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St. Petersburg Federal Research Institute of Physical Culture  
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# **PROCEEDINGS**

**SCIENCE. INFORMATION. SPIRIT.**

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# INTRODUCTION TO PHYSICS OF CONSCIOUSNESS

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The essence of Consciousness is the ability to process information.

The necessary condition for information to exist is encoding. Without encoding information simply cannot exist. For this reason, physical nature of consciousness can be established by determining the necessary requirements for the associated information encoding.

In principle, the information encoding cannot be random, because randomly encoded information is not retrievable. Therefore, the first necessary property of information encoding (not only in consciousness) is the deterministic order (coherence).

One of the most fundamental observable properties of our consciousness is our privacy of thought – privacy of information processing in our consciousness. Our thoughts simply cannot be intercepted. Hence, the second necessary property of the information encoding in our consciousness is protected individuality of access.

What possible physical mechanisms for information encoding could facilitate the necessary requirements outlined above? Since our thoughts are easily reversible, at least several times per second, any chemical-molecular-DNA based mechanisms are highly unlikely, because they are not easily reversible.

The only plausible mechanisms of information encoding that our science today allows us to admit for consideration are of electromagnetic/electro-photon nature. Of these, we have to exclude the possibility of any analog encoding, simply because it cannot meet the privacy requirement arising from Observable Reality.

The only possibility left seems to be some kind of digital electromagnetic/electro-photon encoding. Experiments in quantum computing confirm that single elementary particles (electrons) can store quite large amount of information. Storing and retrieving information from electrons occurs by means of photons [2][3].

Hence, what is currently interpreted as “random”, “non-deterministic” and “unexplorable” behavior of elementary particles (the quantum world) [1] can simply be manifestation of information processing.

It is very important to note, that digitally encoded transmissions will appear totally “random” to any observer who is unaware of their encoding details [4].



Quantum-digital encoding seems not only possible, but actually highly likely mechanism of information encoding in our consciousness.

Since quantum experiments confirm that elementary particles across the Universe can interact and exchange information, the entire Universe should be considered as a gigantic system for information processing.

People on Earth do not have access to this information not because they are not intelligent enough, but because they dismiss such a possibility.

#### References

- [1] Heisenberg W., Physics and Philosophy. Penguin, 1989
- [2] Ahn,J., Weinacht,T.C., and Bucksbaum,P.H., Quantum information storage and retrieval in Rydberg wave packets. Science, 287, 463 (2000)
- [3] Meyer,D.A., Kwiat,P.G, Hughes,R.J., Bucksbaum,P.H., Ahn,J., Weinacht,T.C., Does Rydberg State Manipulation Equal Quantum Computation?. Science, 289, 1431 (2000).
- [4] Chalko T.J., Is Chance or Choice the essence of Nature?, NU Journal of Discovery Vol 2, March 2001, <http://NUjournal.net>

## PROMETHEUS OR THE PASSIONATE SOUL OF SCIENTIFIC REASON

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Quantum physics recognises that physical objects acquire an intrinsic fluttuability because of the interaction with the vacuum. The fluctuations of different objects could tune together when specific physical conditions are met , so that a well defined phase can be attributed to the complex system made up of all those objects; in these conditions the system become *coherent* . It has been proven by David Bohm that a coherent system is able to couple not only with an electromagnetic field but also with the potentials which can propagate at a speed higher than the speed of light giving rise to violations of Einstein causality (EPR paradox). Consequently the possibility of synchronic processes involving coherent systems , such as living systems, emerges. Following this line of thought the emergence of a psyche and a mind from matter becomes possible. The role of water in this dynamics is pivotal.



## RESEARCH OF EFFECT OF RAJ-YOGA MEDITATION ON CONSCIOUSNESS

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There are persons who hold in their arms hands of the global clock. They define current of time, its direction and speed. Without any exaggeration it is possible to attribute to such persons as Dadi Janki which in her 92 years became president Brahma Kumaris World Spiritual University, the organization numbering more of 8500 centers in 100 countries of the world.

The keeper of sacred traditions of the world, spiritual leader Dadi Janki has been named the Keeper of Wisdom at two conferences of the United Nations: Global summit in Brazil (1992) and Habitat II in Turkey (1995).

