INTERVIEW with Professor K P Buteyko

Q: Konstantin Pavlovich, please tell us how you became a medical practitioner and a little about yourself.

A: I was born in a peasant farmer's family on 27 January 1923 in a village Ivanitsa, about 150 km from Kiev. My father was a mechanical enthusiast. This tendency was passed on to me. So on graduating from high school I enrolled into the Kiev Polytechnic Institute. My studies were interrupted by the World War II and I had to leave during the second year to join the forces servicing the front line. After the war I decided to study the most complicated piece of machinery - the human organism as during the war I had had enough of the other types of technology. It seemed to me that having studied the human body I would be able to diagnose its diseases much the same way as I used to do with machinery during the war. But it turned out to be a lot more complex.

In 1946, I enrolled into the First Medical Institute in Moscow. During the third year I started being active in the clinical therapy group under the departmental head academician Evgeniy Mikhailovitch Tareiev. In 1952, having graduated from the institute with honours, I became a clinics therapy intern under academician Tareiev. Still under him I was then put in charge of establishing a functional diagnostics laboratory. However this project failed due to lack of funds, personnel and equipment. An attempt to establish the laboratory under the auspices of the Ministry of Health Hospital in Moscow was also unsuccessful - the necessary equipment was made available but not the scientific personnel. In 1958 I was invited by Prof Meshalkin to join the Institute of Experimental Biology and Medicine at the Siberian Branch of the USSR Academy of Science (where he was the director) for the purposes of establishing a laboratory of functional diagnostics. This project was completed in 1960. But my destiny was resolved earlier in my second month of independent work as a medical practitioner.

Q: That's exactly what I wanted to ask you Konstantin Pavlovich - about your first steps.

A: I think I became a doctor even during my third year at the Institute when I spent hundreds of hours sitting by the patients' bedsides trying to discover the mystery of death. It was during that particular time that I noticed a considerable deepening in patients' breath with the approaching of death. By the depths of their breath I could prognose how many days or hours were left before the death occurred.

Q: To what conclusion did these observations lead you?

A: In my third year I was given a practical assignment whereby I had to work out a method for myself how to auscultate (ed listen with stethoscope) the patient's lungs. I asked a patient to breath deeply as a result of which he fainted (due as I was told to oxygen oversaturation of the brain). This event determined the area of my future interest. During the second month of my independent work a thought flashed through my mind that certain diseases develop as a result of deep breathing and in particular my own problem of hypertension. I checked it out immediately by reducing my breath. Some symptoms (headache and rapid heart beat) also reduced. Then I increased the depth of my breathing and the symptoms returned. Here I understood that I discovered the reason of my disease. Concurrently another thought struck me that many other people also had deep breathing. It was not difficult to surmise that blood vessels spasming occurring in hypertension could occur also with other types of diseases for example in conditions of stenocardia (ed angina pectoris) with the resultant myocardial infarction (ed heart attack); endarteritis (ed inflammation of the innermost coat of an artery usually occurring in legs) or ulcerative stomach disease.
Q: Can it be said that you were then on the threshold of your discovery?

A: Yes, that was the discovery. At that time I already could lay down the theoretical foundation for this idea. It was known that deep breathing removes the carbon dioxide out of the body. This, in turn, caused the vessels to spasm and resulted in oxygen starvation of the tissues. During that memorable night on duty at the clinic I had not slept. I was checking and rechecking my idea on the patients. I asked the overbreathing asthmatics to breathe shallower - and the attacks stopped. I asked those who suffered from stenocardia and other diseases to breathe shallower - and their attacks stopped immediately. I asked them to breathe deeper and the attacks resumed. By the morning I was absolutely sure that this was a discovery, a global discovery, and that our medicine was all upside down.

Q: And what have you undertaken? Please tell us about your further work that was carried out towards developing the theoretical, scientific and practical fundamentals of your discovery.

