

Hydrogen Peroxide

Ozone (O3) is created when radiation (ultraviolet light) from the sun interacts with oxygen (O2) in the atmosphere. O3 is heavier than O2 and falls toward the earth. In the lower atmosphere, ozone (03) encounters water vapor and forms hydrogen peroxide (H2O2). Rain water and snow contain a small percentage of hydrogen peroxide which acts as a natural disinfectant in lakes, rivers and oceans.

Many cities in Europe use ozone and hydrogen peroxide in their drinking waters. Hydrogen peroxide, ozone and ultraviolet light are a simple and effective combinations for drinking water sanitation. Ozone and ultraviolet light also works. Some cities in Europe have been purifying their drinking water with ozone since 1901. Ultraviolet light is used to disinfect surgical instruments, bedding, air, skin, body fluids, etc. of viruses and bacteria. Bacterial and viral disinfection with ozone works up to 5000 times faster than chlorine. Many brands of bottled water that you buy in this country have been ozonated for your protection. Hydrogen peroxide is found in all fresh fruits and vegetables, some of it comes from rain water and some of it is manufactured in the photosynthesis process. Eating fresh fruits and vegetables (preferably organic) in their raw state helps get this healing oxygen into our bodies.

Hydrogen peroxide is really hydrogen dioxide. Its chemical formula is H2O2.

Hydrogen peroxide contains one more atom of oxygen than water does. Boiling point: 286° F (141° C) and Freezing point: 12° F (-11° C). Hydrogen Peroxide is a chemical compound that is a colorless, syrupy, oxidizing liquid, capable of reacting explosively with combustibles. When stored under the proper conditions, it is a very stable compound.

Hydrogen Peroxide is used in a water solution as a mild antiseptic, a bleaching agent, an oxidizing agent, and as a laboratory reagent. Hydrogen Peroxide is soluble in alcohol or ether. Commercial Hydrogen Peroxide usually has a small amount of stabilizer (acetanilide) in it. Hydrogen Peroxide is available for household use as a 3% (by weight) water solution; it is used as a mild bleaching agent and medicinally as an antiseptic. Recent studies indicate that Hydrogen Peroxide is toxic to new cells and is not recommended for wound care.

A 3% solution of Hydrogen Peroxide is sometimes called ten volume strength, (one volume of Hydrogen Peroxide releases ten volumes of oxygen when it decomposes). A pint of the food-grade 35% solution contains the equivalent of 130 pints of oxygen. A pint of 3% hydrogen peroxide found at a local drugstore contains 10 pints of oxygen. A pint of the 6% solution, used to bleach hair, contains 20 pints of oxygen. When kept in the absence of light and contaminants, it dismutates (breaks down) very slowly at the rate of about 10% a year. Storing the hydrogen peroxide in the freezer slows this process.

Hydrogen Peroxide is an very powerful unstable oxidant. Hydrogen Peroxide is a natural substance found in trace amounts in rain and snow. Rain combines with ozone (O3) in the upper atmosphere. When water and ozone mix, the ozone loses one oxygen molecule to the water and hydrogen peroxide is formed. Hydrogen peroxide is very unstable and breaks down readily into water and a single oxygen molecule. Oxygen is stable only when the molecules are paired (O2). A single oxygen molecule is a strong oxidizing and disinfecting agent.

Grades of Hydrogen Peroxide

3% Hydrogen Peroxide (Drug Store / Grocery Store Variety)

Made from Diluted 50% Super D Peroxide.

Contains stabilizers: phenol, acetanilide, sodium stanate, tetrasodium phosphate, etc.

6% Hydrogen Peroxide (Used by Beauticians in Hair Coloring)

Comes in strengths labeled 10, 20 and 40 volume. Activator added to use as a bleach.

Unknown Stabilizers.

30% Re-Agent Hydrogen Peroxide

Used in medical research. Contains stabilizers.

30-32% Electronic Grade Hydrogen Peroxide

Used for washing transistors and integrated chip parts before assembly. Unknown Stabilizers.

35% (also 10%) Technical Grade Hydrogen Peroxide

Contains a small amount of phosphorus to neutralize any chlorine in the water it is combined with.

35% Food Grade Hydrogen Peroxide / 50% Food Grade Hydrogen Peroxide Used in food products like cheese, eggs, whey products.

Also used to spray inside of foil lined containers for food storage (antiseptic packaging system).

You can find food grade hydrogen peroxide in 3%, 6%, 7%, 12%, 17%, 35%, 40% or 50% solutions.

Consumption of any concentration of hydrogen peroxide above 10% can cause neurological damage.

90% Hydrogen Peroxide

Used by the military as a source of Oxygen, at Cape Canaveral and as rocket fuel.

99.6% Hydrogen Peroxide

This was first made in 1954 as an experiment to see how pure hydrogen peroxide could be made.

Production of Hydrogen Peroxide

Methods of Producing Hydrogen Peroxide:

1. Mix Barium Peroxide with Sulfuric Acid.

Barium Sulfate settles to the bottom and Hydrogen Peroxide is drained off, then vacuum distilled to concentrate.

2. Treat water with ultraviolet light.

- 3. Run electricity through water (silent or open spark method).
- 4. Bubble Ozone (03) through cold water.

Hydrogen Peroxide has been a commercial product since the 1880's. Burning barium salts produces barium peroxide which is dissolved into water yielding Hydrogen Peroxide. In the 1920's - 1950's, the primary method of production was electrolytic.

Hydrogen Peroxide is prepared commercially by oxidation of alkylhydroanthraquinones, by electrolysis of ammonium bisulfate, by reaction of barium peroxide with sulfuric acid and is prepared (with acetone) by oxidation of isopropanol. Bubbling ozone through water also produces hydrogen peroxide. Almost all commercial production of Hydrogen Peroxide uses the auto-oxidation of anthraquinones. A solution of alkylated anthraquinones is hydrogenated (using a nickel or a palladium catalyst) and then air oxidizes the solution to produce Hydrogen Peroxide. The solution (water insoluble) is then separated from the Hydrogen Peroxide by solvent extraction, concentrated and returned to the hydrogenator. The crude 40% Hydrogen Peroxide solution is purified by distilling it to around 60%. The Hydrogen Peroxide is then diluted to 35% or 50%, distilled to 70%, and/or purified for high-purity uses.

Deionized / low acidity water is used to manufacture commercial solutions of Hydrogen Peroxide. Inorganic processes employ the electrolysis of an aqueous solution of sulphuric acid or acidic ammonium bisulphate (NH4HSO4), followed by hydrolysis of the peroxydisulfate ((SO4)2) which is formed. Organic production of Hydrogen Peroxide include the auto-oxidation of hydroquinone (C6H4(OH)2) or one of its homologues in a suitable solvent system and the partial gas-phase oxidation of hydrocarbons. High strength Hydrogen Peroxide or high-test Hydrogen Peroxide (HTP) must be stored in vented containers to prevent pressure buildup. Containers must be made of polyethylene or aluminum (not stainless steel) and be cleaned of all impurities.

Electrochemical Hydrogen Peroxide Generator

October 2010 NASA Tech Briefs:

Stable electrocatalysts can produce hydrogen peroxide under acidic conditions.

Two-electron reduction of oxygen to produce hydrogen peroxide is a much researched topic. Most of the work has been done in the production of hydrogen peroxide in basic media, in order to address the needs of the pulp and paper industry. However, peroxides under alkaline conditions show poor stabilities and are not useful in disinfection applications. There is a need to design electrocatalysts that are stable and provide good current and energy efficiencies to produce hydrogen peroxide under acidic conditions.

The innovation focuses on the in situ generation of hydrogen peroxide using an electrochemical cell having a gas diffusion electrode as the cathode (electrode connected to the negative pole of the power supply) and a platinized titanium anode. The cathode and anode compartments are separated by a readily available cation-exchange membrane (Nafion® 117). The anode compartment is fed with deionized water. Generation of oxygen is the anode reaction.

Protons from the anode compartment are transferred across the cation-exchange membrane to the cathode compartment by electrostatic attraction towards the negatively charged electrode. The cathode compartment is fed with oxygen. Here, hydrogen peroxide is generated by the reduction of oxygen. Water may also be generated in the cathode. A small amount of water is also transported across the membrane along with hydrated protons transported across the membrane. Generally, each proton is hydrated with 3–5 molecules.