Dadi Janki already more than 70 years practices ancient Raj Yoga meditation. In 1978 in the American institute of psychology work of brain Dadi Janki investigated with the encephalograph. It was revealed, that at any tasks on all channels of measuring gauges deltas - waves act. (Deltas - waves - written down encephalograph fluctuations which frequency lays in limits from 0,5 up to 4 Hz.) As a rule, deltas - waves are registered in a condition of deep dream of the person. But in a case with Dadi Janki on encephalogram deltas - waves were fixed, when her brain has been occupied with the tasks which demanded her attention. Dadi Janki is brought in the Guinness Book of records as «Delta Woman of the World », as the steadiest mind in the world.

In Saint Petersburg Professor K.G. Korotkov had been carried out research of power parameters Dadi Janki with the help of the equipment of Gas Discharge Visualization. Konstantin Georgievich has commented on received results: «The researches have shown, that Dadi Janki power field in regular intervals, has no essential breaks or heterogeneous. It's paid attention the strong luminescence in the field of a head that is typical of active thought processes. The high level of activation testifies to active functioning of systems of power, that should cause admiration if to take into account, that shootings were carried out after a lasting many hours concert and performance Dadi Janki before a mass audience. As a whole the received distribution of power typically for the person with high spirituality, ideally balanced, keeping a high energy potential at active mental activity. It is necessary to admire only with such results for the woman of 88 years. It is the first similar case in practice of our

measurements».

Dadi Janki has explained that this energy is the energy of the soul. And she has accumulated this energy as a result of daily practice of Raj Yoga meditation from the Supreme Source.

## **DIRECT RECEPTIVITY OF INFORMATION AS THE NEW LEVEL OF HUMAN CONSCIOUSNESS**

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From as far back as the ancient times, people were aware of concepts such as Clairvoyance on a nationwide scale. However, this has always been so merely by the trade of sheer phenomena, the abilities of which were from time to time demonstrated by a select few “psychics”. The ability to willingly access --- without the use of our familiar sensory organs --- direct reception of information from within, began to interest me in the year 2000. That, too, was when I had first officially come forth with the hypothesis about the existence of a Center of Informational Perception (CIP) within the human brain, capable of the said direct reception. In USA, New York, I had organized a school for the activation of this unusual ability. By the means of an intricately developed and copyrighted method, this facility taught in classes to anyone who was interested, independent of gender or age. The ages of students who have attended my courses range between 3 and 70 years. Ten years of running this school has shown practically the human brain’s ability of a particularly direct informational perception. This is expressed most clearly by children up to twelve years old. Wearing a firm blindfold, my younger students learned to exist in their surrounding environment just as easily as one would have done with both eyes open. They read, wrote, played ball, rode on bicycles and rollerblades. That is to say, they freely demonstrated the brain’s ability to receive visual information from within, without the use of visual organs. All of this adds up as sufficient proof of the reality of the brain’s capability in direct informational perception. In the present time, European scientists and researchers in Moscow and St. Petersburg are working on further scientific evidence of this phenomenon.

## **RECONNECTIVE HEALING EXPERIMENTS**

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A big series of experiments have been conducted during Reconnection Healing workshops and conferences. Experimental data



were collected during 14 months with different EPC/GDV instruments, by different researchers, and in different parts of the world. All these data are quite consistent and have very similar type of variations. They all suggest that in the process of Reconnection Healing structurization of space in the auditorium takes place. People may have different response to this process, and this response may take long time. We expect that Reconnection Healing starts harmonization of the energetic processes in the body, and depending on initial conditions this process may take different time and have different outcome. Sensor data undoubtedly demonstrate that Reconnection Healing have strong positive environmental effects which may be expected extend much broader than the range of the auditorium. All abovementioned features demonstrate that recorded variations of a Sensor signal was not just random, but were related to events in the room. They may be related both to the activity of the presenter and to the reaction of the audience. From all the data we can make the conclusion that during sessions of Reconnection Healing structurization of a space in the auditorium takes place. The physical background of this effect needs attention and further investigation.

Water experiments demonstrated that water changed its properties under the influence of Reconnection Healing both in the case of directed attention and with bottles standing in the room. Control experiments had no effects at all. We keep in mind that human body is 70-80 % water, so it may tell us about mechanisms of Reconnection Healing influence to the body physiology.

