

DO NOT BE DECEIVED! AIDS AND CANCER ARE CURABLE!

FRIENDS—PAY ATTENTION TO THE FOLLOWING:

If you are deceived into believing that there is NO cure for Aids or Cancer and are suffering from or have loved ones who are suffering from these dreaded dis-eases, the following may be of extreme help in reducing or even arresting the furtherance of yours or their suffering.

Check out the following extracts.

These are not, I repeat, NOT from any unrecognized sources or journals but from highly-respected individuals and institutions!

The Government, in association with the FDA, AMA and even the press, is being NEGLIGENT to the welfare of our fellow human beings.

**DO NOT FALL PREY TO THEIR NEGLIGENCE
AND THE LACK OF RECOGNITION OF THEIR OWN DATA!**

Rise up from the doldrums of apathy and unbelief!
Our ignorance and lack of care to the laws of the Mother and our personal insensitivity(ies) has caused these problems.
Demand utilization NOW of these scientifically, time-tested, safe, non-toxic, harmless and life-saving compounds.

Demand this from your Government officials, health and welfare institutions, doctors, colleges of research and the press NOW!

CHECK OUT THE EXTRACTS BELOW!!!

The following citation is from **BLOOD: The Journal of the American Society of Hematology**, Vol. 78, No. 7, October 1, 1991:

Inactivation of Human Immunodeficiency Virus Type 1 by Ozone In Vitro

By Keith H. Wells, Joseph Latino, Jerrie Gavalchin, and Bernard J. Poiesz

A device was designed to deliver a constant source of given concentration of ozone to fluids containing human immunodeficiency virus type 1 (HIV-1). Ozone was found to inactivate HIV-1 virions in a dose-dependent manner. Greater than 11 log inactivation was achieved within 2 hours at a concentration of 1,200 ppm ozone. Similar concentrations of ozone had minimal effect on factor VIII activity in both plasma and immunoaffinity-purified preparations of factor VIII treated for the same time period. The data indicate that the antiviral effects of ozone include viral particle disruption, reverse transcriptase inactivation, and/or a perturbation of the ability of the virus to bind to its receptor on target cells. Ozone treatment offers promise as a means to inactivate human retroviruses in human body fluids and blood product preparations.

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The following citation is from the respected scientific journal

SCIENCE, Vol. 209, August 22, 1980—over eleven years ago:

Ozone Selectively Inhibits Growth of Human Cancer Cells

Abstract: The growth of human cancer cells from lung, breast, and uterine tumors was selectively inhibited in a dose-dependent manner by ozone at 0.3 to 0.8 part per million of ozone in ambient air during 8 days of culture. Human lung diploid fibro-blasts served as non-cancerous control cells. The presence of ozone at 0.3 to 0.5 part per million inhibited cancer cell growth 40 and 60 percent, respectively. The non-cancerous lung cells were unaffected at these levels. Exposure to ozone at 0.8 part per million inhibited cancer cell growth more than 90 percent and control cell growth less than 50 percent. Evidently, the mechanisms for defense against ozone damage are imparted in human cancer cells.

The following booklet showing the cause of cancer as cellular anoxia (oxygen deprivation) and toxicity was written by Dr. Otto Warburg, the ONLY man in the history of science and medicine to be given the Nobel Prize in Medicine twice and nominated a third time for his discoveries in health:

The Prime Cause and Prevention of Cancer with two prefaces on prevention • Revised lecture at the meeting of the Nobel Laureates on June 20, 1966 at Lindau, Lake Constance, Germany by Otto Warburg, Director, Max Planck Institute for Cell Physiology, Berlin-Dahlem; English Edition by Dean Burk, National Cancer Institute, Bethesda, Maryland, USA 1967.

If you desire more information, call or write:

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Warburg, Blass and Koch: Men With a Message

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"Today's Scientists have substituted mathematics for experiments, and they wander off through equation after equation, and eventually build a structure which has no relation to reality." ¹

"The scientists from Franklin to Morse were clear thinkers and did not produce erroneous theories. The scientists of today think deeply instead of clearly. One must be sane to think clearly, but one can think deeply and be quite insane." ²

"Nobody today can say that one does not know what cancer and its prime cause is. 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 succeed in inhibiting the application of scientific knowledge in the cancer field. In the meantime, millions of men must die of cancer unnecessarily." ³

"All truth passes through three stages: First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as self-evident." ⁴

These quotes are the frank opinions of the Father of Alternating Current, a two-time Nobel Laureate, and a nineteenth century German philosopher.

Warburg, Blass and Koch were men whose truths are becoming evident in today's world of science. These were pioneers and scientists of the highest magnitude. This abstract uncovers, postmortem, the discoveries of these men and their contributions to future scientific studies.

Otto Warburg won his first Nobel Prize in 1931 for the oxygen-transferring enzyme of cell respiration and his second in 1944 for his discovery of the hydrogen transferring enzyme.

Regarding his discoveries he is quoted as follows:

"Even for cancer, there is only **one primary cause**. Summarized in a few words, the prime cause of cancer is the replacement of the respiration of oxygen in normal body cells by a fermentation of sugar." ⁵

"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." ⁶

Dr. F. M. Eugene Blass, an oxidation specialist and engineer/designer of the Pennsylvania Steel-coke ovens, clinically verified Warburg's foundational work. Returning to the United States in 1925, cured of his cancer and armed with the knowledge of the Institut fur Sauerstoff-Heilverfahren, Blass adamantly represented the

"The recognizable results of an insufficient oxidation either because of a lack of minerals or oxygen or because of the presence of foreign matter in the bloodstream are the symptoms which bear the imposing nomenclature of modern 'dis-ease.' The different kinds of parasites, which are the 'germs' commonly blamed for the creation of these various symptoms, find food and lodging in the diseased soil which accumulates in the body, but logically they are not the cause of disease. A clean body will not tolerate such habitation and normal vital fluids constitute the best insurance against sickness." ⁷

"OXIDATION is the source of Life, its lack causes impaired health or disease, its cessation death." ⁸

William F. Koch, M.D., Ph.D., a well-published pathologist and medical school professor, presented his co-practitioners with "a study of the phenomena of the free radical, the double bond, and its alpha-placed hydrogen atom in the pathogenesis and correction of neoplastic, viral and bacterial diseases."⁹ This professor and teacher was truly the granddaddy of ALL oxidative therapies, now referred carte blanche to "oxygen therapies". It is absolutely a fact that all REAL "oxygen therapies" are oxidative in nature and should literally "flood the body with oxygen". But not all "oxidattherapies are "OXYGEN therapies". The following quotes illustrate further:

"Oxidation has several positions of control in its process in line with our postulate. The first is the potency of the FCG (Functional Carbonyl Group) which must start the process by dehydrogenating the fuel. When this carbonyl group is not free, as when the hydrogen it removes from the fuel is not taken away by some electron acceptor system, then oxidation is blocked. And for this oxygen is essential as the ultimate electron acceptor in aerobic organisms. So lack of oxygen has two steps in blocking oxidation or hindering it."¹⁰

"Our postulate provides for the polymerization of the carcinogenic toxin as it develops to the cancer producing stage, and this provision is based upon the chemical and clinical circumstances that stare one straight in the face. Atrophy precedes neoplasia. If one answers that the neoplasia is a reaction to the atrophy stimulus as hay fever is to the pollen stimulus, one must still offer a mechanism for the reaction. The simplest mechanism that could be involved is that the toxin produces both changes, and this mechanism we have already explained as due to block in energy production and transfer. Recovery from the state caused by the carcinogenic agent, be it virus or chemical, is therefore a satisfactory support to the contention, since the same agency accomplishes the corrections of all states, atrophy, pre-growth toxic state, cachexia, and the tumifactions."¹¹

"After the pathogen, be it a virus, carcinogen, or some allergen has made the pathogenic integration, the need for oxygen in the diseased cells is all the more imperative, and removal of all sources of the pathogenic amines is the prime consideration. And not until a good dispersion of the tissue colloids is had, and a good oxygen supply is present in the diseased cells should the reagent be given. For if it does not have a molecule of oxygen at hand to combine with the free radical formed by each dehydrogenation, there will be no curative progression of oxidation, and the reagent is given in vain. This also applies to the free radicals produced by the use of the reducing agent."¹² (Possibly the MOST important statement ever pronounced by Dr. Koch regarding the PROPER use of his treatment(s).)

"The best proof of the correctness or practicability of any postulate in medicine is doubtless the curative value of its application."¹³

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The Prime Cause and Prevention of Cancer

by

Otto Warburg

Revised lecture at the meeting of the Nobel-Laureates on June 30, 1966
at Lindau, Lake Constance, Germany

Director, Max Planck-Institute for Cell Physiology, Berlin-Dahlem

* * *

As emphasized, it is the first precondition of the proposed treatment that all growing body cells be saturated with oxygen. It is a second precondition that exogenous carcinogens be kept away, at least during the treatment. All carcinogens impair respiration directly or indirectly by deranging capillary circulation, a statement that is proved by the fact that no cancer cell exists, the respiration of which is not impaired. Of course, respiration cannot be repaired if it is impaired at the same time by carcinogens.

* * *

To prevent cancer it is therefore proposed first to keep the speed of the blood stream so high that the venous blood still contains sufficient oxygen; second, to keep high the concentration of hemoglobin in the blood; third to add always to the food, even of healthy people, the active groups of the respiratory enzymes; and to increase the doses of these groups, if a pre-cancerous state⁹⁾ has already developed. If at the same time exogenous carcinogens are excluded rigorously, then much of the endogenous cancer may be prevented today.

These proposals are in no way utopian. On the contrary, they may be realized by everybody, everywhere, at any hour. Unlike the prevention of many other diseases the prevention of cancer requires no government help, and not much money.

* * *

There are prime and secondary causes of diseases. For example, the prime cause of the plague is the plague bacillus, but secondary causes of the plague are filth, rats, and the fleas that transfer the plague bacillus from rats to man. By a prime cause of a disease I mean one that is found in every case of the disease.

Cancer, above all other diseases, has countless secondary causes. Almost anything can cause cancer. But, even for cancer, there is only one prime cause. Summarized in a few words, the prime cause of cancer is the replacement of the respiration of oxygen in normal body cells by a fermentation of sugar. All normal body cells meet their energy needs by respiration of oxygen, whereas cancer cells meet their energy needs in great part by fermentation. All normal body cells are thus obligate aerobes, whereas all cancer cells are partial anaerobes. From the standpoint of the physics and chemistry of life this difference between normal and cancer cells is so great that one can scarcely picture a greater difference. Oxygen gas, the donor of energy in plants and animals is dethroned in the cancer cells and replaced by an energy yielding reaction of the lowest living forms, namely, a fermentation of glucose.

* * *

English Edition by Dean Burk

National Cancer Institute, Bethesda, Maryland, USA

Life without oxygen in a living world that has been created by oxygen⁹⁾ was so unexpected that it would have been too much to ask that anaerobiosis of cancer cells should be accepted at once by all scientists. But most of the resistance disappeared when at Lindau it was explained that on the basis of anaerobiosis there is now a real chance to get rid of this terrible disease, if man is willing to submit to experiments and facts. It is true that more than 40 years were necessary to learn how to do it. But 40 years is a short time in the history of science¹⁰⁾.