The process is unique because hydrogen peroxide is formed as a high-purity aqueous solution. Since there are no hazardous chemicals or liquids used in the process, the disinfection product can be applied directly to water, before entering a water filtration unit to disinfect the incoming water and to prevent the build up of heterotrophic bacteria, for example, in carbon based filters.

The competitive advantages of this process are:

- 1. No consumable chemicals are needed in the process. The only raw materials needed are water and oxygen or air.
- 2. The product is pure and can therefore be used in disinfection applications directly or after proper dilution with water.

3. Oxygen generated in the anode compartment is used in the electrochemical reduction process; in addition, external oxygen is used to establish a high flow rate in the cathode compartment to remove the desired product efficiently. Exiting oxygen can be recycled

after separation of liquid hydrogen peroxide product, if so desired.

4. The process can be designed for peroxide generation under microgravity conditions.

5. High concentrations of the order of 6–7 wt% can be generated by this method. This method at the time of this reporting is superior to what other researchers have reported.

6. The cell design allows for stacking of cells to increase the hydrogen peroxide production.

7. The catalyst mix containing a diquaternary ammonium compound enabled not only higher concentration of hydrogen peroxide but also higher current efficiency, improved energy efficiency, and catalyst stability.

8. The activity of the catalyst is maintained even after repeated periods of system shutdown.

9. The catalyst system can be extended for fuel-cell cathodes with suitable modifications.

This work was done by Charles L.K. Tennakoon, Waheguru Singh, Kelvin C.

Anderson, and Thomas Kinney of Lynntech, Inc. for Johnson Space Center. In accordance with Public Law 96-517, the contractor has elected to retain title to this invention.

Inquiries concerning rights for its commercial use should be addressed to:

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Refer to MSC-23874-1, volume and number of this NASA Tech Briefs issue, and the page

36 number.

Hydrogen Peroxide Stabilizers

Most commercial solutions of Hydrogen Peroxide contain stabilizers (chelating and sequestering agents) which have been added to minimize decomposition of the product through transport and storage. In some applications a high degree of stabilization is

required and in others product purity is important. Stabilizers in Hydrogen Peroxide vary between producers and product grades. Stabilizers are added prior to shipping and storage. Stabilizers may improve the performance of Hydrogen Peroxide, depending upon the application. Types and levels of stabilization depend on the grade of Hydrogen Peroxide.

Stabilizers consist of chelants/sequestrants (inorganic/organic phosphates) and/or stannate and silicate. Some stabilizers (stannate) are alkaline, most (phosphonic acids) are acidic and exhibit buffering properties which add acidity to the product. Colloidal stannate and sodium pyrophosphate (present at 25 - 250 mg/L) are standard stabilizers. Organophosphonates are also common. Other additives may include nitrate, phosphoric acid and colloidal silicate. The amount and type of stabilizers used varies between producers, product grades, and Hydrogen Peroxide concentrations.

Hydrogen Peroxide is colourless and odourless. H2O2 bought in drug stores and supermarkets contain stabilizers. Pour 1/2 cap of hydrogen peroxide in a glass of distilled non-chlorinated water and place it in the sun to see if it contains stabilizers. If the colour has a yellowish or other colour, a stabilizer was added. If the H2O2 solution is colourless, it might not have a stabilizer added. Another test: hydrogen peroxide poured into a clean glass, covered with a dish and left in the sun, should not have air bubbles, if there are air bubbles, there are metal contaminants. To test drinking water: add 10% of 3% non-stabilized H2O2 to 90% tap or well water and wait at least 6 hours. If there are a lot of air bubbles after 6 hours, the tap or well water has to much organic residues or heavy metals. After testing the water discard it or dilute it and use it to water a plant or plants.

Decomposition of Hydrogen Peroxide

Hydrogen Peroxide decomposes into water and oxygen when heated above about 80°C and in the presence of catalysts (metals, acids, or oxidizable organic materials).

Decomposition of H2O2: increased temperature, increased pH (pH 6-8), contamination (reactive metals: copper, manganese, iron, etc.), exposure to ultraviolet light.

Contamination and pH together, increase decomposition of H2O2. Commercial grades of Hydrogen Peroxide contain stabilizers designed to minimize decomposition. Hydrogen

Peroxide decomposition is accelerated by trace levels of contaminants. The degradation by-products are usually acidic. H2O2 solutions are more stable at low pH. Some producers may add mineral acids (phosphoric acid or nitric acid) in the production process or after to further lower the pH. Cleaning metal containers or piping with dilute nitric acid removes surface contaminants and imparts a protective oxide layer to the surface metal. Limit exposure of Hydrogen Peroxide to heat, sunlight, dust or other contaminants.

Purifying Hydrogen Peroxide

Ways to purify Hydrogen Peroxide are hard to find in print because it is very dangerous. A safer approach is sparging, followed by fractional freezing. Sparging takes advantage of the fact that warm (not hot) air will evaporate water. In concentrations above 62%, Hydrogen Peroxide will freeze before the water. Below a 62% concentration, the water will freeze first, until the liquid solution reaches 62%. Hydrogen Peroxide tends to supercool below its freezing point without freezing. Dropping a seed crystal of frozen Hydrogen Peroxide into the Hydrogen Peroxide causes it to freeze.

Exact data on the purification of hydrogen peroxide is hard to come by. Most people with hydrogen peroxide experience know how hazardous hydrogen peroxide can be. Amateurs calculate the numbers from the basic properties, such as the freezing point of hydrogen peroxide and the freezing point of water. Hydrogen Peroxide is a powerful oxidizer and can be used to produce bombs. Terrorists and bomb makers know this. It is too bad that high concentrations of hydrogen peroxide cannot be sold as an additive for gasoline engine automotives to improve mileage and efficiency. "Homeland Security" has new rules; requiring an adult signature for H2O2 shipments and delivery.

Hydrogen Peroxide Safety and Storage

Accidents can occur with hydrogen peroxide when directions and safety precautions are not followed.

- 1. Keep hydrogen peroxide out of the reach of children.
- 2. Never transfer hydrogen peroxide into unlabeled or improperly labelled containers.
- 3. If hydrogen peroxide is accidentally spilled on the skin, flush the area immediately with running water.
- 4. If hydrogen peroxide is accidentally ingested, drink large amounts of water to dilute. Stay upright and contact your doctor. It could be toxic or fatal if swallowed at full strength.
- 5. In case of concentrated hydrogen peroxide spills, dispose of according to Federal, State and local regulations. Flush the spill area with plenty of water. Do not return the spilled material to the original container. Prevent undiluted hydrogen peroxide from entering into the sewage system. Report spills in compliance with Federal, State or Local regulations. Large quantities, such as drums, should be stored in a cool, dry area. Concentrations of hydrogen peroxide in contact with organic materials may form explosive mixtures (spontaneous combustion).

Small quantities of 35% food grade hydrogen peroxide should be stored in the freezer, wrapped in black plastic and labelled: DANGER HYDROGEN PEROXIDE. Thirty-five percent food grade hydrogen peroxide will not freeze unless the temperature is -33° degrees below zero.

Urea Hydrogen Peroxide

Urea hydrogen peroxide is an odourless, nontoxic, white crystalline powder which releases hydrogen peroxide upon application. Urea hydrogen peroxide has an active oxygen content equivalent of 35% H2O2. Urea Hydrogen Peroxide is useful as a bleaching agent, antiseptic and disinfectant for a wide range of applications. Compared with hydrogen peroxide and peracetic acid, it offers many advantages including sterilizability, a broader disinfect spectrum, lower concentrations and is free of residual poison.

In the treatment of cancer, urea hydrogen peroxide is used as anti-liver-ascites agent. It is also applied for treating and nourishing the scalp and hair to promote conditions for the natural growth of hair on the human head for the reversal of male pattern baldness in individual cases. Tooth paste formulated with urea hydrogen peroxide has additional benefits over normal formulations. These benefits include cleanup of tooth spot, elimination of bacteria, reduction of tooth decay and other dental diseases. It functions as an antiseptic agent and deodorant neutral detergents.

