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OXYGEN

The following survey is not intended to form any conclusions, but rather to raise interest and to spur speculation regarding the role of oxygen in health and in therapy.

Swami Rama, founder of the Himalayan International Institute of Yoga Science and Philosophy, writes in his "Lectures on Yoga" that Yoga entails an entire science of breathing techniques called pranayama. Pranayama is defined as "control of the energy of life". The word Prana means "the first unit of energy". According to the science of Yoga, the major route of this energy into the body is through the lungs.

The science of Yoga is many thousands of years old and has produced observations of nature which are fundamentally correct in spite of the fact that the major tenets of western science were unknown at the time.

Rama writes, "Modern science has done much research on diet, calories, vitamins and minerals. The mind and its functions are also being studied. The breath links the body and the mind but little research has been done on the science of breath...Even the educated man does not pay much attention to breathing even though it is more important than food and the other necessities of life. Prana sustains life and food helps it. The vital part of food is Prana without which none can live, even for a few minutes. As man takes food, vitamins, protein and calories, so he should learn and practice the most important and vital exercise of filling his lungs completely at least twice a day. Regulating the lungs is the most vital process in cleansing the human system. When our lungs go into action an exchange takes place between the vital Prana that is being consumed and that Prana which has already been consumed. Overeating, or eating overcooked food disrupts this exchange and both the lungs and the entire respiratory system become irregular... When one regulates the motion of the lungs by certain breathing exercises, the pores function properly and

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the tissues and cells become healthy.

"Food contains a grosser quality of pranas than does the breath which carries a more subtle form of the vital energy. The vital energy, or prana, contained in the food we eat is important, but even more indispensable is the vital energy contained in the air we breathe. There is no medicine known to man which can substitute for this vital energy absorbed through our food and breath... By controlling the motion of the lungs, highly accomplished yogis can control the autonomic nervous system and its set of muscles. The functioning of prana is the basic principle in the systolic and diastolic actions of the heart, the exhalation and inhalation of the lungs, the digestion of food, the excretion of urine and faecal matter, and the manufacture of gastric juice, bile, intestinal juice and saliva" 1).

While the conventional scientific explanations relating oxygen ions to the above mentioned systems may be considerably more detailed in a technical sense, they are no more correct.

Otto Warburg, two time Nobel laureate (1931 for his discovery of the oxygen transferring enzyme of cellular respiration, and 1944 for his discovery of the hydrogen transferring enzymes) has written: "The early history of life on our planet indicates that life existed on earth before the earth's atmosphere contained free oxygen gas. The living cells must therefore have been fermenting cells then, and as fossils show, they were undifferentiated single cells. Only when free oxygen appeared in the atmosphere--some billion years ago--did the higher development of life set in, to produce the plant and animal kingdoms from the fermenting, undifferentiated single cells. What the philosophers of life have called 'Evolution creatrice' is therefore the work of oxygen" 2).

While it is doubtful that the science of Yoga had identified the element, oxygen, it is obvious that it had clearly defined the physical exchange of energy which is accomplished in higher biological systems through oxygen. In emphasizing the imperative nature of deep breathing to maintain or regain health, Yoga has clearly observed medical facts which are now considered to be common knowledge. Shallow, incorrect breathing can lead to build up of toxins, low vitality, respiratory and cardiac disease, restlessness, mental dullness, depression, and more serious problems.

In fact, if cell respiration is depressed sufficiently through any of a variety of means, cells will either die or become cancerous. Warburg describes an experiment by Gawhen, Geisler and Lornez at the Dahlem Institute: "If one puts embryonic mouse cells into a suitable culture medium saturated with physiological oxygen pressures, they will grow outside the mouse body, in vitro, and indeed as pure aerobes, with a pure oxygen respiration, without a trace of fermentation. However, if during the growth one provides an oxygen pressure so reduced that the oxygen respiration is partially inhibited, the purely aerobic metabolism of the mouse embryonic cells is quantitatively altered within 48 hours, in the course of two cell divisions, into the metabolism characteristic of fermenting cancer cells. If one then brings such cells, in which during their growth under reduced oxygen pressure a cancer cell metabolism has been produced, back under the original high oxygen pressure, and allows the cells to grow further, the cancer metabolism remains. The transformation of embryonic cell metabolism into cancer cell metabolism can thus be irreversible, an important result, since the origin of cancer cells from normal body cells is itself an irreversible process" 3).