* Note by DEAN BURK: Adapted from a lecture originally delivered by OTTO WARBURG at the 1966 annual meeting of Nobelists at Lindau, Germany. OTTO WARBURG won the Nobel Prize in Medicine in 1931 for his discovery of the oxygen transferring enzyme of cell respiration, and was voted a second Nobel Prize in 1944 for his discovery of the hydrogen transferring enzymes. Many universities, like Harvard, Oxford, Heidelberg have offered him honorary degrees. He is a Foreign member of the Royal Society of London, a Knight of the Order of Merit founded by Frederick the Great, and was awarded the Great Cross with Star and Shoulder ribbon of the *Bundesrepublik*. His main interests are Chemistry and Physics of Life. In both fields no scientist has been more successful.

In any case, during the cancer development the oxygen-respiration always falls, fermentation appears, and the highly differentiated cells are transformed to fermenting anaerobes, which have lost all their body functions and retain only the now useless property of growth. Thus, when respiration disappears, life does *not* disappear, but the *meaning* of life disappears, and what remains are growing machines that destroy the body in which they grow.

* * *

Many experts agree that one could prevent about 80% of all cancers in man, if one could keep away the known carcinogens from the normal body cells. The prevention of cancer might involve no great expenses, and especially would require little further research to bring about cancer prevention in up to 80 percent.

* * *

Most experts agree that nearly 80% of cancers could be prevented, if all contact with the known exogenous carcinogens could be avoided. But how can the remaining 20%, the endogenous or so-called spontaneous cancers, be prevented?

Because no cancer cell exists, the respiration of which is intact ¹⁾, it cannot be disputed that cancer could be prevented if the respiration of the body cells would be kept intact.

* * *

Why does it happen that in spite of all this so little is done towards the prevention of cancer? The answer has always been that one does not know what cancer or the prime cause of cancer is, and that one cannot prevent something that is not known.

But nobody today can say that one does not know what cancer and its prime cause is. 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 succeed in inhibiting the application of scientific knowledge in the cancer field. In the meantime, millions of men must die of cancer unnecessarily.

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Ozone Selectively Inhibits Growth of Human Cancer Cells

Abstract. The growth of human cancer cells from lung, breast, and uterine tumors was selectively inhibited in a dose-dependent manner by ozone at 0.3 to 0.8 part per million of ozone in ambient air during 8 days of culture. Human lung diploid fibroblasts served as noncancerous control cells. The presence of ozone at 0.3 to 0.5 part per million inhibited cancer cell growth 40 and 60 percent, respectively. The noncancerous lung cells were unaffected at these levels. Exposure to ozone at 0.8 part per million inhibited cancer cell growth more than 90 percent and control cell growth less than 50 percent. Evidently, the mechanisms for defense against ozone damage are impaired in human cancer cells.

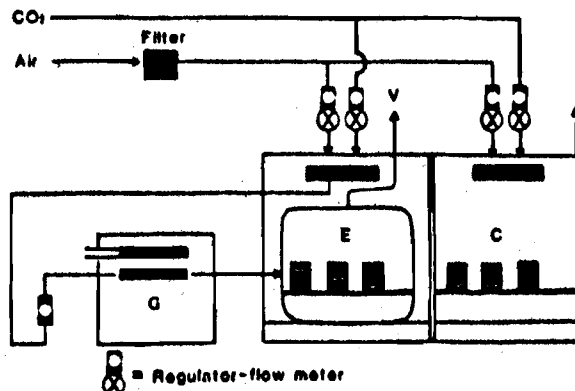
The effects of ozone on human health have been a focus of public concern and scientific investigation for more than two decades (1-4). Considerable attention has been devoted to assessing its cellular effects (5) because it is the major constituent of the ground-level oxidants in polluted air. Much has been learned about the effects of ozone on normal tissues, but little is known about its action on cancer cells. We have conducted experiments in which continuous exposure to ozone at 0.3 ppm (6) selectively inhibited the growth of human cancer cells 40 percent in 8 days.

Controlled levels of ozone (0.3 to 0.8 ppm) were continuously generated by ultraviolet irradiation of filtered ambient air. The ozonated air, containing 5 percent carbon dioxide, was introduced at a constant flow rate of 4.0 liter/min into an environmental chamber in an incubator maintained at 37°C (Fig. 1). The ozone levels were assayed daily with a spectrophotometric ozone analyzer. For comparison, noncancerous human lung diploid fibroblasts (7) were cultured in the chamber along with the cancer cells. The cancer cells were from alveolar (lung) adenocarcinomas (8), breast adenocarcinomas (9), uterine carcinosarcomas, and endometrial carcinomas (10). All the cells were grown in 60-mm petri dishes

in 10 ml of medium and were placed in the chamber at the same time. Control cells were incubated in an adjoining compartment receiving filtered ambient air containing 5 percent carbon dioxide (4.0 liter/min). Three petri dishes for each cell type were removed from each of the two compartments every 48 hours for 8 days, and the number of cells per plate were counted. All of the cancer cells showed marked dose-dependent growth inhibition in ozone at 0.3 and 0.5 ppm (Fig. 2). There was no growth inhibition of the noncancerous lung cells at these ozone levels, and they were morphologically identical to the corresponding control cells. At 0.8 ppm, the growth of the noncancerous cells was inhibited 50 percent, but all four types of cancer cells were inhibited more than 90 percent.

After being cultured through 14 passages, the noncancerous cells exhibited measurable growth inhibition and morphological changes (vacuolation) in ozone at 0.5 ppm, suggesting that aging increases the sensitivity of normal lung cells to ozone (Fig. 3). In cultured human diploid fibroblasts, morphological changes and a gradual decrease in rate of growth have been attributed to a buildup of cellular damage with each successive division (11, 12). Ozone may accelerate processes similar to those naturally

Fig. 1. Schematic diagram (not to scale) of the system used for culturing human cells in ozonated ambient air. Filtered ambient air was mixed with carbon dioxide (5 percent) and introduced into a dual chamber incubator (National 3331). Half was conducted through a calibrated ozone generator (G) consisting of a quartz glass tube irradiated with ultraviolet light and then into a hermetically sealed (20 by 20 by 20 cm) glass and stainless steel environmental chamber (E) containing a gasketed access door. Output of ozone from the generator varied less than 1 percent per day. The ozone content of the vented air (V) from the chamber was measured daily with a spectrophotometric ozone analyzer (Dasibi 1003-AH). Malignant and normal human cells were incubated in chamber E saturated with water vapor. Corresponding cells serving as controls were incubated in the adjoining compartment (C), also saturated with water vapor.



causing cellular damage and may decrease the growth rate of the aging fibroblast colony. However, in ozone at 0.5 ppm, all of the human cancer cells (which do not age) had growth rates several times lower than that of the aged, noncancerous cells (Fig. 2).

Evidently, cancer cells are less able to compensate for the oxidative burden of ozone than normal cells. The marked sensitivity of cancer cells to ozone raises questions about the possible mechanisms of oxidative inhibition of their growth. Virtually every major com-

ponent of normal cells has been found to be affected by elevated ozone levels (5). However, glutathione in its reduced form (GSH) has been credited with providing the first line of defense against the peroxides and free radicals generated in all cells by ozone and oxygen (1, 13-15). It deactivates peroxides and radicals by donating one hydrogen atom to the reactive species. Loss of a GSH hydrogen (oxidation) results in formation of oxidized glutathione (GS-SG). The cellular respiratory system is responsible for reducing GS-SG to GSH. The GSH-linked respiratory system in normal and cancer cells, before and after exposure to ozone, must be examined to learn whether a functional impairment of this system is associated with the marked sensitivity of cancer cells to the oxidant.

These findings lead us to believe that ozone—alone, in combination with radiation therapy (16), or in chemotherapy utilizing electrophilic compounds (17)—may have therapeutic value for patients with certain forms of lung cancer.

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7. These cells (IMR-90) were obtained from Human Aging Cell Repository and plated 48 hours after shipping. This cell type was characterized by W. W. Nichols, D. G. Murphy, V. J. Cristofalo, L. H. Toji, A. E. Greene, and S. A. Dwight [*Science* 196, 60 (1977)].

Fig. 2. Inhibition by ozone of growth of malignant and non-malignant cells in culture on day 8. Each of the cell types were grown in 10 ml of Dulbecco's modified Eagle's minimum essential medium containing 10 percent calf serum. In a typical experiment, 12 dishes per cell line (usually three or four cell lines were tested per experiment) were loaded into the environmental chamber with an equal number of control dishes in the adjoining compartment (Fig. 1). The initial population was 3×10^5 cells per dish. Every 48 hours three dishes for each cell type were removed from both compartments and the cells were tested for viability with 0.4 percent trypan blue and counted with a hemocytometer. Each data point represents the number of experimental cells divided by the number of corresponding control cells per dish multiplied by 100 (the percentage of control growth) and is plotted against the measured level of ozone in the environmental chamber. The percentage of growth inhibition is calculated by subtracting the percentage of growth from 100. The data are from cell counting on day 8 of incubation. There is a nearly linear relation between inhibition of the growth of the cancer cells and increasing ozone levels. The noncancerous cell line IMR-90 (Δ) began to display measurable growth inhibition only when ozone levels exceeded 0.5 ppm, a level that produced approximately 60 percent inhibition in all of the cancer cell lines tested [Δ , alveolar adenocarcinoma (A-549); \circ , breast adenocarcinoma (MCF-7); \square , uterine carcinosarcoma (10); \otimes , endometrial adenocarcinoma (10)]. There was some growth inhibition in noncancerous cells aged through 14 passages (\bullet). The mean populations of the cells serving as controls were as follows (per dish on day 8): IMR-90, 34.8×10^5 ; A-549, 36.5×10^5 ; MCF-7, 57.0×10^5 ; endometrial adenocarcinoma, 64.2×10^5 ; myometrial carcinosarcoma, 121.1×10^5 .

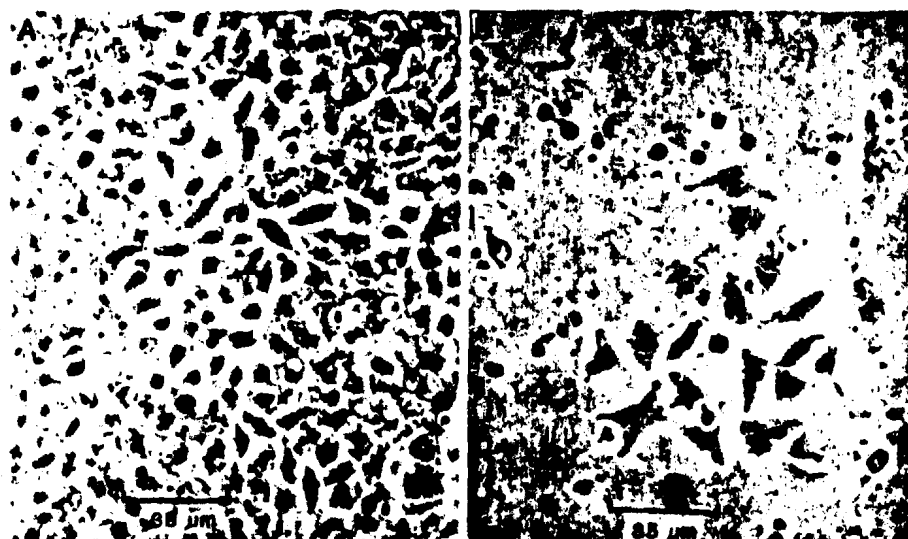
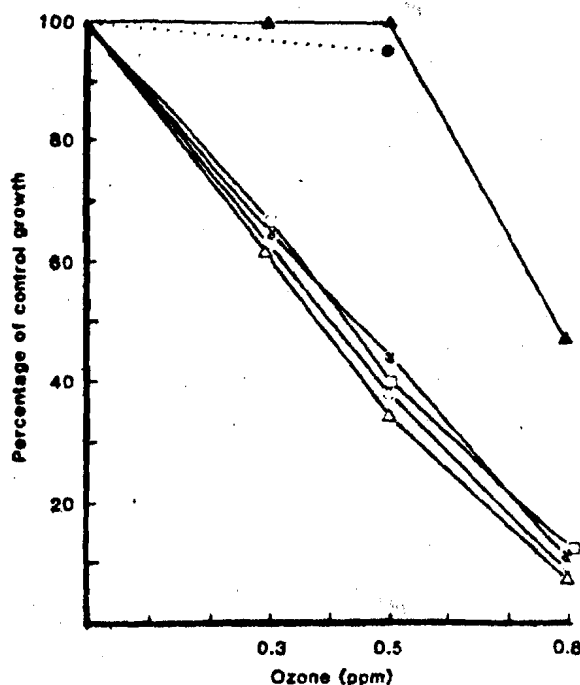


Fig. 3. Photomicrographs ($\times 100$) showing growth inhibition and morphological changes in lung alveolar adenocarcinoma cells after 8 days of incubation in ozone at 0.5 ppm. (A) Control A-549 cells. (B) Ozone-treated A-549 cells showing vacuole formation, a typical morphological change associated with growth inhibition.