A: For about a month, working very intensively at the Central and Lenin Medical Libraries, I tried to clear up the question that worried me - is it really so that for the duration of the entire existence of the medical science such a simple thought had never occurred to anyone else? As it turned out, my efforts were entirely fruitless. During the centuries the human race was learning to breathe deeply and no one, even for a moment, tried to reduce breathing. During my search, I was lucky to learn of a few experiments supporting the viability of my thinking. Then I decided to share my thoughts with my teachers. But I had not found any support from any of them.

I remembered that similar thing happened at some time with Semmelweiss, a Hungarian obstetrician and surgeon who discovered sepsis in 1846. His friend had cut his finger while performing an autopsy on a woman who perished of sepsis (or of "puerperal fever" as they called it then). Three days later he also contracted the "puerperal fever". Semmelweiss had an idea that the reason for the disease was "something" that passed through the cut from the corpse. He surmised that there existed some kind of poison in the corpse that affected the humans (at the time microbes were not yet known of, which were discovered by Pasteur 20 years later). With the desire to confirm his supposition, Semmelweiss decided to wash his hands prior to operations, disinfecting them with a chloride of lime solution. He suggested his assistants also follow this routine. At the time about one third of all new mothers and operated on patients died of sepsis. A three-month experiment confirmed Semmelweiss's hypothesis and he lost no patients thereafter. He informed his society of surgeons and suggested they follow his example. He was declared to be mentally disturbed. Similar destiny befell upon Prof Lister, an Englishman, who ten years later also called for disinfection of hands prior to operations. And only after this discovery had reached the ears of the public and hordes of patients' relatives started to turn up at the operations demanding to know if surgeons washed their hands before the operations, did this procedure become accepted by the surgeons. This happened half a century after the initial discovery by Semmelweiss.

At that time I understood that voicing my convictions was not going to bring any results and started organising an experimental laboratory. I had to gather evidence, develop it, find the formula and only then announce the fundamentals of my ideas.

Q: Please tell us more of the details of your further scientific and experimental work.

A: This work was concurrent with the establishment of the functional diagnostics laboratory that I was involved in at Prof Meshalkin's Institute. In 1958-1959 we conducted clinical studies on about 200 people both healthy and sick. When the first data, various measurements, associations, deductions, correlations, regulations etc. were obtained, all of these confirmed the correctness of my discovery. On 11 January 1960 I presented my work to the Scientific Forum at our Institute and tried to explain the concepts of my thinking. I told those present of our experiments which showed
the objective inter-dependence between the depth of breathing (hyperventilation), the content of carbon dioxide in the body, the vessel spasms and the conditions of the patients.

**Q:** What was the reaction of the members of the scientific forum?

**A:** They were stunned. Surgeons took this as a dirty trick because I offered to treat such diseases as asthma, hypertension, stenocardia without a knife. Invasive surgery never cured these diseases anyway, everybody knew that and mortality was high whereas my method founded on shallow breath, gave a quick almost 100% recovery. Quite naturally I expected that the surgeons would be delighted. Alas, their reaction was quite the opposite.

**Q:** Fortunately 'this did not stop your investigations. What are the concrete, practical results that were achieved at the laboratory'?

**A:** During the ten years of the laboratory's existence and using the contemporary scientific and technological achievements we were successful in obtaining extensive information on the basic functions of the human organism whether healthy or diseased and then analysing this information on computers and mathematically deriving physiological measurements and the various conformities.

Two hundred medical specialists were trained in the laboratory most of whom, by the way, suffered from one condition or another and tried the method on themselves. Now they were all treating other patients utilising my method. Official statistics showed that as at 1 January 1967 more than 1000 patients suffering from asthma, hypertension or stenocardia had been successfully treated and had totally recovered from their illnesses.

**Q:** What is 'the basic concept of your method?'

**A:** Our method is in total contravention to the commonly accepted one - ie breathe deeply. Ours is - breathe less and shallower.

**Q:** By the commonly accepted one do you mean the one accepted by the western medicine?

**A:** Before telling you about the basic concept of the method I would like to emphasise that I describe medicine generally following two directions - one direction is the so-called official western and the other - eastern in particular the Tibetan medicine or "judd-shi" (check spelling).