Why is oxygen so important to life? It is the only element that enters the animal organism in a free state. It is absorbed by plants in the form of water and carbon dioxide, converted by them into organic substances which are used as food by man, and returned to the atmosphere by man in the form of waste products of water and carbon dioxide. Of our body weight, 75% is oxygen.

Since oxygen is one of the major substances required for chemical reactions in the cells, the rates of chemical reactions are, to a great extent, dependent on the concentration of oxygen in extracellular fluid. If oxygen becomes decreased, rates of reactions can decrease almost to a standstill 4).

Conditions which result in low serum oxygen are countered by the body by an immediate increase in red blood cells which carry oxygen throughout the body. High altitudes, where the quantity of oxygen in the air is greatly decreased, will cause the body to rapidly produce red blood cells. Disorders of the circulation which cause decreased peripheral blood flow or decreased absorption of oxygen by the blood also cause rapid production of red blood cells. Cardiac failure, with its slowed blood flow, is commonly accompanied by an increased supply of red blood cells. This is obviously the body's attempt to improve its oxygenation. It is also known that strenuous exercise, which produces anoxia in tissues, also increases red blood cell count. Because all cell respiration in the body depends on transport of oxygen, the body will struggle against all challenges to maintain normal levels.

In disease, oxygen has been used therapeutically to good effect. Standard O₂ is breathed by patients suffering severe anemia, shock or circulatory collapse, pulmonary edema, pneumonia, and in surgical recoveries. Oxygen reduces toxic reactions to anesthesia. It is employed helpfully in septicemia, gas gangrene, peritonitis, and intestinal obstruction.

Hyperbaric oxygen (O₂ under pressure in treatment chambers) is employed in cardiac surgery, in treating aerobic infections such as gas gangrene, vascular disorders, and occasionally in connection with the radiation therapy in tumors.

Innovative administrations of oxygen are on record since 1920 when T.H. Oliver and D.V. Murphy of the British Royal Infirmary of Manchester injected hydrogen peroxide (H₂O₂) intravenously in an attempt to save viral pneumonia patients 5). In an epidemic in which the death rate was 80%, taking only patients who were clearly dying, these physicians produced a recovery rate of over 50% by giving a single I.V. of two ounces H₂O₂ (ten volumes) diluted with 8 ounces of normal Ringer's solution and made alkaline with 5 minims of liquor Ammonia. In one case account, Dr. Oliver wrote: "The change in the mental condition was remarkable, the patient, who previously had had to be tied in bed owing to delirium, was within six hours of the injection sitting up and asking for food; he slept well the next night and from that time improved in every way, eventually being invalided to India as a walking case three weeks later". Conclusions drawn by the two physicians were as follows: "1) H₂O₂ can be given intravenously without gas embolism being produced. 2) The anoxaemia is often markedly benefited. 3) The toxemia appears to be overcome in many cases. 4) The mortality (48%) compares very favourably with the 80 per cent in similar cases not so treated, and more so when it is remembered that we only treated the most severe and apparently hopeless."

In 1957, R.A. Holman of the Welsh National School of Medicine in Cardiff reported the cure in experimental models of cancer by adding H₂O₂ to the drinking water 6). Holman wrote: "It seemed to me that the only effective way to destroy the malignant cells which are already deficient in catalase and sensitive to over-oxidation is to keep up a continued administration of an active oxidizing agent. Since hydrogen peroxide is an excellent ionizing solvent, and since it is formed and is obviously of great fundamental importance in most living cells, this agent appears to be the one of choice.