BLOOD

Inactivation of Human Immunodeficiency Virus Type 1 by Ozone In Vitro

By Keith H. Wells, Joseph Latino, Jerrie Gavalchin, and Bernard J. Poiesz

A device was designed to deliver a constant source of given concentrations of ozone to fluids containing human immunodeficiency virus type 1 (HIV-1). Ozone was found to inactivate HIV-1 virions in a dose-dependent manner. Greater than 11 log inactivation was achieved within 2 hours at a concentration of 1,200 ppm ozone. Similar concentrations of ozone had minimal effect on factor VIII activity in both plasma and immunoaffinity-purified preparations of factor VIII treated

for the same time period. The data indicate that the antiviral effects of ozone include viral particle disruption, reverse transcriptase inactivation, and/or a perturbation of the ability of the virus to bind to its receptor on target cells. Ozone treatment offers promise as a means to inactivate human retroviruses in human body fluids and blood product preparations.

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HUMAN immunodeficiency virus type 1 (HIV-1), the etiologic agent of acquired immunodeficiency syndrome (AIDS), is a lentivirus that completes its replicative cycle by budding through the host cell membrane, acquiring host-derived and virus-encoded components in the process. Subsequent rounds of replication require an intact lipid envelope containing the virally encoded envelope proteins necessary for receptor binding.¹ It has been suggested that perturbation of the HIV-1 envelope may be a suitable approach to inactivating HIV-1.² Compounds that fluidize membranes by removing cholesterol (AL721)³ or by complexing membrane cholesterol (amphotericin B methyl ester)⁴ can inhibit HIV-1 replication in vitro. Although their precise mode of action has yet to be defined, these compounds may reduce HIV-1 infectivity by perturbing the envelope of HIV-1. We therefore investigated the activity of another membrane active agent, ozone, on HIV-1 infectivity in vitro.

Ozone, the triatomic allotrope of oxygen, is an extremely potent oxidant that has been shown to possess broad spectrum antimicrobial activity.⁵⁻⁸ It has been widely used in sewage treatment, in water purification, and in medicine.^{9,10} In particular, ozone has been shown to be effective against a number of enveloped and nonenveloped viral species, with enveloped viruses being more susceptible to ozone inactivation than those lacking lipid envelopes.^{5,11,12} We report on the in vitro inactivation of HIV-1 in cell culture media and deliberately infected factor VIII preparations at concentrations of ozone that are not toxic to target cells, while maintaining the biologic activity of factor VIII. We also investigated the mechanism by which ozone mediates its antiviral effect.

Ozone has previously been shown to possess potent antiviral activity, especially when used against lipid-enveloped viruses. For this reason we investigated the use of ozone as a potential anti-HIV-1 agent. We used a hollow fiber delivery system that maximizes the surface area available for ozone to interact with the fluid material of interest. The system also allows for the precise regulation of concentrations of ozone to be delivered into the hollow fiber cartridge. Afferent as well as efferent concentrations of ozone can also be monitored to determine if saturating levels of ozone are achieved in the treated material. With regard to laboratory safety concerns, this closed system has proven to be safe and leak-proof, thereby reducing possible exposure of laboratory personnel to ozone and human retroviruses to an absolute minimum.

We first examined the ability of ozone to inactivate cell-free HIV-1 in cell-free CM. These results indicate that ozone has potent anti-HIV-1 activity. Preliminary experiments using an escalating dose regimen indicated that a 1,200 ppm dose of ozone achieved a ≥ 2 log inactivation of virus. The data show that neither incubation of the virus preparation at room temperature and at atmospheric conditions for the duration of the experiment nor mechanical shear created by pumping the virus through the system inactivate the virus to any great extent. However, there was a significant inactivation of the virus due to exposure of virus-containing CM to the stream of carrier nitrogen. Exposure of the virus to pure nitrogen for 6 hours results in an almost 85% inactivation of virus.

The International Association for Oxygen Therapy



Information Bulletin Number One

Ozone: Its Therapeutic Action

Ozone (O_3 or O_2O) is an allotropic form of oxygen. It is oxygen in its most active state, and therefore means a more generous supply of oxygen, the life giver and life sustainer.

Through the action of flashes of lightning, nature produces **Ozone** which purifies the air and destroys organic decay upon which disease germs and bacteria thrive. Like oxygen, **Ozone** is a healthful gas. It has, however, a much greater oxidizing, antiseptic and germicidal power. For this reason it is being used with great success for the relief of various diseases. Recently, the FDA and other such suppressive organizations have been trying to malign the beneficial and life sustaining qualities of **Ozone** by telling the public that **Ozone** is poisonous and detrimental to the body. This is not so! For years physicians around the world have used **Ozone** for bringing palliative and curative results to many, many individuals. Famous physicians like Dr. Nikola Tesla (the father of Alternating Current), Dr. F.M. Eugene Blass and many others worldwide have realized the importance of this tremendous gas. **Ozone** is one of the most energetic and useful agents known to science. Its therapeutic action is due to oxygenation of the blood by the loose atom (free radical) of oxygen in the O_3 molecule. It is carried to the various organs and tissues of the body and absorbed, thus oxidizing waste products and facilitating their elimination. In other words, **Ozone** increases the metabolism without the expenditure of vital energy, and special emphasis should be laid on the fact that **Ozone** is a **NATURAL REMEDY**.

DETOXIFICATION AND THE LOW TEMPERATURE

In the process of respiration, waste products are exposed to the action of oxygen in the air and they are burned up very much as if they were put into a stove, thereby producing body heat. In the living body, heat is continually being generated through the chemical action of carbon and oxygen. When the blood receives sufficient oxygen to unite with carbon in the proportion of two atoms of oxygen to one of carbon, carbon dioxide or carbonic acid gas (CO_2) is formed, and being in a suitable state, is eliminated. The process of oxidation is complete. The body temperature is maintained at normal (98.6 F). The organs perform their functions properly and the system is in condition to resist the toxic influences of microbes, environment and mankind's excesses. When, however, an insufficient amount of oxygen is received by the blood, carbon monoxide (CO) is formed. This is **NOT** readily eliminated and, through its poisonous influences, trouble begins. Carbon monoxide is a Deoxidizer. It acts as an irritant to organs; the body temperature falls below normal and the system is incapable of resisting the toxic influences of the various bacteria, environmental and industrial toxins, and **DISEASE** is the result.

So prevalent is subnormal temperature among people today that nine out of ten will show a subnormal temperature by actual thermometer testing. There have been several reasons given for the subnormal temperatures in recent years. They range from "thyroid insufficiency" to "hypothalamus disorders". These explanations are correct but only to a degree, as the **ROOT CAUSE** of the problem is inadequate oxidation/oxygen assimilation. Therefore the thyroid, hypothalamus or other endocrine glands (given as the cause) are hindered in their normal metabolic function and the subnormal temperature is the result. The correct way to counteract this situation is to restore the oxidative process.

SUBOXIDATION: THE OXIDATION TEST AND IT'S MEANING

The clinical thermometer is the best means of determining the existence of under-oxidation and should be used routinely. The temperature of one who is under-oxidized will be found to run from a fraction of a degree to several degrees below normal. The under-oxidized, subnormal-temperature person will present one or more of the following symptoms: headache, dizziness, insomnia, constipation, faint-feeling, loss of appetite, palpitation of the heart, poor kidney action, menstrual problems, cold hands and feet, etc. All are due to an impoverished blood supply. From these symptoms we are justified in rendering an explanation of under-oxidation taking on the definitive forms of neurasthenia, liver disorders, kidney disorders, stomach and intestinal woes, sexual malfunctions, melancholia, hysteria, chorea, anemia, chlorosis and so on. The symptoms or conditions that arise from a subnormal temperature are not necessarily in proportion to the degree of subnormal temperature. A person off a fractional part of one degree may present as severe a problem as a person several degrees below normal.

A sufficiency of an active form of oxygen for the blood means better blood, thus better circulation, better assimilation, better equilibrium of body homeostasis (i.e. temperature), better vasomotor activity, better digestion, better elimination of waste products and less chance of auto-intoxication or toxemia, the keynote of all disease! Simply put, with sufficient available oxygen there is greater bodybuilding of natural substances and less distraction into infection and disease.

After careful analytical investigation of dis-ease, it has been repeatedly demonstrated:

First: One of the most common and important conditions that the person is called upon to correct is the weakness and incapacity produced by an impoverished or diminished blood supply.

Second: De-oxidation produces ill health primarily because of an insufficient supply of oxygen that makes certain the formation of carbon monoxide, the DE-oxidizer and hemoglobin destroyer and an irritant poison devitalizing the blood and paving the way to a multiplicity of acute and chronic troubles. It has long been recognized that the atmosphere possesses the properties of mood-building, oxidation and antiseptics. Ozone differs from atmospheric oxygen only in degree of activity and potency. Ozone's greater activity makes it the greatest blood-building, oxidizing and antiseptic agent available.

It has been suggested that a subnormal temperature may be a normal condition with some people. This deduction can be disproved by placing anyone with a subnormal temperature under the active influence of Ozone: rises back to Normal!

Almost all forms of nervous, functional, respiratory and blood disorders can be successfully corrected by oxidative restoration. The effects are perfectly NATURAL; the person being left calm, toned and with a feeling of buoyancy and exhilaration. Oxidative restoration stimulates the vasomotor system through the nerve centers, which fact is clearly shown by increases in the redness of skin, a feeling of warmth to the whole body and waste products are more freely and easily eliminated. Ozone treatment shows that poor oxidation is the cause of many disorders by reason of the fact that when the temperature is brought back to normal the problems disappear.

Oxidation is the source of life!
It's lack causes impaired health or dis-ease!
It's cessationDEATH!!!

THE INTERNATIONAL ASSOCIATION FOR OXYGEN THERAPY



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The International Association for Oxygen Therapy



Information Bulletin Number Two

DO YOU WANT TO GET WELL ?

If so, you must assist your body to become normal again. It must regain its correct composition of vital fluids and every organ must resume its proper activity. Also such condition must be maintained if you are to enjoy the good health which is rightfully yours!