It has transpired that the truth is on the side of the eastern medicine which has always stated that diseases occur as a result of the disturbed breathing.

The essence of my method is however in decreasing the depth of breathing. You would ask me how. The best way is through relaxation of the muscles that potentiate the breathing action. What then occurs is a sensation of having insufficient air if the breathing is reduced. These are all the instructions - the whole of the method.

**Q:** Returning to your presentation at the Scientific Forum in January 1960 it would be interesting to find out how did they take your concept as a whole?

**A:** As I mentioned earlier my presentation was found to be totally unacceptable to most surgeons. Nevertheless I received approval from Prof Meshalkin who chaired the Forum. He said he understood the perspective and wanted the research continued. Afterwards he visited me in the laboratory seeking some personal assurances from me. He himself suffered from stenocardia in the worst form having had instances of ischemia every day or two and no specialist was brave enough to treat him. Tests conducted on our equipment showed him to be in grave danger of an imminent and very serious heart attack. My laboratory was equipped at the highest level. We had a
compendium of about forty various instruments capable of registering almost all basic functions of
the human organism and producing about 100,000 pieces of data per hour. The data analysis was
conducted by an instrument designed by me and my colleagues which we called the "complexator"
and which was affectionately known by most people as the "medical combine". This instrument
was reported on in the press (in a magazine "Inventor & Rationaliser" No 5/1962 and No 6/1961).
This is a unique device and is not available anywhere in the world.

Q: Is there a patent covering this device?

A: Only certain parts of the instrument were patented. Obtaining a patent for the whole of this
invention would have required an enormous effort and that was not the main purpose of my work.

Q: Was there ever a scientific approbation conducted in connection with your method?

A: I requested Prof. Meshalkin for an approbation to be conducted at the Institute's clinic. He
categorically refused. Despite the fact that he himself had undergone my treatment which helped
him in parting with all of his illnesses in a few days he nevertheless vetoed the approbation. Shortly
thereafter this was followed by rather brutal overall repression up to the forcible confiscation of
equipment. There were to be no publications and strong reprimands were made for any public
appearances or speeches on the subject. This attitude was exhibited not only by Prof. Meshalkin, but
by all of his student-surgeons. In 1963 Prof. Meshalkin had subjected to a similar treatment a few of
other ideas which in his opinion interfered with his concepts of surgery. As a result of these
unseemly management practices the Institute was disbanded and closed.

This in a way saved my laboratory. I was able to keep one third of all the instruments, personnel
and premises. From 1963 to 1968, our laboratory was attached to the Institute of Cytology and
Genetics of the Siberian Branch of the USSR Academy of Science. Prof. Meshalkin's clinic was
reassigned into the system of the Ministry of Health of RSFSR (ed now Russia). My repeated
requests and attempts for experimentation to accredit my method had not met any support
whatsoever. And only in January 1968, after representations made by local and foreign press in
defence of the discovery, was the approbation carried out in Leningrad at the Institute of
Pulmonology under academician Uglov. Shortly before this a visit was paid to us by the Minister of
Health, academician Petrovsky who informed us that if we successfully treated at least 80% of the
patients given to us he would make recommendations for an immediate entrenchment of the
method into the medical practices. He promised also to make available for our use a 50-bed clinic
for the continuation of our clinical work. We had put a condition - to give us the most serious and
difficult cases not otherwise treatable by conventional methods of medicine.

We began by taking all of them off all their medications and soon after have put them back on their
feet. 95% of the patients were officially recognised as cured. Only two from the 46 had smaller
positive effect. All of the patients had up to twenty different conditions each. One of the female
patients was recommended to undergo a mastectomy as she was diagnosed to have a malignant
tumour in the initial stages. She has, prior to that, refused the operation. She was included on the
list of our patients for approbation because of her asthma. She recovered not only from her asthma
but from the rest of her complaints including the tumour. I must add that the two patients not
included in the success rate had also been relieved of their diseases after further treatment and had
informed of this the Minister responsible. Consequently in effect we could describe the results of
our method as having had a 100% success rate.