"Rats implanted with the Walker 256 adenocarcinoma were treated by simply replacing their drinking water with dilute solutions of commercial hydrogen peroxide (Laporte Chemicals, Ltd., London), and maintaining them on a normal diet. The optimal concentration has been found to be 0.45 per cent by weight and with the rats being housed in metal cages (ten animals per cage). The rate of cure is on the average 50-60 per cent. The time taken for complete disappearance of the tumor is usually 15-60 days. This, of course, depends on the size of the tumour when treatment is started. So far, 72 rats have been cured; they are now back on tap water and normal diet, and will be maintained in this manner for the rest of their natural lives. Ten of these rats have been cured for more than two months; their condition is excellent and there is no sign of recurrence of the tumour.

"This treatment has recently been used in four humans with very advanced inoperable tumours. In two of the cases there has been marked clinical improvement with decrease in size of the liver (which contained metastases) and progressive diminution in the blood

serum polysaccharide which Keyser has shown to be an indication of effective therapy in neoplastic states".

Other experimental cancer cured by hydrogen peroxide by various routes of administration have been reported by Magat 7), Pakenham-Walsh 8) and Motawei 9). It is curious that Kanematsu Sugiura of the Sloan-Kettering Institute for Cancer Research was unable to replicate Holman's work 10).

Makino and Tanaka reported 90% tumor kill in both Yoshida sarcoma and MTK-sarcoma at two hours after intraperitoneal injection of one cc of 2 per cent H₂O₂ in tumor bearing animals. The animals' lifespans were doubled with only this single injection of H₂O₂ 11). In 1963, Kremetz, Youngblood, and Healy of the Tulane University School of Medicine, New Orleans, reported over 300% increase in survival and a high percentage of cures in mice with Erlich's ascites tumor which were injected intraperitoneally with H₂O₂ at 180mg/Kg body weight for six successive days 12).

Ozone (O₃) has been used to supersaturate biological fluids with oxygen. It shares with H₂O₂ its ability to release nascent oxygen, O₁, a highly reactive oxygen ion. Sweet, Kao, and Lee of Washington University School of Medicine in St. Louis, Missouri, reported the inhibition of tumor cell growth by O₃ added to the ambient air surrounding the cultures 13). Exposure to O₃ at 0.8 parts per million inhibited cancer cell growth more than 90% and control cell growth less than 50%. The researchers concluded: "These findings lead us to believe that ozone - alone, in combination with radiation therapy, or in chemotherapy utilizing electrophilic compounds - may have therapeutic value for patients with certain forms of lung cancer."

Why does oxygen in its various forms have an anti-cancer effect? Although it would be reductionist to choose a single rationale, perhaps the most important groundwork in this discussion brings us back to Otto Warburg's contribution. Warburg suggested the addition of respiratory enzymes to the food of cancer patients in order to improve oxidative metabolism even in malignant cells: "Because young metastases live in the body almost aerobically, inhibition by the active groups should be possible... The active groups should be added to the food, in the greatest possible amount, for many years, even for ever. This is a promising task. If it succeeds, then cancer will be a harmless disease" 2).

(to be continued)

---- Gar Hildenbrand

REFERENCES

1. S. Fama, Lectures on Yoga (Pub. Himalayan International Institute of Yoga Science & Philosophy of USA, Glenview, Illinois, 1976).
2. C. Warburg, "The Prime Cause and Prevention of Cancer" (ed. Dean Burk, National Cancer Institute, Pub. Konrad Triltsch, Wurzberg, Germany, 1976).
3. G. Warburg, K. Gawehn, A.W. Geissler, D. Kayser, S. Lorenz, Klinische Wochenschrift 43, 289, 1965.
4. A. Guyton, Textbook of Medical Physiology (Pub. W.B. Saunders, Philadelphia and London, 1969).
5. T.H. Oliver, D.V. Murphy, "Influenzal Pneumonia: The intravenous Injection of Hydrogen Peroxide", Lancet, Feb. 21, 1920, pp. 432-433.
6. R.A. Holman, "Method of Destroying a Malignant Rat Tumour in vivo", Nature, May 18, 1957, pg 1033.
7. A. Magat, Congresse allemande du Cancer, April, 1928, Wiesbaden.
8. R. Pakenham-Walsh, Med. Press, 217(246), 1947.
9. A.M. Motawei, A New Chemotherapeutic Agent for Use in Malignancy, (Pub. Memphis Press, El-Mahdi, Cairo, 1954).
10. K. Sigiura, "Effect of Hydrogen Peroxide on Transplanted Rat and Mouse Tumours", Nature 182(4645), Nov. 8, 1958.
11. S. Makino, T. Tanaka, "The Cytological Effects of Chemicals on Ascites Sarcomas", GANN, 44, March, 1953.
12. E.T. Kremetz, J.W. Youngblood, W.R. Healy, "The Effect of Peroxides, Peroxidase Inhibitors, and Alkylating Agents on Ascites Tumors in Mice", Proceedings of the American Association for Cancer Research 4(1), April 1963.
13. F. Sweet, M.S. Kao, S.C.D. Lee, "Ozone Selectively Inhibits Growth of Human Cancer Cells", Science 209, August 22, 1980.