HOW CAN ONE DO THIS?

It is not really difficult and is essentially up to you. If you are to take the necessary steps, then you will have to learn what must be done and DO IT RIGHT! A complete rejuvenation of the body is necessary consisting of a purification of the entire system inside as well as out: This includes every cell and organ. To do this your blood stream must be made healthy, thus mineral-and-oxygen-rich. Also, it must circulate freely and unobstructed throughout your body.

STEPS THAT CAN BE SUGGESTED!

* 1. Free the body's fluid circulation through natural means. Free the vital organs of all obstructions which hinder their normal activity. See **Bulletin #3** re: use of **Sanozon**.

* 2. Provide your blood stream with needed additional oxygen by the use of **Homozon**, **Magozone** or **Macalozone** via mouth. These products enable the blood to become oxygen-rich and thus gradually the bodily wet oxidation maintenance process can be brought to normal as individual condition allows. The more of the products that you use daily, the quicker your health will improve. In order to obtain the best rapid results, it is recommended that you take, for the first five days of the purification process, 1 teaspoon of **Homozon**, **Magozone**, or **Macalozone** every four hours. In other words, 5 teaspoonfuls within the period of a 16-hour day. After the 5th day, it is well to increase the daily dosage by 1 teaspoonful, i.e., take 6 teaspoonfuls on the 6th day, 7 on the 7th, and so on until the purification process is completed.

NOTE*After each dose take the juice of up to 1/2 lemon, or its equivalent in citric acid, diluted in 4 or 5 ounces of water.**

* 3. In addition to the above 1 and 2, highly suggested is to live several weeks on a liquid diet of freshly made juices of TREE-RIPENED citrus fruits. Organic produce (that is grown without the use of noxious chemicals) is best. Grapefruit juice is preferable, though orange juice mixed with grapefruit juice, lemon or lime juice is suitable. Juice mixtures which include lemon or lime may be diluted with water. This will satisfy both hunger and thirst. These juices should be sucked slowly through a straw, fine tube or nipple, not only as a food and thirst quencher but also as solvents to help to activate the glands and total system. No other foods should be taken.

THE WHOLE PURPOSE OF OXYGEN-THERAPY-BLASS AND OXYGEN THERAPIES IN GENERAL IS TO ASSIST IN FULFILLING THE DICTATES OF OTTO WARBURG WHO SAID TO FLOOD THE BODY WITH OXYGEN !!

THERE IS SO MUCH MISINFORMATION ON THE MARKET TODAY THAT THE UNKNOWING, HEARING OF THE REMARKABLE RESULTS OF OXYGEN, MAY ACTUALLY POUR IN MORE TOXINS IN THEIR ATTEMPT TO FLOOD THEIR BODY WITH OXYGEN"

* 4. At intervals of 15 to 20 minutes or so, take your proportionate amount of a duly ration of 3 to 4 teaspoon-fuls of Cell Salts (Minerals for the Blood), if a powder. If tablets, take 4 to 8 tablets every 20 or so minutes for a 12 to 16 hour period. This is also found in the **Q-Ozone** compound, taken 4 to 8 times daily. This is continued until the blood is fully remineralized. Often a once-daily multi-mineral is suggested. One should be able to obtain such minerals from the food and water consumed, but unfortunately most present-day food and drinking water supplies are very polluted and deficient.

* 5. It is of primary importance to keep all of the organs free and devoid of any clogging or back-up. If there is any build-up or clogging, this must immediately be eliminated. This includes the alimentary, urinary, circulatory, respiratory, nervous and endocrine systems and the skin (pores, etc.). Through this purification process the body naturally throws off accumulated waste matter and the poisonous material which makes up the soil for dis-ease and systemic unhealthy. One must be on the alert to see that such soil does not occur to interfere with the positive, life-maintaining functions of the body.

* 6. Depending on the individual conditions, the use of Full-Baths, Sitz-Baths, Colon-Baths, and Washes for special parts of the body will be found to be of major importance to achieve quick results. For all such Baths, Sanozon is used.

* 7. Do not eat any foods that do not react beneficially. This is to be judged individually with the guidance of a good, naturally-oriented physician, nutritionist or therapist. Often even good and generally beneficial foods can react disharmoniously within your system.

Above all, do not eat detrimental, devitalized, processed, nutritionless foods, i.e., those containing white flour, sugar, and other chemicalized "goodies"

At any one meal, and this applies for shortly before and after, eat only such foods which react harmoniously with each other, so as to avoid undesirable fermentation with its destructive effects within the alimentary tract.

YOU ARE THE ONE WHO CONTROLS THE HEALTH OF YOUR BODY!!!

If you will follow the above simple, basic rules daily, you can expect not only to regain good health as far as your bodily condition allows, but also to maintain the same good health. If you are wishing to regain or retain optimal health, follow the simple rules.

It is requested that you take the time to jot us a little note in regards to your benefits received from **Oxygen-Therapy-Blass** so we may keep an up-to-date file of clientele's oxidation activities and success.

Oxidation is the source of life!
It's lack causes impaired health or dis-ease!
It's cessationDEATH!!!

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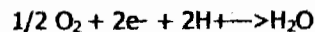
Information Bulletin Number Eight

Free Radicals and Their Relationship to Complex Oxidative Compounds

G. A. Freibott, ND, MD(H), JD.
International Association for Oxygen Therapy
Priest River, ID 83856 USA.

"Singlet oxygen is an especially reactive form of oxygen capable of rapidly oxidizing many molecules, including membrane lipids. Its formation in O₂-generating systems has often been proposed but clear-cut evidence for a damaging role of singlet oxygen in such systems has **NOT** been obtained."¹ (Emphasis added)

"As to atmospheric oxygen, which is obviously essential to all aerobic organisms, including ourselves, its role is to pick up the electrons released by the oxidative reactions:



The end result is the same as in ordinary combustion."²

Today one hears of the popular **theory** of the "detrimental free radical."

Definition of the word **theory**: "A plan or scheme existing in the mind only; a **speculative or conjectural view of something**"³

At the Institute and in conjunction with the Benedict Lust School of Naturopathy we work with Natural Science – fact as evident around us in NATURE, not theory or speculative conjecture.

There have been many contrary views of "free radical" therapists, scientists and clinicians presented in the previous years, but no NATURAL therapeutic study is more grounded in scientific truth than the "oxidative" modalities (now termed, "oxygen therapies").

From 1898 to the present, thousands of clinical cases prove the efficacy of oxidative therapies. A slide presentation and voluminous amounts of archival data from the Institute illustrates.

The commonly accepted electron theory has been used to explain everything from the Periodic Table to advanced biology. In the fields of mathematics and physics this can be an asset, but in natural sciences and chemistry this often creates seeming "double standards." Elaboration.

Continuing the work of the Institut für Sauerstoff-Heilverfahren of Berlin, our laboratories have experimented with and supervised the manufacture of various complex oxidative compounds. These compounds range from FCG (Functional Carbonyl Group) catalysts and glyoxylate cycle enhancers to more simple, yet still highly oxygen-contributing substances. All of these have been shown to enhance homeostasis.

The evidence that a toxin increases lipid peroxidation in vivo does not prove the sequence of events:

TOXIN—>lipid peroxidation—>DAMAGE

but is **equally** explained by the sequence:

TOXIN—>CELL DAMAGE OR DEATH—>LIPID PEROXIDATION.⁴

Every compound excreted by the body is in one form or another bound to oxygen for elimination. The major elements excreted are **Hydrogen, Carbon, Nitrogen and Sulphur**. Thousands of pieces of historical literature have dwelt on the subject of **Hydrogen Peroxide** and its significance. Yet little has been written or discussed about the other unfamiliar higher oxidation state compounds of the **peroxides, superoxides and ozonides**.

Interest in the alkali and alkaline earth metal derivatives is now widespread and diverse, and numerous practical applications have evolved, ranging from their use as air revitalization materials in space cabins to their use in compounding semiconductor materials.⁵

There exists voluminous amounts of contrary scientific information, the author has engaged many participants in roundtable discussions regarding alternative "theoretical" speculations. Supporting evidence cited above and below in the bibliography regarding scientific "fact" and "theorem" are presented.

The constant concentration of O₂ in the atmosphere is maintained by the photosynthesis-respiration cycle....Oxygen occurring in nature is a mixture of three stable isotopes: O₁₆, O₁₇ and O₁₈. This discovery revealed a discrepancy in the accepted chemical scale of atomic weights which was based on the atomic weight of O₁₆ (16 amu).⁶

We sincerely hope this paper references you to the factual scientific sources you desire and assists you in your understanding and comprehension about the fascinating field of "oxygen therapies"!

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- 1) B. Halliwell, **Oxygen Radicals: A Commonsense Look at Their Nature and Medical Importance**, Medical Biology, 62: 72, 1984.
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- 3) Funk and Wagnalls, **Standard Desk Dictionary**, p.701, 1986.
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- 5) Il'ya Ivanovich Vol'nov, **Peroxides, Superoxides, and Ozonides of Alkali and Alkaline Earth Metals**, Academy of Sciences of the USSR, Moscow, p.v, 1966.
- 6) Michael Ardon, **Oxygen (Elementary Forms and Hydrogen Peroxide)**, W. A. Benjamin, p.3, 1965.

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**The
SURVIVAL FACTOR
in
NEOPLASTIC AND VIRAL
DISEASES**

*An Introduction to
Carbonyl and Free Radical Therapy*

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*A Study of the Phenomena of the Free Radical, the Double Bond,
and its Alpha Placed Hydrogen Atom in the Pathogenesis and
Correction of Neoplastic, Viral and Bacterial Diseases*

By

WILLIAM FREDERICK KOCH, Ph.D., M.D.

Detroit, Michigan, U.S.A.