Calcium Peroxide & Magnesium Peroxide

Calcium peroxide (CaO2) and magnesium peroxide (MgO2) are solid peroxygens (oxidizers). They decompose slowly and release oxygen at a "controlled" rate. Calcium Peroxide is a stable oxygen releasing chemical for use in increasing applications in groundwater remediation, waste water treatment, soil decontamination, oxygen supply for plants, fish pond oxygenation, etc. Magnesium Peroxide is another stable oxygen source for use in groundwater remediation, bioremediation of contaminated soils. They are used in bioremediation & composting operations, and as a coating for seeds to improve germination and seedling survival rates.

Magnesium peroxide was developed more than a century ago by Dr. F. M. Eugene Blass & Nicola Tesla. The foremost proponent of magnesium peroxide therapy in the U.S. was Dr. F. M. Eugene Blass. Dr. Blass compiled years of clinical and expert reports along with testimonials of the results obtained using magnesium peroxide therapy.

In the early 1930s, Dr. F. M. Eugene Blass found that stabilized oxygen in magnesium peroxide destroyed bacteria, viruses, fungi, protozoa, and parasites. Dr. Blass' research suggests hyper-oxygenation could help the body purge heavy metals, chemicals, and toxins. Blass believed that increased oxygen enhances the body's ability to utilize vitamins, minerals, and amino acids from the food we eat.

Fast the day before beginning a magnesium peroxide therapy regimen. When using magnesium peroxide, make sure you are always in close proximity to a bathroom. If you have the urge to pass gas, make sure you are sitting on the toilet, because you will soil your

pants. After finishing the magnesium peroxide therapy regimen, you will probably have bowel movements like you did when you were a child. If haemorrhoids have been a problem in the past, you will probably not have any reoccurrences. A magnesium peroxide therapy regimen will liquefy the entire contents of your intestines and colon better than an enema will.

Hydrogen Peroxide in Nature

One natural source of hydrogen peroxide is found in the healing waters of Lourdes, France. The Virgin Mary, Our Lady of Lourdes, appeared to Bernadette and told her to dig in the rock on the banks of the Pau River and immediately a miraculous spring sprung forth. The Virgin Mary told her to "drink the water and bathe in it". Since then, many sick people have been healed after drinking and bathing in the waters of Lourdes, France. The water has a high magnetic field, contains high amounts of germanium and has high amounts of hydrogen peroxide (around .25%).

Hydrogen Peroxide is produced by animal and plant cells in the mitochondrial respiratory chain, and with the hydroxylation and oxygenation reactions. Mother's milk contains high amounts of hydrogen peroxide, the amount contained in the first milk (colostrum) is even higher. Our own immune system produces and uses hydrogen peroxide to destroy bacteria and viruses. The body's immune system also uses hydrogen peroxide to kill cancer cells.

Hydrogen peroxide is produced by the body's T-cells for destroying bacteria, viruses and fungi. Blood platelets release hydrogen peroxide when they encounter particles in the blood stream. Microbes in the body, called peroxisomes, combine water with oxygen to produce hydrogen peroxide, when enough oxygen is available. Acidophilus lactobacillus bacteria produces hydrogen peroxide in the large intestine to stop Candida yeast from multiplying out of control. Dr. Edward Carl Rosenow worked 60 years researching the medical uses of hydrogen peroxide at the Mayo Clinic.

All healthy cells produce energy by oxidizing glucose. Unhealthy cells ferment glucose anaerobically, producing lactic acid. Fermentation produces only 1/6 of the energy that

oxidation does. Cancer cells are starved for energy, and have huge appetites for sugar. Healthy cells manufacture and maintain an enzyme coating to protect them from cellular invasion by viruses and singlet oxygen. Enzyme coatings are catalase, reductase, superoxide dismutase and glutathione peroxidase. Oxygen starved cells do not produce enough enzymes to fortify their cell walls. Diseases and diseased cells have no enzyme coating. Singlet oxygen oxidizes disease microbes and diseased cells that do not have an enzyme coating.

The free-radical dietary supplement, superoxide dismutase (SOD), converts the toxic superoxide radical into Hydrogen Peroxide along with the flavin-linked oxidases. A number of other enzymes such as the heme to Containing catalase (in mitochondrial peroxisomes) decompose the Hydrogen Peroxide into oxygen to protect the cells from damage. These enzymes are at work when you apply H2O2 topically to a cut or wound and see foaming. Whitening of the skin, when exposed to concentrated H2O2, is caused by the H2O2 permeating the skin and oxygen being decomposed by epidural enzymes beneath the epidermis.

Saliva is another source of Hydrogen Peroxide decomposing enzyme. Cell damage is caused by the reactive oxygen species (ROS). ROS are: free radicals, reactive anions containing oxygen atoms, or molecules containing oxygen atoms that can either produce free radicals or are chemically activated by them. Examples: hydroxyl radical, superoxide, hydrogen peroxide, and peroxynitrite. The main source of ROS is aerobic respiration. ROS are cleared from the cell by the action of superoxide dismutase (SOD), catalase, or glutathione (GSH) peroxidase. Superoxide Dismutase (SOD) catalyzes the reduction of superoxide anions to hydrogen peroxide.

Covalent conjugation of superoxide dismutase with Polyethylene Glycol (PEG) has been found to increase the circulatory half-life and provides prolonged protection from partially reduced oxygen species. Cell damage results from the ROS induced alteration of macromolecules in polyunsaturated fatty acids in membrane lipids, essential proteins, and DNA. Oxidative stress and ROS have been implicated in disease states, such as Alzheimer's disease, Parkinson's disease, cancer, and aging.

Using Food Grade Hydrogen Peroxide

--> *Bathing*: Use about 64 oz. (2 quarts) of the of 3% or 3.5% diluted hydrogen peroxide solution in a tub full of warm water. Do not try this before bedtime, because the absorbed oxygen energizes the body and prevents sleep. Soak in the bath for at least 1/2 hour. Add hot water to maintain bath temperature keeping pores and blood vessels dilated, facilitating absorption of oxygen through your skin.

Colonic: Add 1 cup (8 oz.) 3% H2O2 to 5 gallons warm water. (Do not exceed this amount)

Douche: Add up to 6 tablespoons of 3% H2O2 to a quart of warm distilled or filtered water.

Dishwasher: Also add 2 oz. of 3% hydrogen peroxide to your wash cycle.

Enema: Add 1 tablespoon of 3% H2O2 to a quart of warm distilled water.

Facial: Use 3% on a cotton ball as a facial freshener after washing. Keep away from eyes and eyebrows.

Foot Soak: Soak feet in warm 3% H2O2 until condition is improved.

Insecticide Spray: Mix 8 oz. black strap molasses or white sugar, and 8 oz. 3% hydrogen peroxide in 1 gallon of water.

Fruits and Vegetables: Add 1/4 cup 3% H2O2 to a full sink of cold water. Soak fruits and vegetables 20 to 30 minutes (drain, dry and refrigerate) or spray fruits and vegetables with a solution of 3% hydrogen peroxide. Let stand for a few minutes, then rinse and dry. (e to Coli cleaner)

Kitchen: Keep a spray bottle of 3% hydrogen peroxide in the kitchen. Use it to clean and disinfect counter tops and appliances.

Marinade: Place meat, fish or poultry in a casserole (avoid using aluminium pans). Cover

with a dilute solution of equal parts of water and 3% H2O2. Place loosely covered in refrigerator for 1/2 hour. Rinse and cook.

Mouthwash: Use 3% H2O2. Add a dash of liquid chlorophyll or peppermint / spearmint oil for flavouring if desired. Use to treat gingivitis and chronic bad breath. After brushing teeth and tongue, swish H2O2 in mouth for a couple of minutes and then gargle with it, then spit out and rinse. If pain occurs, spit out and try on the following days, etc. Do not attempt with sores in mouth. May also reverse tooth sensitivity. Convert 35% food grade H2O2 to get 3% hydrogen peroxide by adding 1 tablespoon of 35% H2O2 to 11 tablespoons of distilled non-chlorinated water (1:11 ratio).

Nasal Spray: Mix 1 Tablespoon of 3.5% hydrogen peroxide with 8 oz. (1 Cup) of distilled water. Use 2-3 squirts of nasal spray when you start experiencing congestion..

Pets: For small animals (dogs & cats) use 1 oz. 3% H2O2 to 1 quart of water.

