



LIFETRON THERAPY- THERAPY WITH ELECTRONS NECESSARY FOR THE LIFE-THEORETICAL CONSIDERATIONS

Surgery

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ABSTRACT

Lifetron Therapy- Therapy with electrons necessary for the life-Theoretical considerations Introduction: Many ancient scriptures mention that there is an energy in the air which is essential for the human body called as Chi, Qi, Prana, Mana, Baraka, Bioplasmic energy, Orgon energy, Life force, etc. Unfortunately, in absence of any scientific evidence, the modern medical science ridiculed the idea calling it a pseudoscience. This article reports for the first time in medical literature that the electrons in the air is the Chi or Pranaenergy which gets attached to Oxygen, hence Oxygen was labelled as PranaVayu in ancient scriptures. I have invented a new therapy which is labelled as Lifetron therapy, which supplements human body with electrons by various methods. Materials and methods: The lifetron therapy involves giving electrons to the patient by following means. 1) Through a disposable Oxygen mask with oxygen 2) Through a disposable Oxygen mask with air 3) Through skin over radial artery by ECG electrode 4) Intravenous by a stainless-steel wire put through angiocath 5) Through water charged by electrons. 6) Through wall mount air ionizers. An electron generator produces electrons which are delivered by carbon brushes to ionize air and Oxygen to be inhaled by patient by a mask. Same electrons are delivered over radial artery through an ECG electrode. Air ionizers can be used in bedroom, offices and cars to get electrons through air we breathe. **Discussion:** Oxygen molecule has natural affinity to electrons which gets coupled to 4 electrons in air and becomes a negative ion. Electrons in air can be measured by an air ion meter which is an objective evidence of energy in the air. Oxygen unsaturated with electrons in fact acts as a free radicle producing oxidative stress and damage to human body. The same Oxygen when saturated with 4 electrons acts as a primary antioxidant neutralizing free radicles and reducing oxidative stress. Lifetron therapy is a cheap, effective and safe therapy that will be beneficial in ischemic heart diseases, diabetes, cancer, arthritis, vasculitis, glomerulonephritis, lupus erythematosus, adult respiratory diseases syndrome, stroke, intestinal ischemia, hemochromatosis, infectious diseases, acquired immunodeficiency syndrome, autoimmune diseases, hypertension and preeclampsia, neurological disorder (Alzheimer's disease, Parkinson's disease, muscular dystrophy), alcoholism, smoking-related diseases, SIRS etc. The therapy works by stimulating Vegas nerve which leads to metabolic homeostasis. The Vegas nerve stimulates the hypothalamic pituitary adrenal axis leading to various health benefits. The therapy leads to the anti-inflammatory effects through efferent Vegas nerve-mediated control of immune function and pro inflammatory response via the cholinergic inflammatory reflex. Lifetron therapy has a potential to save many lives worldwide. We need many clinical trials to understand its exact indications, dosages and duration and exact mechanism of action in various disease conditions.

KEYWORDS

Lifetron Therapy, Electrons as antioxidants, Antibiotic resistance, Antioxidants, Oxidative stress, Free radicles, Diseases of oxidative stress, Cancer, Therapy for viral and bacterial resistance, etc.

INTRODUCTION:

Many ancient scriptures mention that there is an energy in the air which is essential for the human body. In Japan the energy is called Ki and from this word Reiki is named. The Taoists call life force energy Chi (Qi) and charted its movement through the body. Indian yoga adepts call it Prana. In the West, Dr. Wilhelm Reich discovered the same energy and called it Orgone energy. This energy or life force is known as "Mana" in Polynesia, "Ruach" in Hebrew and "Baraka" in Islamic Countries. It is referred as the Light or Holy Ghost by Christians and bio-Plasmic Energy by Russian researchers. Some individual healers have called it Animal Magnetism, Archaeus. In traditional Chinese culture, qi or chi is believed to be a vital force forming part of any living entity. Qi translates as "air" and figuratively as "material energy", "life force", or "energy flow". Qi is the central underlying principle in Chinese traditional medicine and in Chinese martial arts. The practice of cultivating and balancing qi is called qigong.

Unfortunately, in absence of any scientific evidence, the modern medical science always ridiculed the idea and rejected the presence of any such energy calling it a pseudoscience. This article extensively discusses the exact nature of this energy, its production in the laboratory, its measurement by scientific meter, the various methods of delivering it to the human body and its effects on various diseases. The therapy and its extensive research are reported for the first time in the medical literature.

Despite a lot of research, it is not clear till date about the exact nature of Chi energy or Prana. There are electrons in the air which get coupled to various molecules making them negative ions. Ancient Indians called Oxygen as PranaVayu. Vayu is Oxygen and Prana appears to be the electrons attached to the Oxygen making it PranaVayu. This article reports the electrons in the air attached to Oxygen as Chi or Prana for the first time in medical literature. The ancient Chinese scriptures mention that there are Yin (Feminine) and Yang (Masculine) type of chi energies. The negative ions charged with electrons appears to be the feminine Yin energy and the positively charged ions appear to be Yang energy. Yin energy is supposed to have healing effect on human body.