Rio de Janeiro, Brazil

Instructor, Histology and Embryology, University of Michigan, 1910-1914
Professor, Physiology, Detroit College of Medicine (Wayne State University), 1914-1919
Pathologist, Woman's Hospital, Detroit, Active and Honorary, 1915-1919
Director Koch Cancer Clinic, 1919-1949

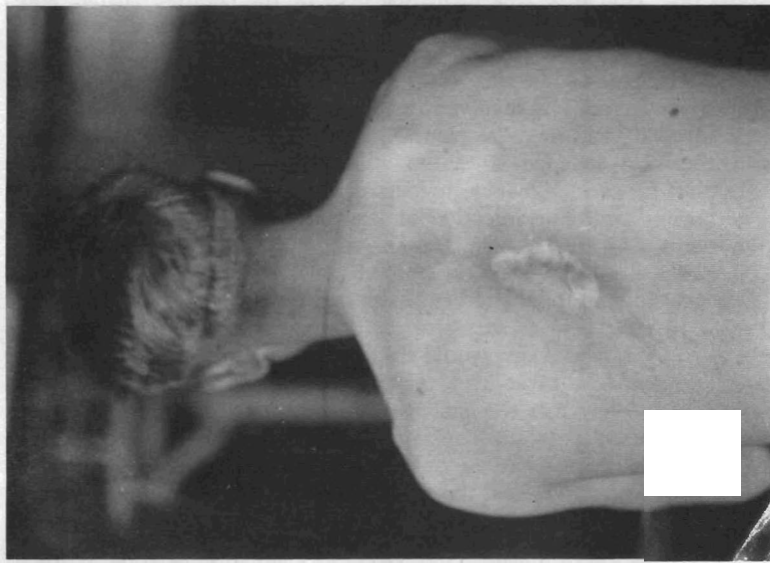
NAME OF SICKNESS	Number of cases	Age of patients	Average weeks between reactions	Time required for cure	% of cures	Years since cured
Allergies nasal	282	1-70 yrs.	9	18 w.	82	6
Acute Tonsillitis	61	2m-54 yrs.	0	3 d.	100	4
Chronic Tonsillitis	20	2-84 yrs.	3	6 w.	80	3
Vincent's Angina	35	2-57 yrs.	0	6 d.	89	4
Arthritis Deformans	16	22-57 yrs.	9	36 w.	50	5
Arthritis Hypertrophic	144	24-82 yrs.	9	27 w.	82	4
Gonorrhea	15	22-55 yrs.	0	3 w.	100	3
Bronchitis acute	64	2m-56 yrs.	0	2 d.	94	4
Bronchitis asthmatic	460	1-69 yrs.	9	27 w.	80	6
Bronchitis chronic	35	3-67 yrs.	3	18 w.	80	4
Brucellosis	35	29-58 yrs.	9	18 w.	93	3
Coccidioidomycosis	70	7-63 yrs.	0	3 w.	95	3
Cholecystitis	44	26-58 yrs.	3	18 w.	84	2
Coryza acute	100	6m-74 yrs.	0	2 d.	100	5
Eczema	120	1-68 yrs.	9	27 w.	80	6
Rheumatic Fever	20	4-11 yrs.	3	6 w.	100	3
Gout	10	30-55 yrs.	0	12 w.	90	6
Influenza	51	8-65 yrs.	0	8 d.	100	3
Nephritis acute	22	6-66 yrs.	3	6 w.	90	3
Nephritis Chronic	20	22-68 yrs.	6	18 w.	85	3
Neuritis	67	17-84 yrs.	0	3 w.	85	4
Pneumonia	22	1-69 yrs.	0	6 d.	82	3
Poliomyelitis acute	10	3-16 yrs.	0	3 d.	100	4
Poliomyelitis chronic	2	23-33 yrs.	9	18 m.	100	3
Syphilis chronic	10	24-47 yrs.	9	36 w.	80	4
Sinusitis acute	38	12-63 yrs.	0	3 d.	92	3
Sinusitis Chronic	27	2-66 yrs.	3	18 w.	78	3
Urticaria	75	1-72 yrs.	9	18 w.	88	4
Combined total of measles, whooping cough, mumps and scarlet fever	66	6m-36 yrs.	0	3 d.	100	3



Miss N. after complete recovery.



Miss N. after the growth started undergoing digestion after the carbonyl catalysts were given, and before crude removal was done.



Mr. L. after complete recovery.



Mr. L. after treatment when the growths were undergoing digestion just before crude removal.

understanding of the pathogenesis and what food diet means, is the best assurance of maintaining health after recovery.

There are some forms of primary cancer of the liver that are grossly pathognomonic. In such cases the expert surgeon can make a firm diagnosis without the biopsy, and he does so to protect his patient from embolism and hemorrhage incident thereto. This is not a matter of neglect, but of good judgment, and usually practiced. The type of greatest interest is that of diffuse distribution of miriads of small lesions over the surface and between the somewhat larger nodules that press up from underneath. The "feel" is also characteristic. In such cases there is deep jaundice because the smaller bile ducts are compressed or blocked by tumor tissue. The biopsy is characteristic also so that one can tell what the microscopic picture is from the gross features. In the diffuse type the small surface nodules are much of the same size as if originating simultaneously, and thus speaking for a multiple origin of the carcinosis, a generalized equal distribution of the pathogen. As these nodules are smaller than many inside the liver, it is evident that the inner ones had an earlier start. Likewise, often, one lobe of the liver is more affected, especially the right lobe. Thus, in the beginning of the disease, the amount of pathogen is not so great that it makes an attack throughout all at one time. It is used up in one locality. However, at the terminal stage the miriads of small nodules equally and independently distributed speak for a swamping of the system with the carcinogen as if there were more toxin present than liver cells to combine with. Such a case will be described, and also a baby with a massive primary cancer of the liver proven by biopsy. This case is well described in the mother's affidavit from which several points are reproduced. The series of photographs are also instructive. This information was sent us by Dr. M---, our collaborator, who had charge of the case, with his notes. This patient was not seen by the writer:

PRIMARY CANCER OF THE LIVER

CASE No. 14

Judy McW., three months old. "After a normal birth, Judy, before the age of six weeks, showed signs of illness. Her abdomen was enlarged, she was restless, and her face did not show the repose of a healthy baby. Her physician . . . could not find anything wrong with her until his check-up and examination at the end of her eighth week. At that time the doctor found her abdomen hard and much distended. During the period from August 20, 1948, to August 27, 1948, a tentative diagnosis of cancer was made and X-rays were given although the X-ray technician stated it was hopeless to expect a recovery."

"By the time Judy was three months old the attending physician and another surgeon made an exploratory operation on Judy's abdomen at which time a biopsy was taken. The physicians reported to us that the biopsy showed a high degree of malignancy which involved 85% of the child's liver. They told

us that there was nothing that could be done to save Judy's life; that we should take her home and make her as comfortable as possible for the few days she could live."

"Her life expectancy was placed at 21 days. We were told not to remove the bandage from her abdomen lest the stitches burst out. It was the doctor's opinion that the incision in her abdomen would not heal."

"Dr. Koch's therapy was given by Dr. N. T. M-----, of Cisco, Texas. The dose was injected into Judy's hip on September 18, 1948. At this time and during the course of Judy's recovery, Mr. N----- took a series of color pictures showing her progress. Previously he had taken two pictures at six weeks of age and before the diagnosis of cancer. The series of pictures gives a good idea of her case.

"At the time the injection was given, Judy's abdomen was so much enlarged that she could hardly breathe due to upward pressure on her lungs. The circulation on the surface had greatly increased and she had a bluish cast from a diffusion of blood in and just under the skin. Veins under the skin of the abdomen were plainly visible. The abdomen was very firm, even hard. At the time the Koch's treatment was given, Dr. M----- expressed no hope of securing a recovery as he thought the case was too far advanced.

"Within ten days after the treatment Judy showed definite reactions which raised our hopes. Shortly, she began to pass large quantities of mucous with bowel movements. She also passed a large amount of water in the normal manner, sometimes requiring as many as twenty diaper changes per day. No medication was used after the injection of the Koch treatment, and only minor changes were made in the baby's diet. Apple juice was substituted for orange juice, and Judy liked it. After treatment was given and until recovery was practically complete, only one doctor saw Judy. That was a doctor residing at Azle, Texas, who removed the stitches from the healed incision about the middle of October, 1948.

"Soon Judy began to gain weight and her abdomen rapidly reduced in size and became more soft and pliant so that she could breathe better. The hard growth receded toward the lower right side. By December 25, 1948, she had a healthy and normal appearance as the pictures mentioned before show, but some traces of the growth remained.

"Later, about May 12, 1949, I had her examined by a doctor in Paris, Texas. He could find nothing, after which he was told of the baby's former illness and he could still find no trouble.

"On November 11, 1949, Judy and her mother appeared before a group of physicians and surgeons especially interested in cancer who met at the Blackstone Hotel in Fort Worth, Texas. While before this group, more than one doctor examined Judy and nothing was found wrong with her.

"On February 18, 1950, both parents and Judy attended a meeting of physicians at Tampa, Florida. Here Judy was again shown to the group of

doctors. These were most friendly to the Koch treatment. Judy is now past two years old. She has shown a normal growth and development, normal mental development, and absolutely no abnormalities that we are aware of. She is very active, mischievous, and friendly. She has had practically no illness after taking the Koch treatment and recovering from cancer." These statements by Judy's parents are signed and notarized.

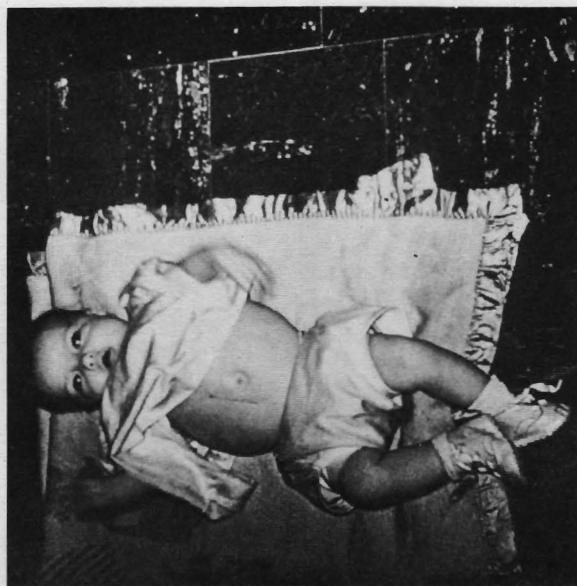
Dr. M---- sent a more technical account which adds nothing to the facts given by the mother. This mother's report should be studied. The observations are well made, and any physician who is experienced, can get a great deal of information out of them. The steady progress of the pretreatment period is plainly established. The manner of absorption of the neoplasm shows it was not of the diffuse type as the next case demonstrates, but was a massive cancer starting in the right lobe of the liver, and of very high (grade IV) malignancy no doubt. The block in the portal circulation was not due to destruction of the vein, but to simple pressure, and the quick relief had, shows also in the better bowel and kidney action as the massive growth underwent absorption. This case should be compared with Case No. 15 which begins on page 101.



No. I, Taken before the injection,
September 18, 1948.



No. II, Taken at the time of the treatment,
September 18, 1948.



No. III, Taken several weeks after treatment.



No. V, Six months after treatment.



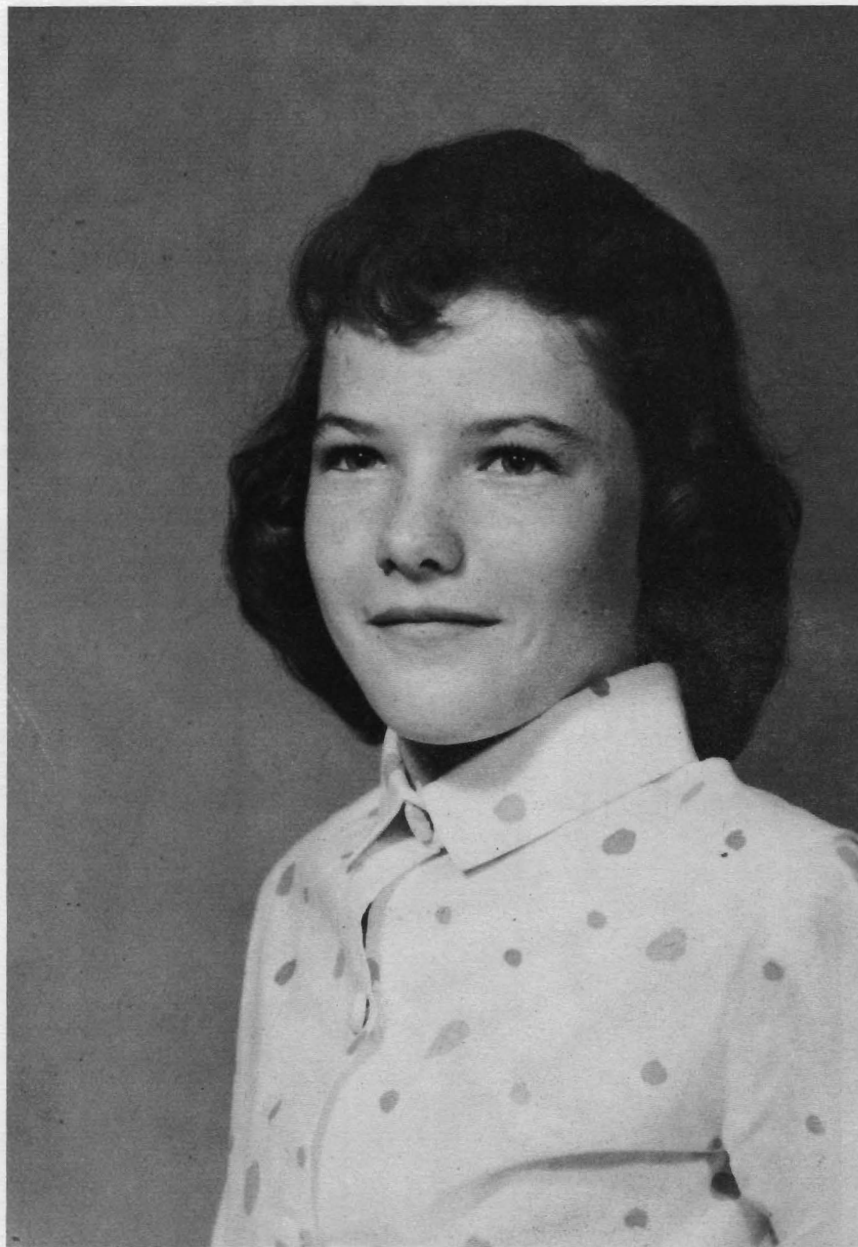
No. IV, Taken a few weeks later.