Plants (house and garden): Put 1 oz. 3% hydrogen peroxide in 1 quart of water. Water or mist plants with this solution.

Seed Sprouting: Add 1 oz. 3% hydrogen peroxide to 1 pint of water and soak the seeds overnight. Add the same amount of hydrogen peroxide each time you rinse the seeds.

Shower: Keep a spray bottle of 3% hydrogen peroxide in the shower. Spray your body after washing. Avoid the eyes, eyebrows and hair.

Toothpaste: Use baking soda and add enough 3% H2O2 to make a paste or dip your brush in 3% H2O2 and brush. Hydrogen peroxide dissolves dental plaque, creates healthy gums, whitens teeth and helps eliminate chronic bad breath. Baking soda and hydrogen peroxide makes the best toothpaste.

Washing/Laundry: Add 8 oz. of 3% H2O2 to your wash in place of bleaches.

Vaporizor (Cool Mist): Add 12 oz. of 3% food grade hydrogen peroxide or up to 4 oz. of 35% food grade hydrogen peroxide to one gallon of water or mix 16 oz. (2 Cups) of 3.5%

hydrogen peroxide with 128 oz. (1 gallon) of water in a vaporizer. Emphysema, chronic obstructive pulmonary disease, lung cancer, bronchitis, pneumonia, etc., usually gets better using a cool mist vaporizer filled with a hydrogen peroxide mixture.

Gardening with Hydrogen Peroxide

Gardeners and hydroponics implementers have professed the use of Hydrogen Peroxide in their watering solutions. Spontaneous decomposition releases oxygen to the plant's roots to enhance root development and prevent root rot, due to lack of oxygen. Many farmers have been increasing crop yields by spraying diluted hydrogen peroxide (20 gallons of water mixed with 5 to 16 ounces of 35% hydrogen peroxide, per acre). Water house plants by adding 1 ounce of 3% hydrogen peroxide or 16 drops of 35% hydrogen peroxide to every quart of water you give your plants. Hydrogen peroxide is an excellent and safe insecticide. Spray your plants with 8 ounces of 3% hydrogen peroxide mixed with 8 ounces of white sugar and one gallon of water.

Feeding Animals Hydrogen Peroxide

In the 1950's, Dr. Reginald Holeman gave cancerous mice hydrogen peroxide in their drinking water. 60 days later their tumours had disappeared. The mice, who received hydrogen peroxide in their drinking water, grew much larger and lived twice as long. In the 1980's, Winifred Wirth repeated Dr. Holeman's experiment twice with the same results. Robert Stroud, the Birdman of Alcatraz, healed birds using sodium perborate. Sodium perborate combined with water creates hydrogen peroxide.

Adding 30 parts per million of hydrogen peroxide to drinking water on farms causes chickens to not get avian flu, egg production goes up, chickens taste better, turkeys weigh more on less feed, turkeys have lower mortality rates, hog meat is leaner and of a higher grade, reduces or eliminates need for antibiotics, increases milk production and butterfat content, decreased bacteria count, less mastitis, etc.

In 1985, a dairy farmer began putting hydrogen peroxide in the water for his entire farm. The water on his farm was polluted and mastitis was a problem with his cows. After using hydrogen peroxide for some time, the farmer noticed the improved health of his cows. In April 1988, the butterfat content of his Holstein cows was up 5.3%. Another farmer weighed the milk from every cow after milking, and seen his milk production increase from 6 to 8 pounds, per cow, per milking. Others farmers have reported that bacteria counts have gone down to less than 2,000 per cubic centimetre.

When hydrogen peroxide has been used for cattle, an increase in milk production and an increase in butterfat content have been reported. Farmers have also reported less mastitis in their herds. Hog farmers have reported their hogs using less feed and a shorter growing time (as much as 30 days less). Turkey and chicken growers reported increased weight per bird using less feed. A man in Wisconsin said he has had the best reproduction rate of his buffalo by using hydrogen peroxide in their drinking water.

Some animal research indicates that when hydrogen peroxide is given orally, it combines with iron and small amounts of vitamin C in the stomach and creates hydroxyl radicals. The rule of thumb is adding 8 oz. to 10 oz. of 35% hydrogen peroxide to 1000 gallons water. Chickens and cows have remained healthy by using 8 ounces of 35% Food Grade hydrogen peroxide in 1,000 gallons of drinking water @ 30 ppm. Hydrogen peroxide application into well water or city water can best be accomplished by a metering device / injector, which keeps the application more constant and thorough, although manual application works just as well. If you do not have a metering device, start out by using 1 teaspoon of 35% hydrogen peroxide in the animal's drinking water. This same ratio is used for all farm animals: cows, pigs, poultry, sheep, goats, rabbits, birds, etc.

Oxygen Therapy

When humming, the gas exchange between the nasal passages and the sinuses is around 98 percent. During normal exhalation the gas exchange rate is around 4 percent. The sinuses are major producers of nitric oxide, which helps dilate capillaries and increase blood flow. When nitric oxide levels are measured during humming, researchers have found that they are 15 times higher than during normal breathing.

Oxygen is the most important thing for life. Oxygen combines with metabolic waste products allowing elimination from the body. This is called the oxidation reduction cycle. When not enough oxygen is available in the body, detoxification slows down, wastes pile up, circulation becomes sluggish and oxygen can not reach the cells. Energy is produced by the body when glucose and oxygen combine, producing ATP. Every 24 hours the human body produces ATP equal to its body weight. If it produces 10% less ATP than normal, the body will feel tired and sluggish. If ATP production falls much lower than 10% the body could die. Cancer begins when a normal cell does not get enough oxygen. If oxygen levels falls below 40% the cell begins to ferment sugar instead of burning it. Fermentation produces only 1/6th the energy of oxidation and lacks the energy to manufacture an enzyme coating around itself. Healthy cells are surrounded by an enzyme coating which O1 can not penetrate. Cancer, bacteria and viruses do not have an enzyme coating and are oxidized on contact with O1. The best sources of reactive oxygen are ozone, hydrogen peroxide and magnesium peroxide.

Dr. Otto Warburg was awarded the Nobel Prize in 1931 for discovering the cause of cancer. Cancer is caused when the body's cells change from aerobic respiration to anaerobic respiration. The growth of cancer cells is initiated by a lack of oxygen. Lack of oxygen and high levels of acidity usually go together. The brighter color red your blood is, the more oxygen it carries. The darker its color, the less oxygen it carries.

All normal cells require oxygen. Deprive a cell of 60% of its oxygen and it will turn cancerous. Deprive a cell of 35% of its oxygen for 48 hours and it may become cancerous. Cancer cells can live without oxygen. The body's cells run on adenosine triphosphate (ATP). ATP must be created by all cells for energy, including cancer cells. The biochemical process where ATP is created is called oxidation phosphorylation and is oxygen-dependent. Cancer cells make ATP by fermentation phosphorylation, which requires acidity and a low oxygen environment. Aerobic cellular respiration creates as many as 36 ATP molecules from each glucose molecule. Anaerobic respiration creates only 2 ATP molecules. When cells cannot feed off of oxygen, they feed off themselves, fermenting their own sugars and becoming cancer cells.

The human body's main fuel source is a simple sugar called glucose. Glucose comes from the food and plants that we eat. When we eat complex carbohydrates, they are broken down by our digestive system into glucose. This food energy is converted to chemical energy by a series of reactions known as cellular respiration. Aerobic respiration extracts the maximum amount of energy from the glucose when the molecule is completely broken down. When oxygen levels are insufficient, anaerobic respiration can release energy without oxygen and occurs in the cytoplasm of the cell. Cancer cells use anaerobic respiration partially or entirely. Things that can damage a cell and its mitochondria are oxygen deprivation, nutritional imbalances, physical trauma, toxic chemicals, allergic reactions, radiation, infections, parasites, bacteria, viruses, etc. When essential fatty acids are missing from the diet, cells have no choice but to substitute inappropriate fats into their structure, resulting in type II diabetes and sometimes cancer.