## **NEW APPROACH TO REMOTE DETECTING OF HUMAN EMOTIONS**

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A new instrumental method for remote detecting of human emotions, both individual and collective has been developed. A series of experiments with the “Electrophotonic Sensor” instrument demonstrated the effectiveness of the developed approach. Measurements conducted during religious ceremonies, yoga meditations, public lectures, musical performances demonstrated that the signal of the Sensor statistically significantly changes during measurements and these changes are correlated with the course of event. Experiments allowed recording both the individual and collective emotional excitations. Several concepts of possible physical mechanisms of the effect are being offered. At any rate, without being concerned on physical explanations, it is clear that the



effects of human emotions are strong and measurable. Results of measurements in the “places of power” allowed to start a new scientific line of the instrumental investigation of the geoactive zones. In this field culturological aspect of the problem is of particular interest. Idea that from the ancient times historical monuments have been correlated with the “places of power”, areas, having some specific geophysical properties, specific influence to the human condition, has been experimentally approved. This approach opens up a broad field of activity. The advantage of this approach is that any researcher operating with EPI/GDV Camera may take part in the research.

### **THERAPEUTIC EVALUATION OF SOQI (SOLAR ENERGY) UTILIZING GAS DISCHARGE VISUALIZATION (GDV)**

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Pilot study of simultaneous influence of FIR and mechanical oscillatory vibration (SOQI) using the biometric method based on GDV showed that FIR had stabilizing effect on tested individuals. The individual with functional hormonal imbalance on the physiological level and low metabolic rate have shown improvement after exposure to FIR and mechanical oscillatory vibration. The female participant demonstrated positive change in the individual values; all the parameters which were showing deviation from the norm before the SOQI treatment recovered. Thus, SOQI treatment which consists of two concomitantly used modules (FIR and mechanical oscillatory vibration), has positive stabilizing influence on humans. The data obtained from the biometric device were confirmed by the testimonies of the participants about the general improvement of their functional state. The biometric method based on GDV has demonstrated that the initial functional parameters of acupuncture points associated with specific body systems which were deviated from the norm before the SOQI (FIR and mechanical oscillatory vibration) treatment improved after the exposure of the individuals to SOQI. The stabilizing influence of SOQI treatment, as shown by the biometric method based on GDV, requires further research involving larger sample size of individuals with and without the homeostatic deviations.



## THE KOVACSIK METHOD FOR CANCER

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The following presentation is an introduction to the Kovacsik Method developed by Estevam Kovacsik for detection, prevention and cure of cancer. For this purpose, the descriptions are guided by theoretical and practical information left by him.

In his theory Estevam states that the only origin of cancer is the prolonged exposure to the irradiation of contaminated groundwater veins. Such contamination takes place when the clean water comes into contact with wastewater or a cesspool. He states as well, differently from the traditional view of cancer, the disease is not characterized by its typical manifestations, but the emergence of a virus in the region of the heart.

Having this view about cancer, in the first stage of his research (1948-1964), Estevam developed a detection, cure and prevention procedures. In the second stage (1979 - 1982), he worked in a new procedure to eliminate the virus. Bearing in mind that the disease is originated from a harmful irradiation, he created a device that captures energy from the environment and thereby, becomes able to spread a beneficial irradiation which can eliminate the cancer virus.

To prevent cancer, he used his theory of origin for the disease as a research base and developed a device that works by neutralizing the harmful irradiation from the groundwater veins.

### **THE SCIENCE OF MEASURING ENERGY FIELDS: WELLNESS TO WHOLENESS THROUGH THE STUDY OF ELECTROPHONIC IMAGING**

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A wisdom conveyance: "What is within us is perfection, what is without is imperfection. The outer world can attain perfection, only when the inner world, inspires, guides, moulds & shapes the outer world."

We are observing & participating in fields of informational cascades, which exemplify the process of human development from the gross to the refined, often blending these two attributes into a presence which conditions our energy fields & spaces. In the former attribute, inertia & high entropy are predominant & in the latter attribute a presence which cherishes for the collective wellbeing in all is the inspiration that seeks expression.



Sri Aurobindo Ji conveyed the essence of this known presence so humankind may awaken to realize & manifest: “The way of yoga is not only to rise out of the ordinary ignorant world consciousness into the Divine consciousness, but to bring the supramental power of that Divine consciousness down into the ignorance of mind, life & body, to transform them & create a Divine life in matter.”