No. VI, Taken a year later.



No. VII, Taken a few years later.



No. VIII, Taken September 1960,
twelve years after treatment.



United States
of America

Congressional Record

PROCEEDINGS AND DEBATES OF THE 80th CONGRESS, SECOND SESSION

The Koch Treatment

EXTENSION OF REMARKS

OF

HON. WILLIAM LANGER

OF NORTH DAKOTA

IN THE SENATE OF THE UNITED STATES

Monday, June 7, 1948

Mr. President, I hold in my hand an article which appears in the current issue of a Lutheran magazine called the Eleventh Hour, published by the Lutheran Research Society of Detroit, Mich. This article bears the title "The Koch Treatment."

It describes the science developed by Dr. William Frederick Koch, of Detroit, Mich., for the treatment of prevailing diseases to which our twentieth-century civilization is heir.

I have personally watched the progress of this system of treatment over a period of years. I feel that it is deserving of the attention of everyone who is interested in the health of the American people.

I therefore ask unanimous consent to have this illuminating document printed in the RECORD at this point as a part of my remarks.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

THE KOCH TREATMENT

Fortunately for Canadian farmers in the Province of British Columbia, the Minister of the Department of Agriculture possessed an open mind.

This fact is saving cattle raisers into the millions of dollars annually. It is assuring them of better cows, steers, and beef than previously known.

Such ailments as Bang's disease, Johne's disease, and other fatal diseases that customarily make devastating demands upon dairy herds, are no longer fatal in British Columbia. Thanks to the integrity and foresight of Canadian physicians, veterinarians, and Government experts who recently completed a series of successful experiments with the Koch system for treating virulent diseases.

More about these investigations a little later.

But, be it known as a further warning against trying to suppress truth, that farmers in various parts of the United States are rising in indignation, demanding the right to enjoy the same advantages as their Canadian brethren. Cattle raisers in South American countries, notably Brazil, have for years demonstrated the validity of the Koch treatment.

As an index to the stir now being created by American men of the soil, your editor has before him a document which may well become one of historical importance. It is a petition, drawn up by a group of Michigan farmers and submitted for signature to members of State legislature for their respective districts. It is dated April 1948, and says:

"We the undersigned members of the Michigan State legislature respectfully petition the Congress of the United States, through an appropriate committee to investigate the injunction imposed by a Federal court on William Frederick Koch, Ph. D., M. D., a pioneer in the field of research and treatment of cancer, inasmuch as recently discovered methods of treatment confirm the research of Dr. Koch, with the end in view of requesting the Attorney General of the United States to have said injunction dismissed, so that Dr. Koch can continue further research and practice in his field without restriction."

The document bears the signature of 25 legislators.

More about Dr. Koch's persecution a little later.

Suffice to say that Michigan farmers are not letting their herds die while waiting for bureaucrats to lift an injunction that should never have been imposed. They are using Koch therapy anyway, thereby saving themselves and the public substantial sums of money in terms of cattle, beef, and dairy products.

Injustice temporarily denies the learned physician the right of recommending his treatment. But men living close to nature, who know values when they see them, are using the discovery just the same.

This reminds us of the man of old who insisted the world was round and that it moved on its axis. In stocks, suffering excruciating pain, he cried out that his tormentors were right—the earth was flat and stationary. But when given his freedom, he confided to a friend that the earth had been moving all the time.

Denial of the earth's rotundity did not cause the solar system's wheels to stop.

Dr. Albert L. Wahl, a New York physician of enviable attainments, says in his book, A Least Common Denominator in Antibiotics: "In the philosophy of medicine, the last word has not been said. Nor, of course, is it presumed that the present writing en-

compasses the final dictum. But in the words of the Old Testament, 'God has worked a new thing,' and this new thing (the Koch treatment) is substantiated by extensive clinical observation. And the facts press hard upon our present concepts, not only of clinical pathology, but of the chemistry of immunity, and clamour for a revision of our philosophy of medicine."

Dr. William J. Hale of the Dow Chemical Co. says: "Dr. William Frederick Koch is modern Pasteur."

Prof. Joseph Maisin of Louvain University, Belgium, stated to the Canadian Cancer Commission in 1940: "The Koch formula should not be called merely a cancer cure. It is a very important step in medicine and is apt to change the whole picture of medicine and pathology. Dr. Koch is doing wonderful things."

It is an interesting story how Koch therapy began to be applied to animals:

Dr. D. H. Arnott, of London, Ontario, first applied the system in the cure of human diseases in 1926. Other physicians and scientists became deeply interested in the cures effected. While convinced that Dr. Koch had discovered new and useful therapeutic chemicals, the kind of data customarily accumulated by animal experiments was lacking. This led to the amazing results that farmers are now enjoying.

The Honorable K. C. MacDonald, Minister of Agriculture of British Columbia, called a group of experts together at Vancouver on October 4, 1944. It was agreed that the Koch method of treating diseases which were then ravaging fine dairy herds, should be carefully studied.

Two divergent views were expressed at this meeting: (1) Educational, scientific, and administrative authorities present, took the position that reports of cures were fantastic and too good to be true, (2) Practical men, farmers who had seen the demonstrations with their own eyes, testified that results were being realized exactly as claimed.

On page 16 of his 1944 report, the Minister stated: "There were many dairymen present who made astounding claims for the Koch treatment. In practically all cases the dairymen claimed that their cows responded almost immediately. These cattle owners were emphatic in their request that no action be taken which would prevent their obtaining Koch treatments when required."

One leading breeder told how the Koch treatment had saved an especially good cow given up to die. He explained that it developed mastitis during lactation. A veterinary surgeon advised him to have the animal removed from the herd and slaughtered. There was danger of the infection spreading.

Instead, the Koch treatment was applied. The action consisted of one dose of the therapeutic reagent being administered by hypodermic syringe under the skin of the neck. Recovery was instantaneous and within a week the cow's milk was being sold to the creamery.

Other breeders related similar experiences. Thereupon it was unanimously agreed that the Department of Agriculture should investigate the merits of the system. The official declaration appears on page 16 of the agricultural department's 1944 report: "The Minister stated that it was his desire to form an opinion based upon accurate investigations and he named a committee to undertake this investigation."

CONGRESSIONAL RECORD

Mr. MacDonald's words of instruction were: "I am Minister, and gentleman, I am determined to get at the truth."

Two veterinarians were appointed by members of the committee to work together. Animals were to be examined and their diseases classified. It was agreed that no clinical problem would be rejected because of the severity of the disease. The joint opinion of the owner and the two veterinarians was to be accepted as final. Field work was begun in November 1944 and completed in September 1945. A Government laboratory and a private laboratory duplicated each other's work and checked up on the bacteriology and other analyses required for the test.

The results were nothing short of astounding to members of the committee. Everything that the Koch Laboratories, located at 8181 East Jefferson Avenue, in Detroit, anticipated, came to pass. It was fitting that the final report published by the Government of British Columbia should have contained a statement by Dr. Arnott. He summed up the Koch theory of treatment as follows:

"Life is promoted, sustained, and reproduced by the use of food. For good health the supply must be adequate in amount and in variety. For the best normal results it is necessary that the food be well digested, and also that the potential energy contained therein be transferred into living energy throughout the body at a vigorous rate, burning the food properly in each individual cell where it unites with oxygen for this purpose.

"This living chemical reaction is spoken of by medical science as 'internal respiration,' and it must take place continuously because nature has not provided any reservoir wherein oxygen may be stored, to be drawn upon at will or in time of need. It is upon the degree approaching perfection with which food is thus turned into living energy consistently that conditions requisite for good health are best maintained, that diseases are best resisted, that life is best reproduced.

"It is Dr. Koch's belief that a normal supply of these essential carbon compounds often can be renewed by the hypodermic administration of the reagents which he discovered."

The committee adopted a closing resolution which contained the following commendatory clause:

"That the observations justify a recognition of the working hypothesis of biological oxidation of the Koch treatment, meriting its further use in veterinary therapy."

And so, our Canadian friends are profiting from the wonderful achievements of the Koch science.

Dr. Koch began the treatment of cancer in 1918 and other diseases later.

He soon discovered interests existing in the United States that did not welcome recoveries from these deadly enemies of society to reach the public. Since that time he has had to constantly beat down the opposition in order to continue his work for the relief of suffering humanity.

The fundamentals of the Koch science may be succinctly stated as follows:

1. That the chemistry of natural immunity in the body is able to destroy the toxicity of germs.

2. When the body is invaded by toxic bacteria so full of poison that they spill over into the system, the oxidation mechanism must burn off these poisons or the person becomes ill.

3. The less able the system is to burn, or oxidize, the poisons, the weaker the person becomes. When the oxidation mechanism fails to burn off any poison, the victim dies.

4. The Koch Laboratories have developed synthetic antitoxins which act as a catalyst in helping the body build up its oxidation mechanism equal to the task of destroying these toxins. When natural immunity is restored the person recovers.

5. Cancer behavior is a protective response to a toxic product generated within the body. Dr. Koch summarized the matter many years ago in a scientific paper from which the following sentences are reproduced:

"Clinical observation discloses the persistence of toxemia over a period even as long as 20 years previous to the advent of the growth. After the growth has come these toxic manifestations disappear, or nearly so. After surgical removal of the growth they return and with recurrence of the growth again disappear. We designate these symptoms as the progrowth symptoms, for they differ from those consequent to the activity of the growth itself.

"The strongest and the sufficient proof that cancer is a response of protection against a definite toxin, however, rests with the fact that removal of the toxin and destruction of the toxin source is followed by complete involution of all cancer tissue, complete healing of the regions involved, return to health with absence of growth and progrowth symptoms, and the absence of recurrence."