According to ancient text Ayurveda, human body has Pranayamakoshawhich is made up of five major pranas, which are collectively known as the Pancha, or five pranas: prana, Apana,

Samana, Udana and Vyana. Prana in this context does not refer to cosmic prana, but rather to just one flow of energy, governing the thoracic area between the larynx and the top of the diaphragm. This is the energy force necessary to keep all the living beings alive. Prana is infused and moves through the body through 3 primary channels, Ida, Pingala and Sushumna. Actually, it is in every part of the body as long as there is life, and it flows through the 72,000 Nadis in the human body.

I have invented a new therapy which is labelled as Lifetron therapy. Lifetrons is an English word coined by 20th century guru and yogi Paramahansa Yogananda to describe the vital life-force energy known by the Sanskrit name prana. He described lifetrons as "intelligent life energy in the body." To give respect to the ancient tradition of yoga, I have decided to call my therapy as Lifetron therapy.

MATERIALS AND METHODS:

The lifetron therapy involves giving electrons to the patient by following means. 1) Through a disposable Oxygen mask with oxygen 2) Through a disposable Oxygen mask with air 3) Through skin over radial artery by ECG electrode 4) Intravenous by a stainless-steel wire put through angiocath 5) Through water dissolved with Oxygen charged by electrons 6) Through wall mount air ionizers.

Complete specifications of Device for Lifetron therapy- Oxygen Mask attachment: (Figure:1) (2) The heart of the machine is an electron generator (Figure:1) (5). The machine (negative ion generator) is a device that creates high voltage to ionize (electrically charge) air molecules and Oxygen molecules. Negative ions, or anions, are particles with one or more extra electrons, conferring a net negative charge to the particle. Input: DC 12 Volt 1 Amp, Output: DC -3.0KV +/-0.5KV. Dimension: L 14 * W 10 * H 24MM. 2 trillion ions/cc at 3 cm from emitter, Power use: less than 1 watts. The Output of the device has a copper wire of 1- meter length (Figure:1) (4). At the end of the wire, fine carbon brushes (Figure:2) (1) are attached which deliver electrons to the air to ionize it. These carbon brushes are fixed in a rubber tube which is fixed with the commercially available disposable Oxygen masks. (Figure:1) (1) The therapy can be taken by inhaling just air or Oxygen through this mask. The carbon brushes are about 3 cm away from nose within the mask.

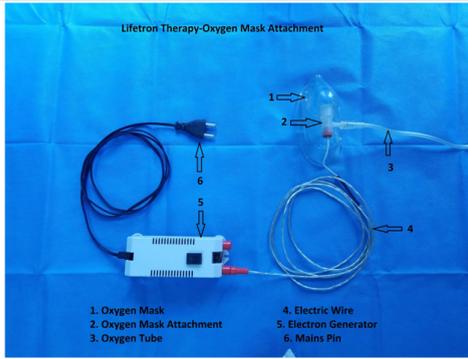


Figure 1: Showing the complete assembly of Lifetron Therapy Oxygen Mask Attachment

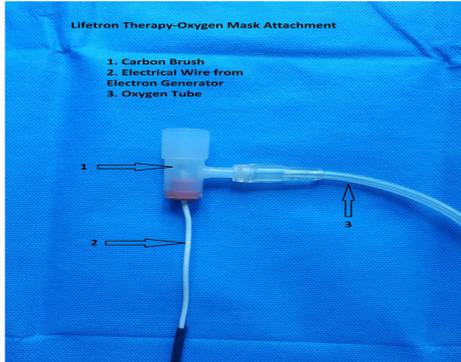


Figure 2: Showing details of Oxygen Mask Attachment for Lifetron Therapy

The specifications of the device for transcutaneous Lifetron therapy is as follows.

The device has an electron generator (Figure:3) (4) which generates 1 million electrons per cubic centimeter. Input Voltage: DC 5V, Rated power: <0.3W. The electrons are delivered over one of the radial arteries (Figure:4) (1) of the patient by a disposable ECG electrode (Figure:3) (1) precisely placed over the radial artery on the wrist. The electron generator has a USB input (Figure:3) (5) which can be powered by a power bank, (Figure:4) (2) a mobile phone or a step-down transformer with USB output plugged into wall mains plug. The LED power indicator (Figure:4) (3) indicates that the device is working.

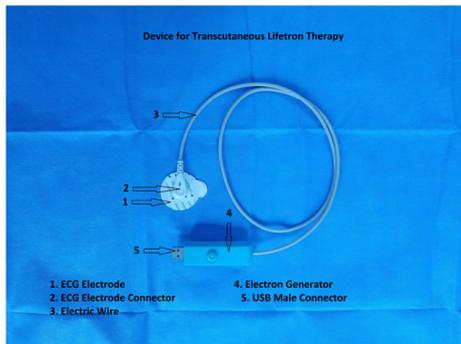


Figure 3: Showing Complete Assembly of Transcutaneous Lifetron Therapy



Figure 4: Showing Transcutaneous Lifetron Therapy delivered over radial artery

The complete specifications for the device for the intravenous lifetron therapy is as follows. The device has an electron generator same as the transcutaneous module which generates 1 million electrons per cubic centimeter. Input Voltage: DC 5V, rated power: <0.3W. A stainless-steel wire is connected to an electrical wire which is connected to the electron generator. This stainless-steel wire goes through an angiocath into the blood stream to deliver electrons to the patient.

