarkable power of killing bacteria That is why the world should LOOK UPON OZONE AS A BOON TO MANKIND No matter how many bacteria there may be, Ozone will take care of them and destroy

any amount and any kind " A. Vosmaer, Ph.D. "Experiments with cholera and typhus bacteria are rather awkward to be carried out in a private plant, handling, say a million gallons of water per day, and the firm Siemens and Halske were very fortunate to find the Prussian State officials willing and ready to test the matter. Dr. Ohlmueller and Dr. Prall published results of their finding regarding the action of Ozone on bacteria. The experimental series covered the effect of Ozone on pure water infected with 16,000 cholera or with 30,000 to 40,000 typhus, or 20,000 to 40,000 coli bacteria. THE RESULT WAS ABSOLUTE STERILITY AFTER TREATMENT. The next step was to see the result on infected ordinary river water carrying over 4,000 bacteria. After treatment with Ozone, some 5 or 6 were left over and those were harmless. E. Howlett, M.E. "Ozone in the air in minute quantity of only 1 part per million retards the growth of bacteria and molds." E. K. Rideal, Ph.D. "Ozone is a powerful germicidal. Its high germicidal activity is doubtless due to its oxidizing power." W. E. Anghinbaugh, M.D. "Ozone generators have been installed in many homes, and that super-oxygen is particularly destructive to all microbes and at the same time it makes inert the dangerous dust with its bacteria laden tenants.

Question 4:

Can Ozone be classified as a "natural" deodourant?

Answered by: M. J. Rosenow, M.D.

"Ozone destroys organic odours. It is a deodourizer of powerful stenches; i.e. garbage incinerati on and fat rendering." Prof. Szyaplenske, Ph.D. "Ozone can destroy certain odours through oxidation as we can prove beyond doubt for hydrogen sulphide indole, skatol and decayed matter." A. Vosmaer, Ph.D. "Ozone will take care of bad odours in a very effective way, by oxidizing them to odourless carbon dioxide and other compounds." Dr. J. C. Olson "When Ozone comes in contact with dead organic matter, oxidation immediately takes place with destruction of the organic matter. In this, it is powerful in removing odours. George A. Johnston, M.D. "Unpleasant odours are not masked or covered up by Ozone, but literally destroyed. The results in an ordinary living room are almost immediate. Where clean fresh air is desirable, Ozone generators have a definite contribution to make to the medical world ".

Question 5:

Can Ozone be classified as a therapeutic?

Answered by:
A. Caille, M.D.

"Ozone is exceedingly valuable from a therapeutic standpoint. It gives better and prompter relief than any other medication." Noble M. Eberhard, M.D. "If I could have only one remedy, I would prefer to take my chances with Ozone." Th. Kunzemann, M.D. "The capability of the strong reaction of Ozone has for a long time found the interest of Doctors and Hygienists. Therapeutic

employment of Ozone is based on two modes of action. One is the action of the pure oxidation itself, the other, the action of the oxygen created by the oxidation, which in its status nascendi shows peculiar qualities.

To group one, belong the employment of OZONE BY INFECTIOUS DISEASES, especially by tubercular diseases. The fact that Ozone infiltrates through the pores of the skin can be proved in a double way through chemical physio treatments. Tests have been made in taking 1 cc. blood from the patient before giving him a 20 minute physical treatment with Ozone. Another 1 cc. of blood was taken afterwards. The result of the investigation showed by each of the persons tested an increase of oxygen in their veins. In concluding, we can say that Ozone, in contact with the skin, is breaking down into molecular oxygen, and through perspiration enters into the inner tissue. The tissues are oversaturated and the Ozone diffuses into the veins. After the treatment, the increase in the different cases were 15, 17, 20, and 25% more oxygen in comparison with the original contents. This increase in oxygen in the tissues and veins leads forcibly to the complete oxidation of all organic acids, and by the expulsion of the carbonic acid, according to the law of the action of quantities to the complete deacidification, and therefore, to a spontaneous reduction of breathing frequency. These physiological verifications established Dr. Sehdens practical verified therapeutic results with many forms of diseases.

S. Barker, M.P.S.

"Ozone has a direct influence on the blood itself. It has been proved that patients treated both by injection and orally, rapidly increase their number of red corpuscles, some blood tests showing an increase of 50% in a months treatment." E. W. Riesbeck, M.E. "I have before me 32 complete records and reports of reputable physicians who treated various diseases with olive or cod liver oil heavily charged with OZONE. By this method the oxygen content of olive and cod liver oil used for treatment was increased 8.53 per cent. In some cases the cod liver oil used for treatment was charged with Ozone until its gravity of 0.925 was increased to 1,000. Among the cases treated with this oil were tuberculosis, anemia, lung trouble, Bright's disease, abscesses, pneumonia and influenza, and as far as the records show, these cases were discharged as cured." In "Ozone Facts" O. M. Justice, M.D. "Like many other treatments, THE REASON FOR SO MANY WONDERFUL ACHIEVEMENTS DERIVED FROM this simple aid, Ozone, is that it consists of nothing more nor less than ACTIVATED OXYGEN. "We all know that Oxygen is positively necessary to the existence of not only animal life, but of plant life as well.

As a consequence, NOBODY CAN DENY THAT ACTIVATED OXYGEN MUST BE VERY ESSENTIAL, NOT ONLY AS A PREVENTIVE OF DISEASE, BUT, A GREAT AID IN THE SUPPLEMENTAL TREATMENT OF AILMENTS OF ALL CHARACTER. "I am very much impressed with the use of Ozone. We definitely are on the threshold of another medicament which seems to be a specific in many diseases." In "Ozone Therapy"

Question 6:
What outstanding physiological effect of Ozone are known?
Answered by:
E. Howlett, Eng.

"Complete water sterilization can be affected in a few minutes ". "Ozone in the air in minute quantity of only one part per million retards the growth of mold and bacteria." D. F. Kessel, M.D. One part Ozone in 2 million p solution renders the virus polyomelitis inactive within 2 minutes compared with the double amount of chlorine using 3 hours. E. S. Hallett. M.E. "In five years that Ozone has been used in the public schools of St. Louis, Tuberculosis cases have been reduced 50%. Also the other diseases have been materially reduced. "Ozone would save thousands of lives every year if homes and schools were equipped with apparatus for the circulation of Ozone." Conclusion Ozone, God's Gift to Humanity, surely has become an outstanding blessing to mankind. Its benefits are so great, so many fold and seemingly unlimited. Ozone is not a drug, but a wonderful and exceptional aid to nature, and with it the great unsurpassed artist and healer-Dr Nature-is blessing humanity. Ozone Blessings by Emma Leonard We ware sick and we did pray, The answer came the OZONE way OZONE comes from God above, Like an Angel of His Love; So to Him we give the Glory For our health and wonder story Are you feeling par today? Listen, what we have to say Give OZONE the acid test, Soon you'll feel your very best, And you'll bless the very day- You look Natures OZONE way.