The official conclusions of the approbation were sent to the Health Minister academician Petrovsky
but had never been advised to either me or the Siberian Branch of the Academy of Science. The
Ministry later, in a phone call to the chairman of the Siberian Branch academician Lavrentiev,
advised that the approbation had failed with only two out of the 46 patients having been cured. This
telephoned falsification served as a foundation for closing our laboratory. On 14 August 1968 the
laboratory was closed, all my colleagues were dismissed without any offers of alternative employment and all of the equipment was pilfered. (ed The second official approbation of the method was conducted at the First Moscow. Institute of Paediatric Diseases in April 1980 at the direction of the Government Committee for Science and Technology of the Soviet Ministry of USSR and had confirmed the findings of the earlier approbation conducted in Leningrad.)

Q: But your method had not perished?"

A: No the method survived because the originally trained team of medical practitioners (all of whom had previously been suffering from various illnesses themselves and fully recovered) has continued to treat patients. Officially not one single medical establishment in Moscow is now using our method. But it's used in Harkov, Chernigov, Kahovka, Leningrad, Krasnoyarsk, Khabarovsk, Sverdlovsk . ..... 

At present discussions are underway to try and convince our medical practitioners to study our theory to master our method and to inculcate it into practice so that approximately 50 million of hyperventilating patients can be treated and cured around the whole of the Soviet Union.

Q: Which scientific laws support your discovery and the based on it method?

A: Our theory represents the development of theory of hyperventilation syndrome - the primary stage of the deep breathing disease. This theory is based on the contemporary understanding of the immense biological role of the carbon dioxide gas in life and health of all humans and all animals on Earth and on the physiological laws of the effects of C02 on organism and all life systems of humans, animals and plants.

Carbon dioxide is the basic food product of all life forms on Earth. Plants absorb CO2 from air. Animals feed on plants and humans feed on both of these. The huge resources of C02 in the air of the ancient eras have reduced from the tens of percent to the infinitesimally- small amount of 0.03% in our time (ed 1982). The Earth's vegetation will eventually absorb the remnants of this food resource and this will lead towards the destruction of all life forms on Earth. I was asked to speak on this subject at the World Congress of Biochemistry which took place in Moscow in 1972. 

The human and the animal cell metabolisms were created in the ancient geological eras when carbon dioxide in the air and water represented a number of tens of percent. Because of this a definite concentration of C02 must be an absolutely essential condition of each cell in order for the cell to sustain all the normal pathways of all the biochemical processes.

In the process of evolution of the human organism and of the higher animals each one of these organisms has created its own autonomous internal air environment, within the alveolar spaces in the lungs, which contains around 6.5% of CO2. It also contains O2 at the level of around 7% less than that in the surrounding air. Obviously this is the minimal concentration necessary for the cell metabolic processes to take place. For example lowering C02 in the lungs by deep breathing shifts the pH towards alkalinity which changes the rate of activity of all body ferments (around 1000) and vitamins (around 20). This shift in the rate of activity of the metabolic regulators disturbs the normal flow of metabolic processes and leads to the death of the cell. If the level of C02 is lowered to 3%, shifting pH to 8 the whole of the organism dies. 

The detrimental influence of the deep breathing on the organism, through the creation by it of the deficit of C02 has been proven by many experiments, starting with the work of the well-known English (?) physiologist, D. Henderson in 1909. In his experiment animals were mechanically induced to deep breathe and dies as a result.

To maintain a constant level of C02 in the lungs the process of evolution has taken care of our organism by the creation of the following defensive mechanisms:
1. spasms of the bronchi and the blood vessel

2. increased levels of production of cholesterol in the liver in the role of a biological isolator, thickening the cell membranes in the lungs and the blood vessels

3. lowering of the arterial pressure (hypotension) thereby decreasing the release of CO2 from the organism.

However bronchial and blood vessel spasms also decrease the amounts of oxygen reaching the cells of the brain the heart the kidneys and other organs.

Lower levels of CO2 strengthen the bond between hemoglobin and oxygen molecules, thus making it difficult for sufficient oxygen to reach the brain (Verigo-Bohr effect). Lowered levels of oxygen produce oxygen starvation of the tissues (hypoxia).