The essence of Dr Korotkov’s vision continues to inspire, enrich, empower & enhance the purposeful presence in how the Electro Photon Imaging (EPI/GDV) device is also utilized to record precise data streams that beings of high wisdom have conveyed over millennia.

We, as a race of humans are awakening from our direct experiences to knowing & realizing that attachments, either to ignorance, passions & goodness, have & will continue to actuate high presence of inertia.

Can we evolve to a higher order of being? Is this symphony from “Wellness to Wholeness” a field presence that can imprint for the awakening of soul consciousness in the collective.

Inspired by Albert Einstein’s words: “Always bring things to the simple, not simpler.” has been my guiding direction unifying Vedic thought to evolved science, which is the science of the EPI/GDV.

So, in this presentation, I shall feature a sampling of case studies in participants whose lives have been inspired to raise the bar of wellness. The presence of inner self organization from simple practices to enhanced qualitative presence, empowering the lives of these beings based on wisdom truths & how each participant continues to live, recognizing that our refinement mirrors the world around us. Also featuring insights from our collective research explorations w Dr.Eric Pearl ([www.thereconnection.com](http://www.thereconnection.com)) & the presence of a unified core discipline within the members of the organization, are inspirational imprints for individuals to communities to live with qualitative purposefulness.

Being a co-founder of The Institute for Science, Spirituality & Sustainability ([www.issstaos.org](http://www.issstaos.org)) with Dr’s Gary Schwartz & Marty Hewlitt, based in Taos, New Mexico, we are wholly committed to enhancing the qualitative presence of all beings via modes of education, scientific exploration to the “soul of science” & empowerment practices to inspire, enrich & to evoke the creative & unbounded potential in ALL, so the brilliance of presence is guided to manifest.

## **COMPARISON OF GDV ANALYSIS TO KIRLIAN PHOTOGRAPHY AS USED IN COLORPUNCTURE**

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The powerful healing modality of Colorpuncture (color light therapy) is discussed in its effect on the human consciousness. The author discusses the theory and methodology of Colorpuncture from a body, mind, and spirit healing perspective, and the use of the GDV camera, and its predecessor, the Mandel Kirlian camera as the primary diagnostic tools. The Mandel Kirlian camera is an analog device, which captures emissions of the fingers and toes on black and white photo paper. The photos are analyzed subjectively in the mind, body and spirit planes by a trained practitioner, as opposed to the detailed objective analysis provided by the GDV software. Comparisons of a patient case study using both camera diagnostics are evaluated and discussed.

The main conclusion is that we witness the informational evolution of the Kirlian diagnostic process, which provides the ability to better evaluate the human emotional state. This process contributes much more clarity in diagnosing and understanding our psycho-spiritual energy as the GDV assessment programs are further refined.

## **INNOVATIONS IN WORKING WITH HUMAN PSYCHE AND THEIR APPLICATION IN SPORT ACTIVITY**

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The traditional psychological approach limits the studying of personal characteristics, activities and problems concerning with activity itself. The integration of east and west approaches and scientific innovations give the better understanding to this problem. All modern researches give a new conception for human psychological resources.

The gas discharge visualization technique is one of the newest and most effective methods, the application of which is able to get characteristics reflecting psycho functional energetic of the organism which could be the keys for works to sportsman of high qualification. According to Russian scientists' researches, efficiency of emulative activity depends on physical readiness, emulative` reliability and consciousness

management during emulative period. The new apparatus methods like specialized program “GDV Sport” give a great opportunity to correct sportsmen’s state during emulative period.

These resources were used in work with Olympic Ukrainian yachting team during 2009-2010. The dependence between the rate of readiness and types of competitions has been discovered. This fact permits to correct sportsmen readiness level. Measuring at the beginning and ending of the competition gave us the possibility to create personal energetic diagram and correct sportsmen state. Obviously, work with apparatus GDV helps to improve sportsman activity because of “turning on” the higher state of his mind, and to increase emulative` reliability.

### **Conclusion:**

- The screening diagnostics can be useful in forecasting of emulative` reliability for sportsmen of high qualification.

- The usage of gas discharge visualization technique gives possibility to correct sportsmen’s state during emulative period.