Electrons in the air can be easily measured by air ion meter (Figure 5). The meter is also used to measure electron density of the output of my devices. Air ionizers are devices which can be mounted in mains plug in your bedroom, office, car etc. They are also used in air purifiers to remove dust particles and other impurities from air. Airborne particles and Oxygen molecules in air become negatively charged as they attract electrons from the ionizer by electrostatic attraction thus, making a large number of negative ions. The electrons do not travel a long distance; hence it is necessary to put air ionizer close to your body. Before installing an air ionizer in my bedroom, the air was in fact charged positively about 30,000 positive ions per cubic centimeter. After installing negative air ionizer, the air is showing 10×1000 that is 10,000 negative ions per cubic centimeter (Figure 5). Thus, I have created a plasma of negative ions in my bedroom and the negative ion concentration there is now equal to the ambience of a waterfall and a forest.



Figure 5: Showing Air Ion Meter measuring ions in my bedroom

DISCUSSION:

There are electrons present in healthy air which get coupled to various substances and called as negative ions. Negative air ions (NAIs) have been discovered for more than 100 years. [1] One such gas in air is Oxygen molecule that has natural affinity to electrons. It gets coupled to electrons in air and becomes a negative ion. The oxygen molecule O₂ is a biradical with two unpaired electrons in different orbitals and is capable of accepting up to 4 electrons. Negative ions [2] are produced by following mechanisms in nature. 1) radiant or cosmic rays in the atmosphere emit α , β , and/or γ rays, which ionize the air producing negative ions [3] (2) sunlight including ultraviolet directly ionizes air molecules (3) natural and artificial corona discharge including thunder and lightning (4) Considerable numbers of NAIs are found under waterfalls or in the seashores produced by the shearing forces of water (Lenard effect) (5) Plants have the ability to generate NAIs under normal growth conditions and have been regarded as natural resources for NAI generation. The degree to which negative ions contribute to overall well-being and health is scientifically proven. The most important benefit of negative ions is that they clear the air of airborne allergens such as pollen, mold spores, bacteria and viruses. Besides they also clear the air of dust, pet dander and cigarette smoke.

Generally, NAIs are composed of multiple negatively charged molecules [3] and these negative ions combine with several or up to 20 or 30 water molecules and form negative-ion clusters such as CO₃-(H₂O)_n, O-(H₂O)_n, and O₃-(H₂O)_n. O₂⁻, CO₃⁻, or NO₃⁻ and their (H₂O)_n clusters as well as HSO₄⁻ core ions. additional ions such as OH⁻, NO₂⁻, HCO₃⁻ and their water clusters are also present. My therapy mainly deals with Oxygen molecule charged by 4 electrons as negative-ions.

The normal healthy air should contain 200 to 800 negative ions per cubic centimeter. But due to air pollution, this number has dropped dramatically. The negative ions in indoor air in many places is zero. Unfortunately, air is full of positive ions which are harmful to the human body. Electrons in air can be measured by an air ion meter. It measures electrons per cubic centimeter of air. This is an objective evidence that the energy in the air the ancient scriptures were mentioning about is now scientifically measurable.

Studies show that about 15 % of negative ions are inhaled and 85 % are absorbed by skin. The electrons are heavy particles and do not move long distances in air. Hence in the Oxygen mask method, the carbon brush is placed just few centimeters away from the nose. When measured by air ion meter, the area of mask where the nose is located showed very high concentration of electrons in the range of 3 trillion per cubic centimeter. These electrons get coupled with Oxygen molecule making it a negative ion. As above mentioned, one Oxygen molecule will attach to 4 electrons. A lot of electrons get directly absorbed into the airway and lungs and absorbed in blood. Since air has 20 % Oxygen, taking the electrons through 100 % Oxygen will be roughly 5 times more potent than by taking through air. The therapy time is 4 hours once or twice a day and can be repeated as per patient's clinical condition.

The skin has 1,00,000 Ohm resistance[4] and is a bad conductor of electricity. Still 85 % negative ions are absorbed by the skin through its pores. To reduce the skin resistance, I have added disposable ECG electrodes in the market which are already FDA approved for human use. The Silver Nitrite in the electrodes reduce the skin resistance to just 100 Ohm so that major quantity of electrons can be absorbed. As mentioned earlier, electrons can-not travel long distance. Hence, it is necessary to place them over an artery so that they travel along the blood stream throughout the body. The ECG electrode is precisely placed over radial artery for same reason. Alternately, it can be given over any superficial artery as DorsalisPedis and also over any well visible superficial vein. The blood is the most conductive element of the human body due to its salt content of 0.9 gm/dl. The blood also as only 100 Ohm of electrical resistance. The electrons given over artery or a vein immediately circulate through the body by the stream of blood and its conductivity taking them to every corner of the body. The output of the electron generator is 65 Volts. It has a minute current, and the product of two according to Ohm's law is just 0.0325 Watt. The terminal ECG connector can be easily touched with bare hands and gives no shock. It is the current that is harmful and not voltage. Static electricity has a voltage from 50,000 Volt to million volts. But the current is negligible, hence it is believed that nobody has ever died with the shock of static electricity. The high voltage accelerates the electrons and the penetrability and travel in the body is much better because of it. The FDA allows maximum 5 m Amp of AC current and 15 milliamps of DC current [3] be passing through human body. In the transcutaneous and Intravenous variant of the Lifetron therapy, the actual current passing through the body was measured by a multimeter connected in series and was found to be just 0.5 milliamps. Since it is DC current, it is 30 times less than the 15 milliamps current allowed by the FDA. An "Electrosurgical Unit" (or ESU) uses high currents (e.g. 10 amperes) at high frequency (e.g. 500 kHz) with various modes to cut or coagulate various human tissues. Electrocautery is FDA approved and in therapy for more than 100 years now. In electroconvulsive therapy (ECT) used in psychiatry typically, 70 to 120 volts electricity is applied externally to the patient's head resulting in approximately 800 milliampere of direct current passed through the brain, for 100 milliseconds to 6 seconds duration. ECT is also FDA approved for use on human brain. In Lifetron therapy, the current used is far negligible compared to the electrocautery and ECT which are FDA approved therapies.