Hypoxia, once it reaches a dangerous level, in some individuals, produces increased arterial pressure (hypertension). Hypertension increases blood flow through the narrowed vessels and improves oxygen supply to the cells of the vital organs.

The oxygen-deprived tissues potentiate a lowered level of oxygen in venous blood which leads to dilation of venous blood vessels and results in varicose veins in the legs and dilation of hemorrhoids veins, resulting in hemorrhoids.

A lowered level of CO2 in the blood increases clotting functions of blood and, in conjunction with the lowered blood flow in veins, leads to the development of thrombophlebitis.

Oxygen starvation of vital organs, once it has reached a certain level, excites the breathing centre in the brain thereby creating a state of dominant stimulation. This increases the breathing even further creating shortness of breath (or lack of air) sensation in the already deep-breathing person which further deepens the breath and creates a vicious circle (an inversely positive connection securing a relentless deepening and strengthening of breathing and further progression of the above disturbance towards the disease).

Lowering of the level of CO2 in the nerve cells decreases the threshold of their excitability. This alerts all branches of the nervous system strengthening the generalised state of excitation leading to irritability sleeplessness, constant maximum stress of the nervous system, unfounded anxiety fears, up to fainting spells and epileptic fits. Concurrently with this the breathing centre in the brain is further stimulated. In this way there is a second vicious circle in operation, stimulating the nervous system, rendering it extraordinarily sensitive to the outside stimuli and to the stress reactions present as a result of the disturbed metabolism and oxygen starvation of the nerve cells. This is how the CO2 deficit in the organism, created partly by deep breathing, affects the nervous system first of all.

Symptoms of the various combinations of disturbances in the organism of a deep-breathing person are exceptionally diverse. The traditional principles and methods of the disease analysis have resulted in the various symptoms of the deep breathing disease (bronchospasms, heart muscle spasms, increased or decreased arterial pressures, fainting spells with convulsions) having started to be called as separate illnesses: bronchial asthma, stenocardia, hypertension, epilepsy. The latter named all lead to complications, sclerosis of the lungs and vessels, myocardial infarcts, strokes, which in turn all represent the main causes of premature ageing, senility, invalidism and mortality.

These laws of physiology explain the destructively poisonous influence of the deep breathing and lay the basis to the single scientific principle for the liquidation of the disturbances named as separate illnesses - by way of the removal of the CO2 deficit from the organism.
Our method, which is based on this principle, has been developed by means of a volitional liquidation of deep breathing (VLDB) or volitional breathing normalisation (VBN).

However if the depth of breathing is decreased to below normal and the level of C02 in the organism is above normal by 0.5-1.0% there are no negative symptoms manifested. On the contrary even those afflicted with the heavy consequences of the deep breathing disease eg bronchial asthma, stenocardia, hypertension, develop symptoms of super-endurance. We have been regularly observing this for the second decade now. It is evident that even the maximal decreasing of the depth of breathing does not result in any kind of undesirable occurrences.

So, in fact, the fundamental law of death has been discovered: the deeper the breathing, the more serious the disease, the closer the death. And, to say it the other way, the shallower the breath, the healthier, the more enduring, the longer living the organism.

The theory of the diseases of deep breathing has previously been presented in a lecture: "On Discovery of the Deep Breathing Being the Principal Reason for Allergies, Sclerosis, Psychosis, Tuberculosis, Precancerous Conditions and Other Symptoms of Degradation, Degeneration, Disease and Death in the Western Civilisations."

Q: In that lecture you mentioned that your discovery is not only represented in the method of treatment of the diseases but in the exposure of their real reasons. Could you tell us something about this?

A: This is a very important question. Western medicine has slipped to the levels of blind empirism. This has happened obviously because attempts to find the reason for the diseases such as asthma, stenocardia, hypertension, cancer, have been fruitless. Because of this, the main principle is being trampled on, which by the way is the principle upon which the eastern medicine judd-shi is based: "Having not found the reason of the disease, the physician has no right to treat the patient. Only having discovered the reason for the disease, it is possible to guarantee the recovery."