Five nutrients necessary to maintain healthy mitochondria are:

- (1) L-carnitine: for the proper oxidation of fats within cells. L-carnitine is made in the body from the amino acid lysine. Cold-processed whey powder is a good source of amino acids.
- (2) Coenzyme Q10: is necessary for the synthesis of ATP, and prevents free radical damage within the cell. Coenzyme Q10 is found in sardines, eggs, whole grains, spinach and many other foods. Coenzyme Q10 helps regulate intercellular oxidation.
- (3) Alpha lipoic acid: helps regenerate vitamins E and C after they are oxidized. Food sources of ALA include spinach, broccoli, tomatoes, peas, brussel sprouts, and rice bran.
- (4) Vitamin E: protects cell membranes from free radical damage. Vitamin E is found in whole grains, nuts, seeds, asparagus, spinach and other green leafy vegetables. Niacin and Vitamin E promote tissue oxidation when they dilate blood vessels.
- (5) Vitamin C: inhibits the oxidation of cholesterol and supports production of the antioxidant glutathione. Vitamin C is found in fruits, berries, and tomatoes. Vitamin C is needed for the synthesis of carnitine, which is required for long-chain fatty acids to enter mitochondria where they are used for energy production. The conversion of vitamin C into carnitine takes place in the liver. Vitamin C helps fight infections by helping the human body produce hydrogen peroxide, which stimulates the production of prostaglandins.
 - (6) Organic germanium: increases oxygen levels at the cellular level.

The human body needs hydrogen peroxide for a multitude of other chemical reactions that take place throughout the body. The colon is responsible for the elimination of wastes and toxins, and the assimilation of nutrients. When the walls of the colon become hardened with fermenting waste matter and poisonous toxins, it creates colon putrefaction and gas. The gastrointestinal tract is around 40% more efficient at assimilating oxygen than the lungs. Surgeons routinely use a patient's colon for respiration during certain surgical procedures. Hydrogen peroxide is one of the many components that help regulate the amount of oxygen getting to your cells, it is required for the production of thyroid hormone and sexual hormones, it stimulates the production of interferon, it dilates blood vessels in the heart and brain and it improves glucose utilization in diabetics.

Hydrogen Peroxide Therapy

There are two methods of taking hydrogen peroxide, orally and intravenously. Most medical conditions respond very well to oral ingestion of hydrogen peroxide. Hydrogen Peroxide Therapy is also used as an alternative medical treatment for cancer. Hydrogen Peroxide is injected intravenously in very low concentrations (less than 1%) into the blood stream. The use of intravenous hydrogen peroxide was reported in 1920 during the influenza epidemic. Intravenous hydrogen peroxide infusion was used successfully used to treat pneumonia in the epidemic following World War I. Intravenous hydrogen peroxide cut the death rate of pneumonia in half.

In the 1940's, Father Richard Willhelm, reported hydrogen peroxide being used to treat bacterial related mental illness to skin disease and polio. Father Richard Willhelm is the founder of "Educational Concern for Hydrogen Peroxide" (ECHO), a nonprofit organization dedicated to educating the public on the safe use and therapeutic benefits of hydrogen peroxide. According to the American Cancer Society: "there is no scientific evidence that Hydrogen Peroxide is a safe, effective or useful cancer treatment". More Information on the uses of Hydrogen Peroxide are available from Educational Concern for Hydrogen Peroxide (ECHO), PO Box 126, Delano, MN 55328 @ (813) 597-4111 or (606) 635-9297.

Tumor cells, bacteria, and foreign elements in the blood can usually be destroyed with hydrogen peroxide therapy. Surgery and chemotherapy destroy brain tissue. Intravenous infusion of hydrogen peroxide may be the greatest breakthrough ever for brain tumors. Intravenous infusion of hydrogen peroxide also helps pulmonary disease, gangrene, arteriosclerosis, aids, flu, asthma, cancers, etc. Chelation Therapy is a useful treatment and preventive for at least 80% of peripheral circulation problems but cannot clean out hardened plaque in the large heart arteries and the aorta. Hydrogen peroxide IV dripped into the leg and carotid vessels of patients with arteriosclerosis cleans the arteries of disease and plaque. When these patients died, autopsies compared the arteries that had been treated with H2O2 with those not treated. The separation of lipids from the arterial wall from the hydrogen peroxide had been accomplished. The plaque in the arteries was removed by injecting H2O2 into the blood vessels. The improvement was not temporary. Hydrogen Peroxide has been shown to dissolve calcium and cholesterol deposits in the body and stimulates peroxidase production.

Other proven methods of reducing arteriosclerosis and the build up of plaque in the arteries require the consumption of supplements. The oldest known method is the Pauling therapy, which uses the consumption of vitamin C (asorbic acid) and lysine. Consuming lecithin for fat emulsification, is believed to work because the elevated licithan levels help the body melt the accumulated plaque on the arterial walls. Serrapeptase is another supplement used to reverse arteriosclerosis. Niacin and niacinimide (B3) dilate blood vessels. Niacinimide has been shown to prevent and reverse Alzheimer's.

There are two methods of administering hydrogen peroxide: orally or intravenously. Emphysema is one condition in which intravenous infusion of hydrogen peroxide is best. Emphysema is destruction of the alveoli, the small air sacs in the lungs. An inadequate amount of oxygen reaching the tissues forces the heart to pump more forcefully; causing high blood pressure, enlargement of the heart and eventually heart failure. A vaporizer improves night time breathing by using at least 1 ounce of 35% food grade hydrogen peroxide mixed in 1 gallon of non-chlorinated distilled water. Hydrogen peroxide intravenous (IV) infusion has the ability to cleanse the inner lining of the lungs and restore the ability to breathe. Within minutes, oxygen from hydrogen peroxide begins to bubble up between the membrane lining, the lungs sacs and the accumulated mucus. The patient begins to cough and expel accumulated material in the lungs. The amount of bubbling, coughing, and cleansing can be regulated by simply turning the hydrogen peroxide on or off. As the hydrogen peroxide cleans the lung surface and destroys bacterial infections, the

patient regains the ability to breath better. Hydrogen peroxide is being used intravenously and intra-arterially by doctors in the United States and foreign countries. The International Bio-Oxidative Medicine Foundation supports clinical research in Hydrogen Peroxide Therapy. To find a doctor near you call (405) 478-4266 or write to The International Bio-Oxidative Medicine Foundation, P.O. Box 13205, Oklahoma City, OK 73113.

A complementary emphysema therapy uses DNA-Nucleotide Immunotherapy and Natural Microdose DNA (deoxyribonucleic acid) Mucolyxir. The use of a single sequence of synthetic DNA composing guanine and cytosine, has been shown to improve immunity, allergies and inflammation. It is being studied for use as a vaccine, an immunotherapy and it appears to be safe and fast-acting. Some medical and veterinary doctors have been using microdose DNA (Mucolyxir) to treat respiratory ailments in dogs, cats, horses, infants, children and adults. Millions have been spent and dozens of researchers are involved, but more research is required for use as an FDA-approved DNA drug.

Synthetic DNA sequences have been found to:

- Reduce inflammation associated with asthma and allergic respiratory diseases.
- Reduce lung damage and 'remodeling' due to allergic stress.
- Increase CD8 cytotoxic T Cell lymphocyte response enhancing immunity.
- Treat allergic rhinitis in mice (reduced inflammatory mediators).
- Attenuate the magnitude of airway hyper-reactivity and airway remodeling in nonhuman primates with experimentally induced allergic airways diseases.
- Stimulates pathway for the development of CD(+) cytotoxic T lymphocyte responses against infectious pathogens.
- Improvement in COPD symptoms, especially shortness of breath.
- In clinical trials with over 100 infants and children with acute otitis media, 80-90% responded on microdose DNA (Mucolyxir).
- Improvements shown in acute otitis media, acute sinusitis, acute bronchitis, chronic bronchitis, reactive airways disease, emphysema, mucositis and cystic fibrosis.

Healing Wounds with Hydrogen Peroxide

Specific microdoses of hydrogen peroxide can enhance wound healing. For years, hydrogen peroxide has been used as an antiseptic. Hydrogen peroxide kills the bad bacteria and the body's healthy cells. New research proves that hydrogen peroxide

(H2O2), in concentrations lower than conventionally used in the past as an antiseptic, can help heal wounds faster from injury and surgery.