The intravenous Lifetron therapy device pumps electrons through a stainless-steel wire directly into the blood stream. This option is for patients who are critically ill or had a recent cardiac arrest. Since the 1,00,000 Ohm skin resistance is bypassed, this option is the most effective. But it requires higher skill on the part of the doctor. Both the devices of Lifetron therapy are described for the first time in medical literature and commercialized at a reasonable cost of Rs. 15,000. Two patents have been registered at Mumbai office for the devices.

The Lifetron therapy is not to be confused with giving electricity to the human body. If regular 12 Volt AC or DC electricity is given to the human body by placing each terminal in each hand, the electrons are only moving from one negative terminal into another. It means that electrons are moving from negative terminal (Anode) to the positive terminal (Cathode) without net gain of electrons to the human body. In Lifetron therapy, there is only one terminal which is negatively charged called Anode. Due to high voltage, the electrons from Anode sprinkle like a fountain into the air like free particles and not as a flow as in case of electricity.

Pure water can-not store electrical charge and is a bad conductor of

electricity. That is why I have added the carrier of electrons in water, the Oxygen. Oxygen is soluble in water with a maximum concentration of 10 ppm. This dissolved Oxygen is the basis for survival of the entire marine life. Without it, organisms in water can-not survive. Oxygen has affinity for electrons and get coupled with 4 electrons per molecule. The ancient scriptures stated that there is waterprana as well. It appears to be this Oxygen molecule with electrons. I label this water with Oxygen coupled with electrons as Lifetron water. It is prepared as follows. Pure distilled water is taken in a metal glass. Oxygen from cylinder or Oxygen concentrator is bubbled by a plastic tube for 15 minutes. The dissolved Oxygen is measured by dissolved Oxygen meter and is around 8-10 ppm. Now, this stainless-steel glass is placed on a steel plate and the output of electron generator given to the plate for 15 minutes. The Oxygen in the water gets coupled with electrons and is measured by ion meter and was found to be 30,000 ions per cubic centimeter. This water was stored for 15 days in plastic bottle. After 15 days also, water maintained its electrical charge. The patient can be given this water to drink orally as medicine. Lifetron water can act as antioxidant due to its electron donating ability. Alternately, a water glass can be put on organic materials which absorb static electricity from atmosphere. The Oxygenated water gets charged with electrons. Lifetron water therapy is for inflammatory diseases of the gastrointestinal tract.

Since ancient times, women wear large silver bracelets on arms. The electrons in the air charge the silver bracelets and ultimately absorbed by the body. There is a tradition of drinking water and eating food from highly electrically conductive metals such as copper, silver and gold. Certainly, these metal utensils are charged with electrons in the air and these electrons subsequently charge food and water.

Earth is a great reservoir of electrons. In old days, people used to walk barefooted and used to get electrons through the earth. Nowadays, we use foot ware of synthetic material which is bad conductor of electricity. The floor in the house is also many times made up of synthetic materials which are bad conductors of electricity. Hence, we do not get enough electrons from nature due to our modified lifestyle. So, it has become necessary to artificially supplement electrons into human body. Ayurveda has SonaChandiChyawanprashas a tonic which claims good health and immunity. It contains gold and silver particles. Ayurveda has SuvarnaPrashan therapy which gives fine gold particles to patients orally. Both the therapies contain gold and silver particles which are electrical highly conductive which are absorbed by cells. Due to their high affinity to electrons, these metals will attract more electrons and store them for a long time. All above examples prove that ancient civilizations had detailed knowledge of electrons and negative ions. But, as a fellow of science, I wish to do more research in these matters before I can believe it.

Human cells have an electric potential of about 40 to 80 millivolts (0.04 to 0.08 volts) across their cell membranes. Resting cells are negatively charged on the inside, while the outside environment is more positively charged. Bioelectrical currents (and potentials) of human tissue, recorded from the skin surface by electrocardiograph (E.C.G.), electroencephalograph (E.E.G.), electromyography (E.M.G.) and similar sensitive devices, are widely used in medicine to diagnose the condition of various vital organs. The human body produces 0.7 Volt electricity. Bioelectricity is one of the fundamental forms of energy in the human body. In the form of moving action potentials, it is the basis for such central bodily functions as conduction of motor, autonomic, or sensory messages along the nerves; muscle contraction; and brain function. The average human, at rest, produces around 100 watts of power. This equates to around 2000 kcal of food energy, which is why your recommended daily intake of calories is around 2000 kcal. I believe that electron supplements by various routes in Lifetron therapy may enhance this bioelectricity. I am performing a study on it and will be published shortly.