News from another Cured 'incurable' patient:

About 3½ years ago, this 55 year old man was told that he had no more than 3 months to live due to advanced liver cirrhosis. His liver enzymes were very elevated (SGPT 290 - normal 0-45) and his doctor told him that nothing could be done. So, anticipating death, he "got his affairs in order": he sold his business and various properties. He then heard about the Gerson Therapy and came to La Gloria Hospital for treatment. Now, more than 3½ years later, he is well and active. -- He did have one problem: since he sold his business, he had to start another one - which he did, successfully!

August 1948

In the early course of our life we have to go through a change from the sodium (Na) to the potassium (K) animal. That change must be complete, definite, and maintained throughout life as it is decisive for health from the beginning to the end of our existence. It starts with the fertilization of the ovum as the physiological basis.

We found that the male and female component parts contain each of Rudolf Keller's two opposite mineral groups, here highly differentiated.

The human egg cell 1/10 mm in size, contains the K group (K, P, Mg, Mn, Cu), is electro-positive and has the corresponding enzymes, vitamins and probably hormones too. The human sperm, 1/200 mm in size, on the other hand contains the Na group (Na, Cl, H₂O, Ca, ion, Al, Br, I), is negative and has the other group of enzymes, vitamins etc.

The combination of egg & sperm brings about the most remarkable biological effect. In 1/200,000 of a second the fertilized cell becomes negative, rejects all other negative spermatozoons and increases the negativity by attracting more Na group minerals from the lymph fluid.

The Na group (accumulated mostly in the chromosomes and genes), especially iodine, seems to control the velocity of growth into a morula farther into the germ layers, etc. In general, the velocity of growth seems to depend mostly upon the amount of the Na group and its iodine. As Na+I means faster growth and dedifferentiation, K+I means slower growth and specific differentiation. This is the biologic basis of the theory upon which the following cancer therapy is based, derived first from clinical results. The above mentioned biologic peculiarity of faster growth is best documented by the higher contents of Na and iodine found in fast growing plants and animals such as parasites, bacteria, creeping plants, lettuce, spinach, embryos, cancer cells, etc. in cultures and tissues.

This physiological relationship is present also in the $\frac{K_a}{Na}$ ratio of mothers milk of faster and slower growing animals.

The faster growth capacity and the predominant Na negative stage remains in a human fetus during pregnancy, although gradually decreasing in Na and increasing in K. The definite transformation, however, into a K animal is accomplished not before half a year after birth, when the infant acquires great power of retention of K minerals. To complete the vital change from the Na to K preponderance, the most important factor seems to be the natural K rich fruit and vegetable food as it supports the growing fetus and infant with a great deal of additional living enzymes and vitamins, known and unknown. This food is more valuable and especially effective when grown with natural fertilizer.

New mothers also need this food while nursing. They should nurse the infants at least during the decisive 6 months to help the natural perfect transformation into a K animal. Thus, these mothers will be rewarded with calm babies, free of intestinal troubles, not inclined to colds, other infections and allergic diseases. On the other hand, babies underdeveloped physically and mentally, who are not sufficiently transformed at birth, may be helped after.