The western medicine, as it stands at the moment, either has stopped looking for the reasons of asthma, stenocardia, hypertension, or it has a false impression of their reasons. That is why these diseases continue to remain incurable.

It has eventuated that deep breathing is actually the reason for around 150 diseases, including cancer, as it appears now. Therefore, out of the 30 000 known to the mankind diseases, 150 are the direct results of deep breathing. We have conducted an immense synthesis of diseases. And we have found that diseases such as asthma, epilepsy, hypertension, stenocardia, myocardial infarcts, strokes, hemorrhoids, eczema are all symptoms of the disease of deep breathing. In cases where patients had these diseases they have all been cured as was proven in the Leningrad and Moscow approbations. Some of the patients presented to us as asthmatics had 20-30 diseases each. All of them have been cured by our method - they became absolutely healthy people.

Q: We have touched directly on the medical problems. But another question arises as a consequence. If the reason has been found for these diseases to be the deep breathing then where has the deep breathing itself come from? What is the reason for this reason? What is the deep breathing a consequence of?

A: In other words what is the reason for the reason of the deep breathing? We have found new factors deepening the breathing. The most important factor in my opinion is the propaganda of the usefulness of deep breathing. The contemporary man starts to be taught to breathe deeply even before he is born, having his mother sent for sessions of deep breathing gymnastics and exercises during the period of pregnancy. Even the newly born is being taught to increase his breathing by having his little arms raised and lowered. And so it follows on in kindergartens, schools, army,
during physical culture-activities, sport. There are other factors as well - overeating, especially of animal protein (fish, chicken, eggs, milk, and naturally meat) sharply increases breathing. It should be noted that the animal products increase breathing more than the plant products; cooked food more than the raw.

The next factor deepening the breath is a state of limited mobility, lack of physical work or activity, idleness. Physical activity potentiates the release of CO₂ from the cells, increasing its levels in the body. This is the reason why people engaged in physical work live longer and have less diseases. In other words the breath is deepened by hypodynamics, by bed rest regimes, by prolonged horizontal positions (especially lying on the back), prolonged sleep. Recommendations for longer periods of sleep and even the sleep therapy have never cured anybody. Most attacks of epilepsy, asthma, myocardial infarction, strokes, paralysis and death occur towards the end of sleep around 5 am.

Further factors deepening the breath are the various emotions, either positive or negative, overheating, stuffy premises. And the other way around, calmness, temperance, cold temperatures, all assist the shallow breathing. Other deepening factors are also excessive sexual activities, perversions. Abstinence decreases the breath.

So, to sum up, the main positions of the traditional medicine to breathe deeper, have more rest, sleep longer, have quality caloric intake, all lead to deep breathing. Also included amongst the factors increasing the breath are smoking and the use of alcohol.

From here the reverse applies: less breathing, less rest, less sleep, less entertainment, less perversion and more physical activity and work till perspiration, as in perspiring a variety of toxic substances are eliminated, all lead to better health, longer life. In this way we can underline the correctness of the principles of ascetism.

Our civilisation has taken on a global character - it's now embracing the whole of the mankind, and because of this the time is approaching when our world can perish instantaneously through application of nuclear weapons, or gradually through contamination of our environment. The latter eventuality has already commenced its cycle. I feel compelled to point out that the diseases of deep breathing and of poisoning of nervous system (ie factors of greediness) of the human beings also affect human intelligence through the damage caused to the nervous system and the cortex of the brain. With the progressive character of these afflictions, the human being's mental capacity to understand that he is on the path of self-destruction is continually being reduced. In other words, such human being becomes insane enough not to comprehend that he is chopping a branch of the tree from underneath himself. That is why the discovery of our principles represents perhaps the salvation of the mankind from the impending catastrophe, ie the death of the Earth's civilisation.

Q: Have you had any support from any of the scientific and medical leaders?