Air ionizers are used in air purifiers to remove particles from air. Airborne particles become charged as they attract charged ions from the ionizer by electrostatic attraction. The particles in turn are then attracted to any nearby earthed (grounded) conductors, either deliberate plates within an air cleaner, or simply the nearest walls and ceilings. The frequency of nosocomial infections in British hospitals prompted the National Health Service (NHS) to do research the effectiveness of anions for air purification, due to repeated airborne Acinetobacter infections in a ward. It was completely eliminated by the installation of a negative air ionizer. The infection rate fell to zero,

an unexpected result. Positive and negative ions produced by air conditioning systems have also been found by a manufacturer to inactivate viruses including influenza.

Free radicals [5] are produced in nearly all diseases communicable and non-communicable. They are supposed to be a common denominator to a lot of diseases in human body. The Nobel Prize in Chemistry 1971 was awarded to Gerhard Herzberg for his contributions to the knowledge of electronic structure and geometry of molecules, particularly free radicals. Free radicals are chemical species possessing an unpaired electron that can be considered as fragments of molecules and which are generally very reactive. They are produced continuously in cells either as accidental by-products of metabolism or deliberately during, for example, phagocytosis. The most important reactants in free radical biochemistry in aerobic cells are oxygen and its radical derivatives (superoxide and hydroxyl radical), hydrogen peroxide and transition metals. Other important oxygen-containing free radicals in many disease states are anion radical, hydrogen peroxide, oxygen singlet, hypochlorite, nitric oxide radical, and peroxy-nitrite radical. Cells have developed a comprehensive array of antioxidant defenses to prevent free radical formation or limit their damaging effects. These include enzymes to decompose peroxides, proteins to sequester transition metals and a range of compounds to 'scavenge' free radicals. Reactive free radicals formed within cells can oxidize biomolecules and lead to cell death and tissue injury. Establishing the involvement of free radicals in the pathogenesis of a disease is extremely difficult due to the short lifetimes of these species. These are highly reactive species, capable in the nucleus, and in the membranes of cells of damaging biologically relevant molecules such as DNA, proteins, carbohydrates, and lipids. Free radicals attack important macromolecules leading to cell damage and homeostatic disruption. Targets of free radicals include all kinds of molecules in the body. Among them, lipids, nucleic acids, and proteins are the major targets.

Oxidative stress [5] is the term is used to describe the condition of oxidative damage resulting when the critical balance between free radical generation and antioxidant defenses is unfavorable. Oxidative stress, arising as a result of an imbalance between free radical production and antioxidant defenses, is associated with damage to a wide range of molecular species including lipids, proteins, and nucleic acids. These injured tissues produce increased radical generating enzymes (e.g., xanthine oxidase, lipogeneses, cyclooxygenase) activation of phagocytes, release of free iron, copper ions, or a disruption of the electron transport chains of oxidative phosphorylation, producing excess ROS (Reactive oxygen species). The initiation, promotion, and progression of cancer, as well as the side-effects of radiation and chemotherapy, have been linked to the imbalance between reactive Oxygen species (ROS) and the antioxidant defense system. ROS have been implicated in the induction and complications of diabetes mellitus, age-related eye disease, and neurodegenerative diseases such as Parkinson's disease.

An antioxidant is a molecule stable enough to donate an electron to a rampaging free radical and neutralize it, thus reducing its capacity to damage. For the discovery of vitamin C and its role as antioxidant, Albert Szent-Györgyi received a Nobel Prize in medicine in 1937. These antioxidants delay or inhibit cellular damage mainly through their free radical scavenging property. [6] Antioxidant is a substance that opposes oxidation. They are classified as lipophilic and hydrophilic depending upon their solubility. According to their mechanism of action they are classified as primary and secondary antioxidants. Antioxidants are again classified as synthetic and natural based upon their origin. These low-molecular-weight antioxidants can safely interact with free radicals and terminate the chain reaction before vital molecules are damaged. Some of such antioxidants, including glutathione, ubiquinol, and uric acid, are produced during normal metabolism in the body. [7] Other lighter antioxidants are found in the diet. Although there are several enzymes system within the body that scavenge free radicals, the principle micronutrient (vitamins) antioxidants are vitamin E (α -tocopherol), vitamin C (ascorbic acid), and B-carotene. [8] The body cannot manufacture these micronutrients, so they must be supplied in the diet.

Two principle mechanisms of action have been proposed for antioxidants. [9] The first is a chain-breaking mechanism by which the primary antioxidant donates an electron to the free radical present in the systems. The second mechanism involves removal of

ROS/reactive nitrogen species initiators (secondary antioxidants) by quenching chain-initiating catalyst. Antioxidants may exert their effect on biological systems by different mechanisms including electron donation, metal ion chelation, co-antioxidants, or by gene expression regulation.