Microdoses of hydrogen peroxide applied to the wound site, from amounts greater than 500 nanomoles to less than 50 micromoles per square centimeter of lesion, signal leukocytes to help the body's own healing processes at the edges of the wound. The body's naturally occurring supply of hydrogen peroxide runs out at the wound site about two hours after an injury occurs. Laboratory experiments have shown that the body's leukocytes begin the healing process at the wound site, by using minute quantities of hydrogen peroxide produced internally in the body.

When microdoses of hydrogen peroxide are applied to a wound:

- The body's natural healing processes are enhanced.
- Leukocytes are drawn to the wound margins.
- The rate of healing in mammals is increased.

Microdoses of hydrogen peroxide used in different formulations (gels, lotions, ointments, creams, pastes, liquids, etc.) and applied in various ways (surgical dressings, staples, clips, sutures, catheters, implants, etc.) can speed the body's own healing process at the wound site and opens the way to new wound care protocols, dressings and devices that naturally help wounds heal faster. Surgical dressings with microdoses of hydrogen peroxide can start, continue, enhance, and support the body's own healing process by continually adding hydrogen peroxide to the wound after the body's supply runs out.

U.S. Published Patent Application 2005/0281890 A1, entitled "Methods and Compositions for Wound Healing", by Chandan San, discloses the research in methods, devices and compositions using 500 nanomoles to less than 50 micromoles per square centimeter of lesion microdoses of hydrogen peroxide to heal wounds. The methods, devices and compositions provide an increased rate of wound healing. The use of food grade hydrogen peroxide is recommended for anyone attempting to use this method of healing.

The human body expels 70 percent of its toxins from breathing. When you breathe, fat molecules combine with oxygen atoms, producing carbon dioxide. Carbon dioxide is the most abundant product of metabolism. The other 30 percent of toxins are discharged through defecation and sweat. A small amount of water soluble toxins are discharged through urination. If your breathing is not operating at peak efficiency, you are not ridding yourself of toxins properly. Research shows that shallow breathers get cancer more often. Drinking Hydrogen Peroxide usually helps rid the body of excess toxins, bacteria, viruses and cancers. The acidic properties of fat lower the body's cellular pH and oxygen levels, producing an ideal breeding ground for cancer. Cancer needs an acidic low oxygen environment to survive and thrive. Your kidneys must work overtime if less than 70 percent of your toxins are not being released through breathing, causing a number of illnesses.

A 1:1000 solution of colloidal silver to H2O2 increases the efficacy of colloidal silver by up to 100 times against bacteria. The increased bioavailability reaction using colloidal silver and H2O2 results in a delivery mechanism that increases adsorption of silver directly into tissues. Dilute the H2O2 to the desired concentration, then add the colloidal silver to the solution. The amount of hydrogen peroxide to use will depend on the type and quality of colloidal silver. The higher the particle content, the more hydrogen peroxide will need to be used. A 3% H2O2 solution with colloidal silver is much more reactive than standard 3% H2O2 solution.

Drinking hydrogen peroxide may cause an upset stomach. Hydrogen peroxide should be taken on an empty stomach, one hour before meals or three hours after meals. Food in the stomach may cause excess foaming, indigestion or vomiting. Those with chronic systemic Candidiasis may need to start with 1 drop in 8oz. of water 3 times a day, then 2 drops in 8oz. of water three times a day before starting a schedule. Do not mix chlorinated tap water with 35% Food Grade Hydrogen Peroxide! People with serious problems will benefit from staying on 25 drops three times a day for one to three weeks, then tapering down to 25 drops two times daily until the problem is resolved (1 to 6 months). Some patients take three or four lecithin capsules at the same time they take the hydrogen peroxide to stop the nausea.

As dead bacteria and toxins are released from your body, your capacity to eliminate them quickly enough may cause some pain or discomfort in the kidneys. This toxic overload may cause fatigue, diarrhea, headaches, skin eruptions, cold or flu-like symptoms, and/or nausea. If this occurs, remain at the current dosage or reduce it to the previous dosage until the problem stops. Do not discontinue drinking the hydrogen peroxide solution unless pain or irritations become severe. Discomfort and irritations will dissipate shortly after cutting back on the amount of hydrogen peroxide you are drinking. Continuing with the hydrogen peroxide program will clean out the body sooner of excess toxins. Another method of drinking hydrogen peroxide, requires putting 1 drop of hydrogen peroxide in every ounce of water you drink. If the taste of the hydrogen peroxide is to strong for you, try putting 1 drop of hydrogen peroxide in every 2 ounces of water you drink.

Normal human cells have a lot of molecular oxygen and a slightly alkaline pH. The cancer cell has an acid pH and lack of oxygen. Cancer cells will not survive in an oxygen environment. Cancer and all diseases do not like oxygen. Proper cellular utilization of oxygen requires diets containing adequate amounts of unsaturated fatty acids. Most common ailments affecting population are directly related to oxygen starvation. Asthma, emphysema, and lung disease are on the rise, especially in polluted metropolitan areas. Cases of constipation, diarrhea, intestinal parasites and bowel cancer are on the rise.

Many of the new "miracle" drugs and nutritional supplements used to treat these conditions work by increasing cellular oxygen. The miracle nutrient, Coenzyme Q10, helps regulate intercellular oxidation. Organic germanium increases oxygen levels at the cellular level. Niacin and vitamin E promote tissue oxidation through their dilation of blood vessels. Vitamin E makes efficient use of available oxygen and acidophilus helps reestablish beneficial bacterial flora in the bowels. Hydrogen peroxide is only one of the many components that help regulate the amount of oxygen getting to your cells. The presence of hydrogen peroxide is vital for many other functions as well. Hydrogen peroxide is required for the production of thyroid hormones and sexual hormones, the production of interferon, dilation of blood vessels in the heart / brain and glucose utilization in diabetics.

Germanium is a trace element / mineral, which promotes cell oxygen absorption.

Germanium enhances the cell's ability to generate energy by raising the cell's oxygen supply. Organic Germanium-132, has never exhibited any toxic side effects. Germanium strengthens the immune system, normalizes high blood pressure / cholesterol and protects

the body against cellular aberrations. Germanium stimulates the immune system in cancer patients as well as healthy individuals. The highest concentrations of germanium were found in medicinal plants: ginseng, shitake mushrooms, aloe vera, comfrey and garlic. Russian shelf fungus had the highest levels of germanium. The healing waters of Lourdes, France also have significant quantities of germanium. Germanium appears to significantly enhance the body's production of interferon. research suggests that germanium helps normalize the body's defenses in cancer patients.

A single atom of oxygen is very reactive and is referred to as a free radical. We continually read that free radicals are responsible for all types of ailments and even premature aging. Our bodies create and use free radicals to destroy harmful bacteria, viruses, and fungi. White blood cells are responsible for fighting infection and foreign invaders (bacteria, viruses, fungi, etc.) in the body by making hydrogen peroxide to oxidize all infections and invaders. Vitamin C helps fight infections by producing hydrogen peroxide, which stimulates the production of prostaglandins. Lactobacillus found in the colon and vagina also produce hydrogen peroxide. This destroys harmful bacteria and viruses, preventing colon disease, vaginitis, bladder infections and a host of other common ailments. When lactobacillus in the colon or vaginal are overrun with harmful viruses, yeast, or bacteria, an effective douche or enema solution can be made using 3 tablespoons of 3% hydrogen peroxide in 1 quart of distilled water. Friendly bacteria in the colon and vagina are aerobic, while most strains of harmful bacteria, viruses and cancer cells are anaerobic and cannot survive in the presence of oxygen or hydrogen peroxide.

Hydroxyl radicals are formed when super oxide and hydrogen peroxide react together. To prevent damaging the cells, antioxidants and hydrochloric acid (muriatic acid) should be taken if the hydrogen peroxide formula is going to be used for a long period of time. Antioxidants come if different pill forms and in different food types. Antioxidants foods are cranberries, blueberries, aronia berries, pomegranates, etc. Nature's best antioxidant is a drop of clove oil under the tongue, which contains more than ten times the antioxidants that any berry does. Dentists have been using clove oil as an antiseptic in there profession for ages.