6. Diet occupies a prominent place in the practical application of the system.

Testimonials like the following by Dr. Wahl could be multiplied to fill several large volumes:

"Over a year ago, my sister was dying of lymphosarcoma, a disease which the profession regards as invariably fatal. The diagnosis was made by Dr. H. H. Ferriar, of Mercy Hospital, Pittsburgh, Pa., on the basis of biopsy study No. 1171, May 1, 1946. The medical staff of Mercy Hospital had previ-

ously made a diagnosis of lymphosarcoma or Hodgkin's disease.

"The case was far advanced at the time, my sister having been practically bedridden for 6 months because of weakness and recurrent infections. The masses of lymphoid tissue did not have to be palpated; they stood out on the sides of her neck and in her axillae and groins like bunches of grapes mixed with walnuts.

"When the diagnosis of lymphosarcoma had been made, and I had received written commiseration from a top-ranking staff member of Mercy Hospital, it never occurred to me to do other than offer my sister the straw hope of deep X-ray therapy. Everyone who examined her thought she would be dead within a few weeks.

"I refused to listen to my father's recommendations that my sister be treated with a substance built up from the conjugated systems of carbonyl and ethylene linkages. Because of American Medical Association propaganda, I believed that the results previously reported with this therapy 'approached the acme of quackery.'

"However, my father did have my sister treated, since he personally knew of cases of cancer which were cured and remained cured after its use. This type of cancer is fatal in 3 to 6 months, as a rule.

"My sister was in the last stages and was said to have only a few weeks to live, according to the best knowledge on the subject. She recovered after one dose in characteristic fashion.

"Then and there, I decided to undertake an independent investigation of the treatment. I have been irrevocably convinced of the great value of this treatment.

"The American Medical Association is not yet convinced after 25 years. But that is an old story."

William Frederick Koch was graduated bachelor of arts at the University of Michigan in 1909 and later received the degrees of master of arts (1910), and doctor of philosophy (1917). He received his medical degree at the Detroit College of Medicine.

During 1910-13 he was instructor in histology and embryology at the University of Michigan, and for 5 years, 1914-19, professor of physiology in the Detroit Medical College.

Comparisons are odious, but Dr. Koch has been described by authorities as "the world's greatest living chemist"; "the discoverer of a new science which charts the future course of the medical profession"; "one who cannot be bought, coerced, or intimidated"; "a Christian gentleman of courage and distinctive attainments"; and "a man of amazing capacities."

No one who knows him well and understands the humanitarian spirit that animates his every deed will deny that the foregoing descriptions apply.



United States
of America

Congressional Record

PROCEEDINGS AND DEBATES OF THE 82^d CONGRESS, FIRST SESSION

Koch Treatment for Mastitis

EXTENSION OF REMARKS

OF

HON. WILLIAM LANGER

OF NORTH DAKOTA

IN THE SENATE OF THE UNITED STATES

Monday, August 27, 1951

Mr. LANGER. Mr. President, I ask unanimous consent to have printed in the Appendix of the RECORD an editorial entitled "London Milk Producers Study Koch Treatment for Mastitis," published in the Ontario Milk Producer for July 1951. I call this particularly to the attention of the farmers of this Nation who have cattle.

There being no objection, the editorial was ordered to be printed in the RECORD, as follows:

LONDON MILK PRODUCERS STUDY KOCH TREATMENT FOR MASTITIS

The frank, enthusiastic, and sincere testimony to the efficacy of the Koch treatment for mastitis, sterility and acetonaemia, given to a group of Middlesex County dairymen, a few days ago, by a dozen or so Michigan dairy farmers, left the Canadian group somewhat stunned. The evident control that has been gained over mastitis particularly, seemed almost unbelievable to the Middlesex men who, heretofore, in the majority of cases have been able only to secure temporary relief from this scourge of the dairy farmer.

The London Whole Milk Producers Assn., interested in the reported success of the Koch treatment in British Columbia, under the authority of the British Columbia Department of Agriculture, decided to send a committee to Imlay City, Mich., where extensive work had been progressing in the application of the treatment. Duncan Fletcher, Beverly Chappel, John Byers, and Ivan Parkinson representing the association, made the trip. They were accompanied by Dr. D. H. Arnott, of London, Canadian associate of Dr.

Koch, who arranged the tour, and by Douglas Cozens, Woodstock, of the Ontario Whole Milk Producers' League Field Service, and the editor of the Milk Producer.

CHAMBER OF COMMERCE ARRANGES TESTS

The Imlay City enterprise was the result of action taken by the chamber of commerce. Mastitis was rampant in Lapeer County. Members of the chamber had read of the Koch treatment and the work being done in British Columbia. A meeting was called at which Dr. Arnott was invited to speak and tell of the results in the British Columbia project. After this meeting, which was attended by some 250 dairy farmers, the chamber of commerce decided that some action should be taken but that the veterinary department of the State college should be requested to cooperate and render some financial assistance.

A committee went to Lansing. The result, as reported, was that the committee was told, first that it would require \$2,000 to finance the project in its initial stages; that sufficient experts on the specified diseases were not on the staff, and that the time was not available. Dr. Bryan, the chief veterinarian, is reported to finally have offered to make tests required but only providing no representative of Dr. Koch was present. Refusal to permit Dr. G. F. R. Barton, one of the veterinarians named by the British Columbia Government to work on the investigations in that Province, to assist or even be present is said to have been made.

The Imlay City committee believed that, for reasons best known to themselves, the State officials wanted no part in the work. It went home disappointed, but not dismayed. It was decided that the work should go ahead. Finances were found and Koch Cattle Shots, Inc., was founded. Its president is Lawrence Thatcher, a member of the Christian Medical Research League, of Detroit, the organization that produces the Koch treatment, and its manager is Lyle

Watkins, long-time prominent citizen and farm-implement dealer of Imlay City.

Two herd-demonstrational tests were arranged. Dr. Lewis T. Dawe, veterinarian of Opaac, Mich., agreed to supervise the tests. The herds chosen were badly infected with mastitis, consisted of 23 Holsteins in the herd of Max Graybiel, and a 35-Jersey herd owned by Richard Koning, both in Lapeer County. Control groups were not treated.

TREATMENT MORE EFFECTIVE

The results of these tests were so successful that the green light was given the new organization. Dr. Dawe reported that he was much encouraged. Dr. William Mackay, of Lapeer, said he had found the medicine more effective than any other he had used in chronic mastitis cases. Dr. David Ellis, of Memphis, said that out of 40 or 50 doses he had observed favorable results.

This, briefly was the background of the Imlay City enterprise, which was told to the Canadian group and shown to them by well-documented evidence.

For 2 days the party toured Lapeer, St. Clair, and Sanilac Counties, covering nearly 300 miles in the trip. Some 15 or more dairy farmers were interviewed by the party in addition to druggists who retail the treatments, State agricultural instructors, and others have had some contact with the work that is being done.

One of the first farms visited was that of Harlan Greenwald. A number of cows in his Holstein herd had developed sterility. Bulls and feeds were changed in the belief that one or the other or both was responsible for this condition. However, there was no effect. Cows did not conceive. The Dr. Koch treatment was suggested and Mr. Greenwald consented without much hope and as a last resort. The cows and heifers were injected and no other treatment was used. Mr. Greenwald says the condition has entirely cleared up and he has had no more

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trouble. This was the story told by Mr. Greenwald.

MILK PRODUCTION INCREASED

At the Fergus-Lea farms, where, by the way, the committee saw one of the finest herds of Guernseys this writer has run across for many a day, Harold Walton, herd manager and part owner, told an amazing story. Mastitis, acetonaemia, and sterility in a prize bull were part of his troubles and were conspiring to reduce the number and the effectiveness of his herd to a very unprofitable position. The natural increase could not be maintained. After other treatment, the condition remained substantially unchanged. Then the Koch treatment was used. Following the treatment conditions began to improve, in some cases in a matter of hours. Today the herd is clean. Milk production has increased as has butterfat. Mr. Walton's records show an increase in butterfat from 3.84 to 4.21. One of his cows had a condition diagnosed as acetonaemia further complicated with pneumonia. The cow was down and appeared a fit subject for the wagon. Mr. Walton said that at 11 o'clock at night it was injected with the Koch treatment and the following day the cow was on its feet. It made rapid recovery from both the acetonaemic condition and from the pneumonia. In the case of the bull, which was a pedigreed prize-winning champion, it developed an apparent sterility. It could not get a calf. The bull was treated with a Koch injection. It regained its potency and can now successfully withstand heavy service.

At the farm of Elmer Perkin, he told that he had several times attempted to bring a herd into profitable producing condition. On each occasion as he believed he had reached his goal, mastitis infected the herd and they finished in the slaughterhouse. He was in debt, veterinary bills and medicine was costing him \$200 upward per year, and was on the verge of quitting and getting out of the dairy business. He was induced to use the Koch treatment and, he said, from the day his herd was treated, his troubles began to decrease. He told the committee his herd was cleaned up. In a couple of cases there had been a recurrence and these cows were subjected to a second injection which cleared up the flare-ups. Today, he said, "I am almost out of debt; my milk checks have increased in amount, and pretty soon those milk checks are going to be all mine."

William Thorman, a dairy farmer with a herd of fine holsteins, had similar troubles. He told the committee he treated 30 cows and had 100-percent success with 29 head. The committee visited several farmers who

had been shut off from the dairies. One such case was that of the postmaster of Deckerville, Mich., Mancel Wintermute. This man was not actually shut off, but had been warned on several occasions that he would be shut off. He said he was about to sell, when he decided to try the Koch treatment. Everything else he had used had given only indifferent results. After the herd had been treated, beneficial effects became apparent. The herd is now producing steadily, without trouble. Quality and quantity have substantially increased. Asked if he had any intentions of selling out now, Mr. Wintermute said, "No, not any more."

One farmer, a Mr. Shreiber, of Imlay City, told the committee that after his herd was treated, he not only had his mastitis trouble cleared up, but that his milk check increased from \$421 to around \$755 per month.

ENTHUSIASM SPREADS

The product is sold by some 42 druggists in the counties visited and in Deckerville, the druggist there, Mr. Vannattar, produced his books for the inspection of the committee. These showed the accounts of some of the dairy farmers in the area. They showed in the case of one man, that in a period of approximately a year he had purchased such drugs as penicillin, aureomycin, streptomycin, sulphamethazine, and sulphathiazole to the extent of nearly \$200 but after purchasing the Koch treatments for his herd, the sales of the drugs dropped to practically nothing. Other accounts showed similar trends. Mr. Vannattar's records showed that he had distributed 340 treatments during the past 4 months, or an average of better than three for every week-day.

Wherever the committee went, or whoever they interviewed, they heard the same enthusiastic story. The writer, seeking some independent information, sought an interview with the editor of the Imlay City Times. Mr. Cross had had considerable contact with farmers who had used the Koch treatment and he said he had heard nothing but praise for the treatment. The closest he had come to anything that might be construed as lacking in recommendation was a couple of farmers who had said they were undecided whether the treatment was doing their herd any benefit. In these cases, Mr. Cross said, "they were using other treatments at the same time."

A number of the agricultural representatives in the areas are also staunch supporters of the treatment. One, to whom the committee talked, was outspoken in his regard for the "shots."

Not only in that area, but in other areas in United States the same situation is to

be found. The committee had the privilege of studying the case histories sent in by veterinarians from many parts of the United States. The results were practically all the same—a complete clearing up of the trouble.

It was not suggested that the treatment was 100 percent effective in all cases. Both Mr. Thatcher and Mr. Watkins say they have reason to believe the treatment, over-all, is nearly 80 percent effective.