Therefore, the therapy has to rehabilitate the K group in the essential organs, predominantly by means of electrical potentials. (Rudolf Keller). Generally each group, with the corresponding vitamins and enzymes, has to be stored where it belongs, iodine especially in the thyroid, where 1/5 of the total amount is stored or 40 to 45,000 mg* with the other minerals of the Na group. The more firmly the new K majority is established and maintained in the essential organs such as liver, muscles, brain, central nervous system, stomach, kidney, cortex, suprarenal cortex, etc., the stronger is the resistance and protection against acute and degenerative or chronic

diseases, one of which is the great complex of cancers and malignancies. When the general K+I protection is lost, there is not much difference whether the malignancy generates from an embryonic remnant, where the original Na majority is still present, or from a part of an organ where Na is physiologically reabsorbed and accumulated. We find this biologic situation in the pancreas, colon, kidneys, lower ducts of the breast, and also in the stomach wall cells where Cl is split off and Na returned to the veins. Finally it is true in tissues damaged by chronic inflammation, thrombosis, ulcer formation, or underdevelopment frequent in ovary and testis (not descended), etc. They all show the same characteristic: a surplus of Na and I locally, but more or less lost generally. This facilitates carcinomatous growth of cells with all the consequences.

To prove this theory I refer to observations, publications, demonstrations and statistics of my very promising results during the last 2 decades. Above mentioned are some biological facts from the literature. Lack of hospital facilities, lack of a well-furnished laboratory, and lack of sufficient funds hindered the scientific proof of my therapy for rehabilitation of cancer patients. However, in the history of medicine the results at the bedside are always decisive.

In beginning cases we may find more K and more I in the serum as these minerals leave the stores in a greater amount because of decrease in electrical potentials. Later when these minerals are excreted more or less, they are lost. Na decrease in serum does not mean lack of this mineral as it invades other tissues and can be found there.

There are many other intricacies and difficulties to overcome. Examination of the liver, pancreas and thyroid will be necessary, but the puncture method may be questionable in some regard. In terminal cases all reserves are exhausted, the organs emptied. Also the serum is very far deprived of K+I. Na is increased especially in accompanying anemias or other blood diseases. Often when the amount of small and large lymphocytes is less than 10% in c.b.c. the therapy could not accomplish rehabilitation. Where the situation is disturbed so fundamentally I thought it would be helpful to examine one or more members of both mineral groups in blood and serum. I started to test phosphorus from the K-group and chloride from the Na-group in more than 100 cases in serum and red blood cells, using the latter as indicator of an organ normally with a K majority. I have the impression that this kind of new test will be helpful to clarify the picture but it must be repeated in larger numbers and more frequently in each case to confirm these findings.

Additional Sources of Organic Produce:

One of our patients on Long Island has shared with us her source for fresh organic produce. We are always happy to hear directly or indirectly about these good people. If you have a favorite store, please communicate with us.

Paul & Edith De Frey
Brightwaters Farm
1624 Manatuck Blvd.
Bay Shore, NY 11706
Tel. (516) 665-5411

A good source of organic grains and other products:

Paul Keene
Walnut Acres
Penns Creek, PA 17862
(717) 837-0601

HOLIDAY MENU FROM YVONNE'S KITCHEN

Main Course: Stuffed Squash - serves 6-8

Yvonne Nienstadt

3-4 Acorn squash (small to medium size)
 ½ c. onion, diced
 ½ c. celery, diced
 ½ c. carrot, diced
 1½ c. cooked brown rice
 (use part wild rice if desired)
 ½ c. sprouted lentils

½ c. raisins or chopped prunes
 (soaked + drained) (opt)
 3 Tbsp. fresh parsley, minced
 ½ tsp. rubbed sage
 ½ tsp. thyme
 2 Tbsp. lemon juice
 1 lrg. clove garlic, crushed **

Slice squashes lengthwise and remove seeds. Combine remaining ingredients, fill squash halves. Cover and bake at 300° - 325° for 1½ hr. or until squash is tender. Delicious with apricot sauce or golden gravy.