A: I can name a number of the leading scientists and doctors who support me, although perhaps none of them fully realises the importance and the impact of this discovery as far as the big picture is concerned. In particular a very famous surgeon, academician Amosov, is in total favour on the building up procedures for the immune system rather than for perpetuating our dependence on surgical solutions. Amosov is also in favour of fasting vegetarianism and physical exercise. This is perhaps the reason why he understands my principles. In the magazine called "Science & Life" (No 11, 1977) in his article, "Ponderings on the Subject of Health", Amosov writes that he cannot contain himself from referring the reader to my recommendations: to breathe less and to keep checking the depth of breathing. He agrees with me that the humankind is constantly overbreathing with the resultant CO₂ deficit causing it harm through spasms of the blood vessels of the airways and of the intestines.
This topic is also close to heart and easily understood by another academician from the Ukrainian Academy of Science and a former director of the Institute of Biochemistry, academician Gooliy. In his books “Carbon Dioxide & Life” and “Basic Metabolic Cycles”, Gooliy highlights that he agrees with my principles and with my method of treatment and its usefulness. Academician Gooliy has proven that if the level of CO2 is raised in animals, and all the other given conditions, including the animal feed, remain equal, double the amount of milk is produced by cows and a higher meat output by chickens and pigs. In other words CO2, becomes equivalent to the nutrition necessary for the synthesis of proteins, lipids and carbohydrates. This means that without any further expenditure we can increase our production of meat, milk, eggs and other food products. Academician Gooliy understands the very essence of my discovery with all its implications and consequences.

Q: I believe that beside the theory of breathing culture, you have also developed a number of other fundamental theories. Could you please tell us about these?

A: In this context, and as I was developing my theory and method, I also had to expand my thinking on the theory of medicine, as basically the western medicine has never had any fundamental theories attached to it. Western medicine, as we know it, has really become nothing but the blind empirism, wandering in search of chancy substances which might help the diseased. Today a medical practitioner is not searching for the reasons of a patient's disease in order to cure him, but for a magic potion to help him in some unknown fashion. If the eastern medicine (in particular judd-shi) begins not from the disease, but from drawing first of all a picture of the tree of life, followed by a picture of the tree of disease (which is very much like the tree of life, except distorted) then the western medicine's theory of life has not only no foundation at all, it has no theory behind it. What we do have is the theory of evolution of life which we can use as the basis for the theory of life. Thus we are forced to develop the theory of life with the evolutionary aspects in mind.

According to the works of academicians Oparin and Vinogradov, we know that life on Earth started during the times when there was only carbon dioxide in the Earth's atmosphere. There was no oxygen. This atmosphere produced all the life matter, including the man. And only much later, when the plant life had absorbed most of CO2 and produced O2, the atmosphere had undergone a drastic change. Carbon dioxide disappeared from the atmosphere. It was then substituted by oxygen in the most part.

Our cells require approximately 7% of CO2 and approximately 2-3% Of 02. The surrounding us air contains approximately 0.03% of carbon dioxide which is two hundred times less than is necessary and 20% of oxygen which is ten time the needed norm. Consequently the surrounding air has become poisonous to us. Evolution, you might say, has saved the live beings, including the man, by creating an atmosphere of their own in their lungs. This "new" atmosphere contains 6% of carbon dioxide and an amount 5% less than that of CO2 of oxygen. That is why we survive. All those animals that used to breath oxygen only, lost the carbon dioxide and died. This is the essence of the evolution. In the mother's womb every one of us repeats exactly the same evolution. Human and animal fetus, while in its mother's womb, contains two times the normal of CO2 and five times less the amount that the newly born or the adult has of O2. That is why in the mother's womb the fetus is never ill. Having been born to the outside world and having breathed a few times and changed its environment the newly born start their diseases. Thus then, the development of every one of us repeats the pattern of development of everything that is alive on the Earth. Consequently, the creation of the theory of life and of my discovery and of my method can be attributed to have commenced from the moment of creation of the world.
The theory of life, in brief, is such that carbon dioxide is the basic nutrition of every life form of Earth - if it disappears there will be no life on Earth. It acts as the main regulator of all functions in the organism; it is the main internal environment of the organism; it is the vitamin of all vitamins.