Hydrogen peroxide helps: Adult Onset Diabetes, Allergies, Altitude Sickness,
Alzheimer's, Anemia, Angina, Arrhythmia, Arthritis, Asthma, Bacterial Infections,
Bronchitis, Cancer, Candida, Cardiovascular Disease, Cerebral Vascular Disease, Chronic

Fatigue Syndrome, Chronic Pain, Diabetic Gangrene, Diabetic Retinopathy, Digestion Problems, Emphysema, Epstein-Barr Infection, Food Allergies, Fungal Infections, Gangrene, Gingivitis, Headaches, Heart Disease, Herpes Simplex, Herpes Zoster, HIV Infection, Immune Disorders, Infectious Diseases, Inflammation, Influenza, Insect Bites, Liver Cirrhosis, Lupus Erythematosis, Migraine Headaches, Multiple Sclerosis, Parasitic Infections, Parkinson's Disease, Parkinsonism, Periodontal Disease, Pneumonia, Prostatitis, Pulmonary Diseases, Rheumatoid Arthritis, Shingles, Sinusitis, Sore Throat, Stroke & Memory Loss, Type II Diabetes, Ulcers, Vascular & Cluster Headaches, Viral Infections, Warts, Yeast Infections, etc. Some results from drinking hydrogen peroxide include: arthritis disappearing, high blood pressure normalizing, cancers going into remission, high energy levels returning, bowels regulated, alertness and increased memory, elimination of depression, etc. Hydrogen peroxide stimulates enzyme systems throughout the body, increasing metabolic rate, causing small arteries to dilate and increase blood flow, enhancing the body's distribution and consumption of oxygen while raising body temperature.

Possible Reactions to using Hydrogen Peroxide include: Skin eruptions, nausea, sleepiness, unusual fatigue, diarrhea, colds (in head or chest), ear infections, boils, or any other method that the body uses to emit toxins from the body. This is the natural way for the body to cleanse and the natural cleansing will be of short duration, as you continue to maintain your program. Above all, even if you must decrease the dosage, continue the program, don't give up. If you get a cleansing reaction, you may want to increase the dosage to hasten the cleansing. A cleansing is the effect on the body of bacteria dying off, or various forms of poisons being released through the eliminative organs of the body, i.e. skin, lungs, kidneys and bowels. Remember: When hydrogen peroxide comes in contact with virus and streptococcus, it will liberate free oxygen. This may be happening in your stomach. If your stomach feels uneasy, it is only the hydrogen peroxide destroying the virus and streptococcus in your body.

The dangers and side effects of hydrogen peroxide are few and conflicting. There have been two known fatalities in children who ingested 27% hydrogen peroxide and 40% hydrogen peroxide. A 2 year old female swallowed one mouthful of 35% hydrogen peroxide. She immediately began vomiting, followed by fainting and respiratory arrest.

She experienced erosion and bleeding of the stomach and esophagus, but survived the incident. She was re-examined 12 days later, her stomach and esophagus had healed.

Caution

Taking hydrogen peroxide immediately before bedtime causes difficulty getting to sleep because of the increased oxygen levels at the cellular level. CAUTION: Individuals who have had transplants should not take hydrogen peroxide. Hydrogen peroxide stimulates the immune system and could cause the rejection of the transplanted organ. Keep hydrogen peroxide out of the reach of children. Store hydrogen peroxide in the back of the refrigerator or in the freezer in a box or in a marked container (DANGER!!! or CAUTION!!!).

Drink hydrogen peroxide solution one hour before or three hours after a meal. Add food grade hydrogen peroxide to 8 oz. distilled water, spring water, milk, vegetable juice, or fruit juice. Do Not use chlorinated tap water. Hydrogen peroxide is used to pasteurize milk in most countries around the world. 12 drops of 35% food grade hydrogen peroxide in a quart of milk is an alternative to pasteurization. There is an enzyme in fresh pressed carrot juice and bananas that breaks down H202 into water and oxygen on contact. No sugary, alcoholic or carbonated beverages. Drink the hydrogen peroxide mixture on an empty stomach. If your stomach gets upset at any level, stay at that level, or go back one level. Candida victims may need to stay at the Day 1 dosage level for up to 1 week before beginning the hydrogen peroxide regimen. When reaching higher dosages, more water may be used. Deep breathing, fresh air, and exercise are also very important. If you are on a medication, consult your doctor. CAUTION: If any strong solution of hydrogen peroxide concentrate is spilled on the skin, flush the skin immediately with water. Skin may whiten temporarily. Try not to burp after drinking the hydrogen peroxide solution, it is probably singlet oxygen (O1).

Dosage Schedule Using 3% Food Grade H202

Day 11 oz. daily
Day 22 oz. daily
Day 33 oz. daily
Day 44 oz. daily
Day 55 oz. daily
Days 6 through 12 5 oz. 2 times daily
Days 13 through 19 5 oz. 3 times daily

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Days 20 through 25......5 oz. 2 times daily
Days 27 through 32......5 oz. every other day
Day 33 and on.......5 oz. every third day
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If the above amounts are to much, back off to an amount of intake you feel comfortable with. Stay at that level until you get the results you are looking for. If the condition is severe, stay on 8 oz. of the .5% solution twice a day as long as you think it is necessary. If you have a weak stomach, try using 1 oz. of 3% food grade hydrogen peroxide in 8 oz. of milk, vegetable juice, fruit juice, non-sugary, non-alcoholic or non-carbonated beverage.

Mix one part 3% food grade hydrogen peroxide with five parts of distilled water (.5% solution of hydrogen peroxide) or use a gallon of water by taking out 20 oz. of water and replace it with 20 oz. of 3% food grade hydrogen peroxide.

Dosage Schedule Using 6% Food Grade H202

Dosage Schedule Using 35% Food Grade H202

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Day 1.....3 drops, 3 times daily
Day 2.....4 drops, 3 times daily
Day 3.....5 drops, 3 times daily
Day 4.....6 drops, 3 times daily
Day 5......7 drops, 3 times daily
Day 6.....8 drops, 3 times daily
Day 7.....9 drops, 3 times daily
Day 8......10 drops, 3 times daily
Day 9......12 drops, 3 times daily
Day 10.....14 drops, 3 times daily
Day 11......16 drops, 3 times daily
Day 12......18 drops, 3 times daily
Day 13.....20 drops, 3 times daily
Day 14......22 drops, 3 times daily
Day 15.....24 drops, 3 times daily
Day 16.....25 drops, 3 times daily
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For serious problems stay at 25 drops, 3 times daily for 1 to 3 weeks. Reduce dosage to 25 drops, 2 times daily until the problems go away. This may take 1 to 6 months. When problems go away, reduce dosage to 25 drops 1 time daily for a week, then 25 drops every other day for a week, then 25 drops every third day for a week and then 25 drops every fourth day for a week. A good maintenance routine would be 5 to 20 drops a week. The addition of copper to hydrogen peroxide increases the effectiveness of hydrogen peroxide on bacteria up to 3,000 times. Coenzyme Q10, organic germanium, niacin, vitamin E, flax oil, lecithin and acidophilus help increase oxygenation.

Urine Therapy

People have lived for days without food or water. They survived because they drank their own urine, those that didn't died. In the past, Doctors were trained in the analysis of urine by looking at it, smelling it and tasting a patients urine. Astronauts drink their purified urine in space for months without any adverse effects.

Urine is a by-product of blood filtration, not waste filtration, and is non-toxic. The body secretes elements not needed at the time through urine. Urine contains compounds that are very specific to the individual from which it comes. It is antibacterial, antifungal, antiviral, antineoplastic (anticancer), anticonvulsive, and antispasmodic. Urine is a sterile body compound that is purer than distilled water (no bacteria). Urine contains thousands of compounds. Urine contains Alanine, Arginine, Ascorbic acid, Allantoin, Amino acids, Bicarbonate, Biotin, Calcium, Creatinine, Cystine, DHEA, Dopamine, Epinephrine, Folic acid, Glucose, Glutamic acid, Glycine, Inositol, Iodine, Iron, Lysine, Magnesium, Manganese, Melatonin, Methionine, Nitrogen, Ornithane, Pantothenic acid, Phenylalaline, Phosphorus, Potassium, Proteins, Riboflavin, Tryptophan, Tyrosine, Urea, Vitamin B6, Vitamin B12, Zinc, and other compounds.