Glutathione is body's own powerful antioxidant composed of three amino acids - cysteine, glycine, and glutamate. Glutathione can be found in virtually every cell of the human body. Its levels decrease as a result of aging, stress, and toxin exposure. Glutathione is costly and can be given as oral supplements but bioavailability is very poor. That limits its use as an antioxidant.

In Lefetron therapy, the electrons ultimately act as primary antioxidant. The circulating electrons in blood stream can directly get attached to the free radicals which are deficient in electrons and neutralize them. For decades, researchers wondered that the Oxygen without which human life is not possible is in fact a free radicle. This fact appeared paradoxical in the sense that Oxygen which is essential and life-saving on one side is also a free radicle that leads to oxidative stress [10] and damage to the body. This article clears the paradox for the first time in medical literature. I postulate that there is a dual behavior of Oxygen with reference to human body. The Oxygen molecule which is not coupled with 4 electrons is a free radicle and will lead to oxidative stress and damage to the body. Oxygen molecule has four vacancies for electrons. The same Oxygen molecule when coupled with 4 electrons is healthy and in fact act as a primary antioxidant which will neutralize free radicals and a cure for oxidative stress. The same Oxygen molecule after donating electrons can get coupled with the electrons coming in blood stream or from lungs and again donate them, thus a complete cycle is produced. It means that the Oxygen molecule acts as a carrier of electrons. I called only this Oxygen molecule saturated with 4 electrons as a Lifetron. The Oxygen makes up a whopping 65 percent of the human body by weight. This major volume tells us the importance of Oxygen in human life and the potential dangers if it is deficient in electrons. Electrons and Oxygen, both can easily cross blood brain barrier, blood placental barrier and blood bone marrow barrier hence can show their effects thought the human body. In a study, one iron bar was subjected to negative ions and another to ordinary air kept as a control. The iron bar exposed to negative ions did not rust but the one exposed to air rusted completely. These studies prove that negative ions can stop oxidative damage In Vitro. The same protective effect of negative ions happens inside human body protecting it from oxidative damage.

The therapy will be effective against a vast majority of diseases of the oxidative stress [11] such as in atherosclerosis, inflammatory condition, certain cancers, and in the process of aging. It can also be effective in all inflammatory diseases such as arthritis, vasculitis, glomerulonephritis, lupus erythematosus, adult respiratory diseases syndrome, ischemic diseases like heart diseases, stroke, intestinal ischemia, hemochromatosis, acquired immunodeficiency syndrome, emphysema, organ transplantation, gastric ulcers, hypertension and preeclampsia, neurological disorder [11] (Alzheimer's disease, Parkinson's disease, muscular dystrophy), alcoholism, smoking-related diseases, and many others. An excess of oxidative stress can lead to the oxidation of lipids and proteins, which is associated with changes in their structure and functions.

Lifetron therapy can be effective for variety of inflammatory conditions as they all have free radicals involved in their etiopathogenesis. The brain and the gut communicate bidirectionally through the autonomic nervous system (ANS). The Vagus nerve (VN), a major component of the ANS, plays a key role in the neuro-endocrine-immune axis [12] (Figure 6) to maintain homeostasis through its afferents (through the activation of the hypothalamic pituitary adrenal axis and the central ANS) and through its efferent (i.e. the cholinergic anti-inflammatory pathway; CAP). The CAP has an anti-TNF effect (Figure 6) both through the release of acetylcholine at the distal VN acting on macrophages and through the connection of the VN with the spleen through the splenic sympathetic nerve. Low-frequency (5 Hz) VNS of vagal efferent activates the CAP for an anti-inflammatory effect that is as an anti-TNF therapy (Figure 6) in inflammatory diseases where TNF is a key cytokine as represented by experimental sepsis, postoperative ileus, burn-induced intestinal barrier injury, colitis. However, both vagal afferents and efferent are activated by VNS.

fighting with the micro-organisms.

Lifetron therapy can be helpful in auto immune disorders. Tumor necrotic factor alpha levels (Figure 6) are significantly elevated in many autoimmune disorders (21). Lifetron therapy stimulates the Vegas that reduces levels of Tumor necrotic factor alpha. Vegas is anti-inflammatory at its nerve endings by producing acetyl choline. Thus, autoimmune diseases such as Type 1 diabetes and inflammatory bowel diseases can be benefited.

Lifetron therapy can benefit Type 2 diabetes by neutralizing free radicals and by Vegas mediated reduction of Tumor necrotic factor alpha. TNF- α (Figure 6) is an adipocytokine that has been implicated in the development of insulin resistance (22,23). Dysregulation of TNF- α production has been implicated in a variety of human diseases including type 2 diabetes mellitus. The raised level of TNF- α induces insulin resistance in adipocytes and peripheral tissues by impairing the insulin signaling through serine phosphorylation that leads to the development of T2DM.