Space here does not permit us to report on the many other interviews and the documents that were studied by the committee. In no case was there any derogatory evidence either oral or documentary, other than that referred to near the beginning of this report, which originated at the State College at Lansing. The committee was so impressed with the evidence they had seen and heard that they will recommend to the London Association that herd tests be made in that area. We understand that an attempt will be made to have this done as speedily as possible.

HOW TREATMENT IS USED

In this report, we have referred to this therapy as treatments. While this definition is accurate within limitations, the liquid substance used is known as glyoxilide. It comes in small glass ampoules containing either 5 or 10 cubic centigrams. Five cubic centigrams is the amount usually employed at each treatment. It is administered with a hypodermic needle into the muscular section of the neck of the cow—sometimes in the rump. Each shot is considered a treatment. The herds visited by the committee had in the majority of cases only one treatment per cow. In some cases, two treatments were administered, and on rare occasion, three. The glyoxilide frequently produces reactions that manifest themselves in cycles of 21 days, gradually becoming lesser in intensity until they disappear entirely. It is only in extremely stubborn cases that two or more treatments are indicated. The beneficial effects of one treatment have been known to exist for up to 3 years. A year to 2 years is common. At most of the farms visited by the committee, there is a prevalent practice of re-treating about every 18 months as a form of insurance. One result that was pointed out to the committee repeatedly is the generally lower bacteria count that follows the use of the glyoxilide. Counts of 8 to 10 thousand was mentioned on more than one occasion.

The action and work of the London Milk Producers Association will undoubtedly be followed with much interest, and this journal will endeavor to keep you up to date with the progress of the experiment if it is undertaken.

THE KOCH TREATMENT

Koch's methods, once thought "too good to be true," have now convinced many dairy-men of their effectiveness and worth.

By D. H. ARNOTT, M.D.

ON October 4th, 1944, at the invitation of the Minister of Agriculture of British Columbia, there met in Vancouver a group of men who assembled for the purpose of considering the merits of the Koch method of treating and preventing common, seriously-destructive diseases which were ravaging the dairy herds not only in this province, but in every part of the Dominion of Canada and elsewhere.

There were two sharply opposing views: The educational, scientific and administrative authorities were convinced the reports emanating from my own experiences obviously were just too good to be true and therefore unworthy of consideration. The fact that none of these men had seen the treatment used, carried weight with the Minister, when:

1. "There were many dairymen present who made astounding claims for the Koch treatment. In practically all cases the dairymen claimed that their cows responded almost immediately to the single injection of glyoxylide. These cattle owners were emphatic in their request that no action be taken which would prevent their obtaining Koch treatments when required." (Annual Report, Department of Agriculture, B.C., 1944, Page 16.)

One leading breeder stated that he was convinced the use of the Koch treatment had saved him from incurring serious loss due to mastitis which had affected a particularly valuable cow which he owned. He related how this animal developed mastitis during lactation and required a great deal of care. At the next freshening the trouble had recurred in a very commanding degree, and the veterinary surgeon in attendance advised him to have the animal removed from the herd and slaughtered, in order to prevent the infection from spreading to other cows. However, instead he used the Koch treatment which consisted of one dose of the therapeutic reagent which was administered by hypodermic syringe under the skin of the neck. As a result the cow recovered and within a week her milk was once more being sold to the creamery. Also, during this lactation the cow had produced twice as much milk as she had given during the previous lactation.

Other breeders contributed their

own satisfactory experiences, and some who were unable to be present communicated with the Minister by letter.

As a result it was moved, seconded and carried unanimously that the Minister take steps to investigate the merits of the treatment.

2. "The Minister stated that it was his desire to form an opinion based upon accurate investigations and he named a committee to undertake this investigation." (Annual Report, Department of Agriculture, B. C., 1944, Page 16.)

The Committee met at once and decided to observe the action of the treatment as applied to the various forms of mastitis, and also in regard to results obtained in the treatment of infertility.

It was agreed that the tests should be undertaken over a wide field in the Lower Fraser Valley and extending to Vancouver Island. Breeders would be asked to offer for the test cows suffering from mastitis or infertility.

Two veterinarians appointed for the work by the Committee, always acting together, examined these animals, classified the nature of the attack, administered the treatments and carried out the observations requisite, and made written records. It had been agreed that no clinical problem of mastitis was to be rejected because of its severity, and that the joint opinion of the owner and the two veterinarians in charge was to be accepted by the Committee as final, that none of the animals treated would have recovered spontaneously. The field work was begun late in November, 1944, and completed in September, 1945.

3. "Milk specimens were taken from each quarter of the udder of the affected animal by the veterinarians at the time each animal was injected. Altogether sixty-one initial samples of milk were taken from infected udders. A bacteriological examination was made and noted. Then forty duplicate samples were taken a week later, examined and compared bacteriologically with the first. A second physical examination was made at this time and compared with the first and any improvement or otherwise was accurately recorded." (Annual Report, Depart-

ment of Agriculture, B. C., 1944, Page 16.)

4. "The remarkable reduction in bacteria is of interest, particularly in view of the fact that bacterial reduction was not claimed for the treatment which was simply that dairy cows could be brought back by means of a glyoxylide injection to the condition that would permit them to produce market milk." (Annual Report, Department of Agriculture, B. C., 1944, Page 16.)

This observation was made just one week after the Koch treatment had been administered.

At the meeting which took place on May 12th, 1945, the laboratories reported there was a strong trend frequently observed for streptococcus hemolyticus not only to lessen in numbers, but even to disappear entirely from the milk of treated animals. The streptococcus hemolyticus is a germ greatly feared by medical men when it affects unpasteurized milk.

5. "Milk samples were taken on the first visit and treatment administered, a second sample taken in one week, and further samples taken at monthly intervals. These samples were drawn as aseptically as possible, kept in a special case containing ice and delivered to the laboratories within twenty-four hours. The findings of both laboratories were found to coincide very closely." (Annual Report, Department of Agriculture, B. C., 1945, Page 22.)

The Committee Report was strongly favourable to the use of the Koch treatment for mastitis and infertility. The 1945 Annual Report of the Department records some interesting observations:

(a) "A consistent result was a definite softening of the udder after treatment." (Annual Report, Department of Agriculture, B. C., 1945, Page 22.)

(b) "The disappearance of fibrous tissue was noticed in a considerable number of cases." (Annual Report, Department of Agriculture, B. C., 1945, Page 22.)

(c) "One quarter that was affected for a long period and badly atrophied (shrunken) made a complete recovery." (Annual Report of the Depart-

ment of Agriculture, B. C., 1945, Page 23.)

(d) "A total of 207 mastitis affected quarters of which only seven were lost." (Annual Report of the Department of Agriculture, B. C., 1945, Page 23.)

(e) "It appears this treatment had a beneficial effect on digestion, also on the skin and coat." (Annual Report, Department of Agriculture, B.C., 1945, Page 22.)

Infertility

Of the twenty-nine cows treated for infertility, twenty-one had fertility restored, being mated successfully to the same sire used during the infertile period:

6. "With very few exceptions, one injection of the Koch treatment was all that was used." (Annual Report, Department of Agriculture, B. C., 1945, Page 24.)
7. "It must be remembered that any and all abnormal conditions were left precisely as found. No attempt was made to correct these by manipulation or other treatment." (Annual Report, Department of Agriculture, B. C., 1945, Page 24.)
8. "Of the twenty-one that responded, two had cysts only of the ovaries, three had cysts and vaginitis, four had retained corpus luteum and vaginitis, three had retained corpus luteum only, eight had vaginitis only, and one had fibrous ovaries." (Annual Report, Department of Agriculture, B. C., 1945, Page 24.)
9. "Dr. Bennett pointed out that five of the cows included in this sterility report that had responded satisfactorily to the glyoxylide treatment were cows suffering from mastitis as well as sterility." (Annual Report, Department of Agriculture, B. C., 1945, Page 24.)
10. One cow was observed to be continuously in heat and four had this function suppressed, but the Koch treatment corrected both these irregularities and restored fertility. (Annual Report, Department of Agriculture, B. C., 1945, Page 23.)
11. "Dr. D. H. Arnott was then called on for some remarks and he expressed himself as being grateful to the minister of agriculture, the chairman, and gentlemen present."



DR. ARNOTT

He explained briefly the working hypothesis of the Koch treatment therapeutic philosophy thus:

"Life is promoted, sustained, and reproduced by the use of food. For good health the supply must be adequate in amount and in variety. For the best normal results it is necessary that the food be well digested, and also that the potential energy contained therein be transferred into living energy throughout the body at a vigorous rate, burning the food properly in each individual cell where it unites with oxygen for this purpose. This living chemical reaction is spoken of by medical science as 'internal respiration,' and it must take place continuously because Nature has not provided any reservoir wherein oxygen may be stored, to be drawn upon at will or in time of need. It is upon the degree approaching perfection with which food is thus turned into living energy consistently that conditions requisite for good health are best maintained, that diseases are best resisted, that life is best reproduced.

"It is Dr. Koch's belief that a normal supply of these essential carbon compounds often can be renewed by the hypodermic administration of the reagents which he discovered." (Annual Report, Department of Agriculture, B. C., 1945, Page 24.)

Before the meeting closed, it was moved by Dr. F. W. B. Smith, seconded by Dr. S. N. Wood, and carried unanimously:

12. "That the observations justify a recognition of the working hypothesis of biological oxidation of

the Koch treatment, meriting its further use in veterinary therapy." (Annual Report, Department of Agriculture, B. C., 1945, Page 25.)

Encouraged by the authentic information obtained from the investigation carried out by the Department of Agriculture, some owners of important herds have employed the treatment so freely and consistently that mastitis abortion and infertility no longer cause serious losses. They look forward to the day when the proven strong resistance to these and other destructive diseases acquired through the correct use of the Koch treatment will be passed on to the offspring, when the surplus will be sought as foundation stock at premium prices. Because only in British Columbia has there been the enterprise of the breeders and the co-operation of the Government requisite for the development of desirable bloodlines effectively cared for and mated to produce a fine strain of animals known to be highly resistant to diseases which elsewhere constantly threaten, and often ravage the high priced herds.

Looking back, those who were at the meeting of October 4th, 1944, will always remember the decisions of the late Hon. K. C. MacDonald when he said:

"I am the Minister, and gentlemen, I am determined to get at the truth."

It is Dr. Koch's belief that certain carbon compounds perform an important intermediary step in the living chemistry by which food is turned into life itself; and should the supply of these compounds fall below that requisite for the best conditions, life may continue, but vigorous good health may be lost.

The young intellectual, Gregory Soltenx, slept especially late this morning. His father lectured him: "You, with your Communistic ideas. Why don't you go to work and make some money?"

Gregory sprawled out even further on the bed and said: "Papa, that's exactly why I ain't going to work. It will come a Communistic state—and a Utopia, and we won't need money."

"Maybe," answered the parent, "but isn't it better you should go to work now and make about fifty thousand dollars? When it comes the Revolution, you give it to them, to help it along."

"Yes," answered the young idealist, "suppose it don't come the Revolution—then I'm stuck with the fifty thousand dollars."

ACETONEMIA

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TREATMENT OF
CINOMOSE BY THE
KOCH THERAPY
(DISTEMPER)

by

DR. ADELBERTO DA SILVA CARNEIRO

and

DR. CRISTOVAO COLOMBO SOUZA

Studies and Observations Made
in the Hospital for Small
Animals of the Brazilian Army
in Rio de Janeiro, 1950.

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