** Try using 6-8 whole cloves garlic for a delicious mild flavor. Crushing releases the strong aromatic oils, whereas using garlic uncut imparts a very mild flavor.

Apricot Sauce

½ c. dried apricots (unsulphured)
 1 c. pure water, heated

½ c. fresh apple or orange juice

Wash and drain apricots. Combine with water and soak for several hours. Add juice and stew over low flame until apricots are very tender - about 1-½ hrs. Puree sauce in blender or by putting through Foley Food Mill or Norwalk.

Golden Gravy

1 sm. potato, quartered
 4 carrots, sliced
 2 tsp. cider vinegar or lemon juice
 1 c. soup stock or water

1 sm. onion, diced
 ½ tsp. dill, marjoram or thyme
 1 Tbsp. parsley, minced

Combine ingredients and stew over low flame for 1½ - 2 hrs. or until tender. Remove potato skins and puree.

Glazed Beets serves 6-8

9 large beets

glaze: 2/3 c. fresh orange juice
 1 Tbsp. cornstarch

1½ Tbsp. cider vinegar
 1 Tbsp. raw honey or crude brn. sugar

Scrub beets and simmer in water until tender, approx. 1 - 1½ hrs. Peel in cold water. Slice or cut into bite sized pieces. Combine glaze ingredients and cook over low flame until thick. Add beets and mix well.

Variation: use ½ c. apple juice and 3 Tbsp. lemon juice in place of orange juice.

DessertApple Streusel Pie

1 - 9" pie crust (see below)
 12 med. gr. apples, sliced 1/8" thick
 1/3 c. crude brn. sugar or ¼ c. honey
 2 Tbsp. cornstarch or oat flour
 2 - 3 Tbsp. lemon or orange juice

½ c. dried currants or chopped dates
 ½ tsp. coriander
 ½ tsp. mace
 ½ tsp. allspice or ground anise seed

Combine dry ingredients. Coat apples. Drizzle on honey (if used) and juice. Fill pie crust. Sprinkle on topping. Bake at 300 - 325° for 1 hr. 15 min. or until apples are tender.

Crumb Topping:

2/3 c. oat flour*

½ tsp. allspice

3 Tbsp. crude brn. sugar

1/3 c. honey or maple syrup

* can be made easily by putting rolled oats in blender or through fine grid on Norwalk.

8.

Raised Crust

- 1 c. oat flour
- 1/2 c. potato flour (or use more oat flour)
- 1/2 c. triticale or whole wheat flour
- 1 Tbsp. honey or brn. sugar
- 1/2 c. warm water
- 1 Tbsp. baker's yeast

Proof yeast in warm water mixed with honey. When frothy add flour and mix well. Let rise in warm place for 1 hr. Knead on floured board for 5 min. Let rest for 10 min. Roll out on floured board. Place in pie plate that has been thoroughly coated on the bottom with rolled oat flakes. Flute edge. Let rise for 15 min. Bake at 375° for 20 - 25 min.

Variation: omit yeast, use just enough cold water to make a stiff dough. Roll out between sheets of floured wax paper. Carefully place in pie plate. Chill crust. Then bake at 350° for 10 - 12 min.

Essene Bread Crust

- 2 c. essene bread crumbs
- 1/2 c. honey
- 3 Tbsp. oat flour

Toast slices of bread in slow oven until lightly brown. Let cool. Grind coarsely by running through grinder or Norwalk. Add flour, then honey. Press into pie plate that has been well coated with rolled oat flakes. Chill for 1 hr., then bake at 350° for 10 - 12 min. Cool, then fill.

SEASON'S GREETINGS from all of us at the GERSON INSTITUTE

We take this opportunity to wish our members and friends and all their families a very Merry Christmas and a Happy, Healthy New Year.

May the New Year bring you Peace and Joy and may your wishes and hopes be fulfilled.

We pray that our efforts to improve your health will bear fruit and give you and yours an active, satisfying, successful future.

Charlotte Gerson

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