The Lifetron therapy can be a treatment for variety of bacterial and viral and fungal infections. There are lots of research articles present which demonstrate the effects of NAIs on the growth of microorganism. The majority of the studies focused on bacteria and the presence of high concentration of NAIs inhibited the growth of bacteria. An early study showed that NAIs caused a significant amount of biological decay of the bacterium *Serratiamarcescens* [24]. Exposure to NAIs showed inactivation or growth inhibition of the bacteria *E. coli*, *Candida albicans*, *Staphylococcus aureus*, *P. fluorescens* [25,26,27,28,29] and has a lethal effect on starved *Pseudomonas veronii* cells. NAIs prevented 60% of tuberculosis (TB) infection and 51% of TB disease [31]. Except for the inhibition effect of NAIs on bacteria, reports also showed that NAIs inhibited the growth of fungi and viruses. For example, NAIs could inhibit the growth of *Penicilliumnotatum*; the use of NAI generators reduced airborne transmission of Newcastle disease virus.

Besides animals/humans and microorganisms, plants might also be affected by NAI exposure. After NAI treatment of *Avena sativa*, the fresh and dry weight were increased [32] and mean stem length and integral elongation were also increased [33]. Oxygen consumption was increased in barley seedlings after exposure to NAIs [34]. Plant height increased by 13–15% and dry weight increased by 18% under the growth environment with high concentrations of NAIs [35]. Lettuce plants exposed to NAIs showed vigorous growth with increased leaf area and fresh weight [36]. NAI treatment improved sprout growth and bacterial control during plant development [37]. NAIs have a positive effect on kale growth by improving fresh weight, macro-elements and microelements [38].

Lifetron therapy may have anabolic effect on human as it may be increasing ATP production in Oxidative phosphorylation or electron transport-linked phosphorylation. It is the metabolic pathway in which cells use enzymes to oxidize nutrients like glucose, thereby releasing the chemical energy of molecular oxygen, [39] which is used to produce adenosine triphosphate (ATP). The electron transfer chain carries electrons in 4 steps and ultimately deliver protons out of mitochondrial membrane. NAD and FAD are the electron carriers which carry electrons which are stripped off the electron rich glucose molecule. These protons enter through ATP synthase enzyme and produce ATP molecules, the energy currency of the cell. It means electrons are necessary for the production of ATP molecules. I have an alternative hypothesis here which is not yet proved. The Oxygen molecule saturated with 4 electrons (Lifetron) can get the electrons inside a cell. These electrons can be carried by the electron transfer chain bypassing glycolysis and glucose-based electrons. The empty Oxygen molecule can retake the electrons in the final fourth and two hydrogen ions to make water. Lastly, the hydrogen ions flow through ATP synthase to make ATP. Thus, apart from glucose-based ATP production, cells might be producing ATP molecules from electrons directly and electron supplementation might increase ATP production. But we need further research to prove it.

Lifetron therapy can stimulate the Vegas nerve and regulate autonomous nervous system [40] and balance it leading to variety of benefits to the patient in the form of regulation of blood pressure, heart rate etc. The therapy stimulates Vegas nerve and reduces stress. The following study in rats proves the claim with a probable mechanism of

action. In a study on spontaneously breathing anesthetized rats, the effects of NAI on physiological responses, such as blood pressure (BP), heart rate (HR), and heart rate variability (HRV) as well as neuronal activity, in the paraventricular nucleus of the hypothalamus (PVN), locus coeruleus (LC), nucleus ambiguus (NA), and nucleus of the solitary tract (NTS) with c-Fos immunohistochemistry was studied. Cervical vagotomy was performed to reveal the afferent pathway involved in mediating the effects of NAI on autonomic regulation. NAI significantly decreased BP and HR, and increased HF power of the HRV spectrum. Significant decreases in c-Fos positive nuclei in the PVN and LC, and enhancement of c-Fos expression in the NA and NTS were induced by NAI. After vagotomy, these physiological and neuronal responses to NAI were not observed. These findings suggest that NAI can modulate autonomic regulation through inhibition of neuronal activity in PVN and LC as well as activation of NA neurons, and that these effects of NAI might be mediated via the Vegas nerves.

Lifetron therapy can regulate the hypothalamic pituitary axis [41] (Figure 6) an intricate pathway with a central role in maintaining homeostasis by integrating complex physiological and endocrine inputs, and neuronal and hormonal output giving variety of health benefits. The role of vagal afferents was first described by Harris in the regulation of the hypothalamic pituitary axis. HPA induces the release of adrenocorticotrophic hormone by the pituitary to stimulate the release of glucocorticoids by the adrenal glands to inhibit peripheral inflammation. Hence, prolonged intake of electrons may increase human life. Since the Vegas nerve supplies pituitary gland, its stimulation will produce more pituitary hormones. German researchers discovered a link between catecholamine regulation and lifespan after depriving experimental animals of negative ions. First, researchers at the Goldstein and Lewin Dept. of Medical Research in Standoffs, Germany isolated mice and rats in air-tight, sealed acrylic cases. Next, they filtered the ambient air to remove all negative ions from the sealed cases. Their research led to the discovery that a prolonged deficiency of negative ions led to an accelerated rate of death for the experimental animals. Examination of the animals led researchers to conclude that the results 'strongly suggest that animal death is related to disturbances in neurohormonal regulation and pituitary insufficiency. [41]

The Lifetron therapy can be an anti-stress therapy by the Vagal nerve stimulation mechanism. Researchers at the Russian Academy of Sciences in Moscow discovered that negative ions are able to help protect the body from induced physical stress [42]. When the researchers immobilized rats and exposed them to negatively charged air ions, they discovered that the ions prevented the development of pathological changes characteristic of acute stress that are observed in untreated rats. The protective action of negative air ions was observed in all the experimental animals independently of their types of behavior. [42]