When you eat, food is broken down in the stomach and intestines into extremely small molecules. These molecules are absorbed into tiny tubules in the intestinal wall and then pass through these tubes into the blood stream. The blood circulates through your body carrying these food molecules and other nutrients, along with red and white blood cells, antibodies, plasma, microscopic proteins, hormones, enzymes, etc., all manufactured at different locations in the body. The blood circulates through the liver where toxins are

removed and excreted from the body in the form of solid waste. When the blood enters the kidneys it is filtered through a complex and intricate system of minute tubules called nephron. The filtering process removes excess water, salts and other elements in the blood that your body does not need at that time. The excess elements collect in the kidney as a purified, sterile, watery solution called urine. Many elements are then reabsorbed by the nephron and delivered back into the bloodstream. The rest of the urine passes out of the kidneys into the bladder for excretion.

Research shows that allergic reactions are caused by white blood cells (antigen receptors) that attack substances, even when they are no threat to the body. Dr. William Linscott showed that when these antigen receptors (white blood cells) are reintroduced into the body, the body develops antibodies to these antigen receptors, stopping the allergic response. Realizing that the urine of allergic individuals contains the allergy causing antigen receptors, re-introducing the urine back into the allergic individual produces antibodies which stop the allergic reactions.

Gaston Naessens invented a 30,000X dark-field microscope that allows living tissue to be seen at much higher levels of magnification. Hidden within the blood plasma he found tiny bodies he named "somatids". These somatids were observed to change from one form to another in regular cycles. In a healthy person the somatids have a three stage cycle. In an unhealthy person the somatids have a 16 stage cycle. The critical stage between stage three and stage four is fermentation. Fermentation is the result of sub-cellular trauma that is produced by exposure to chemical pollution, radiation, accidents, shocks, depression, etc.

The 13 unhealthy somatid stages include a bacterial stage. Bacteria comes from external sources or are internally generated, and usually do not cause disease. Bacteria is usually the result of disease, and the disease actually exists on the somatids level and this biological imbalance allows the unhealthy forms of somatids to thrive. Studying the blood of healthy people and people with various diseases, Naessens found that he could predict the diseases the healthy people were going to get, based on the condition of their somatids. In traumatized animals, the somatids become highly active and begin to destroy the bodies of their hosts. Naessens has become famous for treating diseases by monitoring the somatids to determine the effectiveness of the treatment. He has successfully treated thousands of cases of cancers and other diseases, Somatids are electrical in nature. Their

nuclei is positively charged and their exterior membrane coating is negatively charged. Somatids are actually the smallest living condensers of energy ever found.

The optical microscope developed by Dr. Royal Raymond Rife in the 1920s and 1930s also magnified living tissue around 30,000X. With his microscope, Rife observed tiny organisms smaller than the bacteria that he isolated from cancer tumors. He studied the effect of various frequencies of light on these organisms until he was able to find a frequency that killed them. Cancer patients were exposed to light of a certain frequency for three minutes every third day. After three months, 14 out of 16 terminal cancer patients fully recovered. Using only light, he was able to cure cancer and many other diseases including tuberculosis, typhoid, leprosy, and hoof-and-mouth disease. If a person understands what causes cancer, every cancer cell in a person's body can be reverted into a normal cell within 24 hours. In the 1930s, researcher Dr. Royal Rife cured cancer within minutes because he understood what causes cancer. The American Medical Association (A.M.A.) offered to buy Dr. Royal Rife's technology (they intended to "bury" the technology), but Dr. Rife refused to sell. The FDA then destroyed his equipment. Mr. R. Webster Kehr, researcher, President and member of the Board of Directors of the Independent Cancer Research Foundation, Inc., a non-profit corporation organized in the state of Nevada, has an article on the Internet discussing the overall treatment of advanced cancer: Treatment For Stage IV Patients.

The cancer causing organisms could be isolated from tumors, cultured, injected into healthy animals where new tumors would form, and then be isolated once again from the new tumors. When placed onto plant tissue, it developed into fungus. Under certain circumstances, the cancer-causing organisms would transform themselves into bacillus coli, a common intestinal bacteria. The ability of an organism to change from one shape or size to another is called pleomorphism.

Guenther Enderlein developed remedies that were based on the blood pH getting off balance causing microbes in the blood to grow into pathogenicity (pathogens). If the blood's pH balance, mineral balance, etc. shifts, the elemental forms, the colloidal particles known as the protits or somatids, will change their shape to adapt to the new environment. What they change into can be pathogenic to the body. When Professor Enderlein was doing his research in this area, he understood the developmental life cycle of the internal parasite. He knew that disease was brought about by a shift in the internal metabolic

balance. To get well, you had to rebalance the metabolism. The way to rebalance your metabolism (pH) is through diet. But in severe situations, you could accelerate the process biologically. Enderlein understood that if you have a microbe at a late developmental stage in the body that is causing problems, you could introduce the earlier stage of that same type of microbe and they would combine and become a lesser form.

This is how his isopathic remedies work. The protit is a colloid of life. It is the progenitor to later stages of development if the pH of the blood gets thrown off. To deevolve the later pathogenic stages, you can re-introduce new cultured young protits back into the blood, and the pathogenic forms will become lesser, apathogenic forms. Professor Enderlein re-introduced the small colloids of life (protits) back into the body to combine with the pathogenic forms so they would de-evolve back into a non-pathogenic state. The colloids in your blood are protits (somatids) and are very small particles, unfilterable by the kidneys. When you consume your own urine, you are receiving a dose of these pure colloids. These colloids proceed to support the immune function, taking the pathogenic microbes in the blood back to the apathogenic state.

Urine can be utilized as the body's own medicine. Urine therapy has cured or reversed incurable diseases. Multiple sclerosis, colitis, lupus, rheumatoid arthritis, cancer, hepatitis, hyperactivity, pancreatic insufficiency, psoriasis, eczema, diabetes, herpes, mononucleosis, adrenal failure, allergies, pelvic inflammatory disease, ulcerative colitis, Chron's disease, chronic fatigue syndrome, Hashimoto's disease, severe kidney infections, yeast infections (internal and external), cystitis, candida, endometriosis, ear and sinus infections, food and chemical allergies and other ailments have improved or reversed using urine therapy. Medical research has discovered that many of the elements of the blood that are found in urine have enormous medicinal value, and when reintroduced to the body, they boost the body's immune system defenses and stimulate healing in a way that nothing else does.

Pharmaceutical companies produce drugs made from urine. Pergonal is a fertility drug made from human urine. Urokinase, made from urine, is a drug sold as a miracle blood clot dissolver for unblocking coronary arteries. Urea is medically proven to be one of the best moisturizers in the world. Murine eye drops are made from urine. Carbamide is another name for synthetic urea.

Homeopathy is a therapeutic method, which applies the Law of Similars by using medically active substances at infinitesimal doses. If you were sick with the flu, you would give yourself a dose of the same or similar flu virus, to stimulate your immune system. Homeopathic dosage: Clean the genital area, then collect midstream urine in a clean cup or container. Add one drop of fresh urine to 1/6 ounce of distilled water in a sterile bottle. Cap, then shake 50 times. Take one drop of this solution and add to another 1/6 ounce of distilled water and shake 50 times. Add one drop of this solution to 1/6 oz. of 80 to 90 proof vodka (acts as a preservative). Use three drops sublingually under the tongue every hour until there is an improvement, then lengthen the interval between doses. After 3 days, stop treatment to avoid shocking the immune system. Start dosage again if progress remains static or if a relapse occurs.

Direct dosage: Use fresh urine immediately after collection. Do not boil or dilute the urine in any way. Take 1 - 5 drops of morning urine on the first day sublingually under the tongue. Take 5 - 10 drops in the morning on the second day. On the third day, take 5 - 10 drops in the morning and the same amount in the evening, before you go to bed. Gradually increase the amount as needed for obtaining results for your condition. As you use urine therapy, you will learn to adjust the amount by observing your reactions. You may work your way up to drinking an ounce or two of urine per dosage.

No research or documentation has been done or found on the subject of using Hydrogen Peroxide Therapy and Urine Therapy combined. If you are on your deathbed, and decide to use Hydrogen Peroxide Therapy and / or Urine Therapy together as a last resort, don't be afraid, chemotherapy and other drugs are much more toxic to the body than Hydrogen Peroxide or Urine.

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