British researchers at the Centre for Sport and Exercise Sciences in Liverpool exposed male subjects to negative ions and measured physiological responses [43], including body temperature, heart rate and respiration, while at rest and during exercise. Negative ions were found to significantly improve all physiological states, particularly during rest. Most important was the finding that negative ions are "biologically active and that they do affect the body's circadian rhythmicity." [43]

Another clue to the role of negative ions in health comes from Russian research [44] conducted at the Institute of Theoretical and Experimental Biophysics of the Russian Academy of Sciences, in Pushchino, Russia. Researchers found that exposure to negative ions increased levels of the protective antioxidant enzyme superoxide dismutase (SOD) in mammalian erythrocytes. The researchers also discovered minute amounts of H₂O₂ (hydrogen peroxide), writing, "The primary physicochemical mechanism of beneficial biological action of negative air ions is suggested to be related to the stimulation of superoxide dismutase activity by micromolar concentrations of H₂O₂ (hydrogen peroxide)." [44]

Lifetron therapy can improve circadian rhythms and reduce allergies and migraines and improve cognitive function. Negative ion atmospheric loading has been reported to affect a range of psychological functions [45] from alertness to circadian rhythms, and has been suggested to benefit a variety of medical conditions, from allergies to migraine. In a double-blind study planned to assess the

effect of negative ions on cognitive performance in human volunteers, 65 female graduate course students were randomized into ionized atmosphere (n = 34) and control (n = 31) groups. The following cognitive tasks were administered: Digit Symbol Substitution Test, Addition Test, Visual Memory (Complex Figure) Test, verbal memory (Complex Passage) Test, Ideational Fluency Test and Clerical Speed and Accuracy test. On all but the last two tests, the negative ion group performed significantly better (to a 15-40% extent) than controls. It is concluded that negative ionization of the atmosphere by artificial means may be of benefit in certain common, practical situation in which depletion of these ions occurs.

Lifetron therapy can play a major role in septicemia due to bacterial and viral infections. The therapy stimulates killer T cells which can kill micro-organisms. The therapy has a direct potential of killing a variety of bacteria, viruses' fungi etc. Systemic immune response syndrome (SIRS) and cytotoxic storm of sepsis are extremely challenging conditions to treat. Although we are successful in killing the micro-organisms, SIRS[46] can still kill the patient. SIRS further lead to Multiple Organ Dysfunction Syndrome (MODS). Steroids can be given in this situation but quite risky as they suppress the immune system and lead to a lot of side effects. Lifetron therapy acts in sepsis and SIRS by Vegas nerve mediated regulation of metabolic homeostasis, and the efferent Vegas nerve-mediated control of immune function and proinflammatory response via the cholinergic inflammatory reflex. The therapy also corrects the autonomous dysfunction and correct the high pulse rate and low blood pressure in sepsis. Tumor necrosis factor alpha is a proinflammatory mediator in the pathogenesis of the SIRS. Lifetron therapy reduces tumor necrotic factor alpha levels through Vegas nerve. It has been previously demonstrated that TNF [47] plays a major role in SIRS secondary to infection, burns, trauma, hemorrhagic shock, and pancreatitis. Systemic inflammatory response syndrome (SIRS) is an exaggerated defense response of the body to a noxious stressor (infection, trauma, surgery, acute inflammation, ischemia or reperfusion, or malignancy to name a few) to localize and then eliminate the endogenous or exogenous source of the insult. It involves the release of acute-phase reactants which are direct mediators of widespread autonomic, endocrine, hematological and immunological alteration in the subject. Even though the purpose is defensive, the dysregulated cytokine storm has the potential to cause massive inflammatory cascade leading to reversible or irreversible end-organ dysfunction and even death. Lifetron therapy can be effective against cytotoxic storm of Covid 19 infection which is the major cause of death due to Novel Corona virus.

I do not claim to know about every aspect of the Lifetron therapy in this article. This is only the beginning of a modern evidence-based research on the subject. I agree that many clinical trials would be necessary to know more about the therapy and its benefit on various diseases. I am conducting a few clinical trials myself which will be published later on. This particular article is about the extensive hypothesis of the therapy and its potential applications in medical sciences.

Conclusions: This research reports a lot of facts for the first time in the medical literature. Lifetron therapy is a cheap, effective and safe therapy for a vast number of diseases. The electrons supplied by Lifetron therapy can neutralize free radicals and reduce oxidative stress acting as antioxidants. The Oxygen molecule without electrons is a free radical leading to oxidative stress, but the same molecule coupled with 4 electrons becomes an antioxidant neutralizing free radicals. The therapy works by stimulating Vegas nerve which leads to metabolic homeostasis. The Vegas nerve stimulates the hypothalamic pituitary adrenal axis leading to various health benefits. The therapy leads to the anti-inflammatory effect through efferent Vegas nerve-mediated control of immune function and proinflammatory response via the cholinergic inflammatory reflex. Lifetron therapy has a potential to save many lives worldwide. We need many clinical trials to understand its exact indications, dosages and duration and exact mechanism of action in various disease conditions.

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