- The results of investigation can be used as a base for creation of the model of multilevel sportsmen’s state regulation in their activities.

### **Bibliography:**

1. Коротков К.Г, Короткова А.К. Инновационные технологии в спорте:исследование психофизиологического состояния спортсменов методом газоразрядной визуализации/К.Г.Коротков, А.К.Короткова. – М.: Советский спорт, 2008. – 280 с.
2. Коротков К.Г. Энергия наших мыслей/К.Г.Коротков. – М.: Эксмо, 2009. – 352 с
3. Куликов Л.В. Психологическое исследование/ Л.В. Куликов. - СПб: Питер, 1995

## **INVESTIGATION OF GLOW IN THE SILVER NANOPARTICLES SOLUTION AND OTHER LIQUIDS BY DYNAMIC GAS DISCHARGE VISUALIZATION TECHNIQUE**

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The problem of identifying individual differences of chemically similar liquids is relevant to medicine and biology (2, 3). In studies of Korotkov K.G and his collaborators (1) the technique for investigation of liquids by studying the characteristics of gas discharge around drops has been developed. In this study, the liquid was exposed to electromagnetic field within 10 seconds, and visualization of the interaction and its recording was carried out as a video at 30 frames per second. A drop of the test liquid is suspended at a distance of 3 mm from the optical electrode with a conductive coating to which voltage pulses from a specialized generator are applied. The time series studied in this work

represented a change in the glow area parameter, the average intensity of the image and the entropy in time. The purpose of this study was to investigate possible differences between the glow of solutions of silver nanoparticles (concentration of 50 mg / ml) of tap water and water from the cooler. Analysis of the data indicates a significant difference in the glow area, average intensity and the entropy of solution of silver nanoparticles from tap water and water from the cooler. The data are presented in the table.

Name of solution	Glow area	Glow intensity	Entropy in time
Solution of Ag nanoparticles	36,8 + 8,2	90,1 + 18,3	0,61 + 0,21
Water from cooler	146,5 + 21,4	30,3 + 2,7	1,55 + 0,3
Tap water	460,5 + 41,3	34,6 + 2,3	2,01 + 0,28

The averages were performed on samples of 10 measurements of each test liquid. The table shows that the data for all three indices of glow of silver nanoparticles solution are significantly different from other liquids.

The study showed that the method of dynamic GDV-imaging allows us to detect statistically significant differences when comparing different fluids. The differences are manifested in changing the form of time series of the glow area, the average intensity and the entropy GDV images in time.

#### References

1. Korotkov KG Fundamentals GDV bioelektrografii.-Petersburg, Acad SpbGITMO, 2001.
2. M.Skarja, M.Berden and J.Jerman, J.Appl.Phys., 84, 2436, 1998.
3. K.Korotkov and D.Korotkin, J.Appl.Phys., 89, 4732, 2001.

## **APPLICATION OF GDV IN THE EDUCATIONAL PROCESS IN HIGHER EDUCATION**

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Urals Federal University named after the first President of Russia Boris N. Yeltsin,  
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We have been working at the university since 2005 and gradually introducing GDV technique in teaching students both the basics of saving energy and life safety.

At the department "Energy Saving" of the Thermal Power faculty we read a course on human energy, the energy ideology and conduct practical exercises using the "GDV Camera". The diagnostic device for man

as an energy system is the complex "GDV Camera", developed by Prof. K. Korotkov (St. Petersburg). The purpose of practical work with students is to teach them to save energy of the resources of their own organism, so as to successfully meet the challenges of energy and resources saving in the national economy, students must first take care of their own energy resources.

At the department "Life Safety" of the Electrical Engineering Faculty in the course "Monitoring of the habitat" practical training is carried out: laboratory and course works. GDV technique is used as a method of monitoring operating in a certain frequency range – monitoring of the functional state of human organism under the influence of various external effects. We believe that the GDV technique should be used in the training course at universities for both scientific works and demonstration of the energy potential in man, and skills to use it appropriately.

## **INVESTIGATION OF THE TECHNOLOGIES OF ADAPTIVE SUSTAINABILITY DURING AN EXPEDITION TO MEXICO**

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From February 7 to March 5 an international scientific expedition to Mexico took place within the framework of the events held by the International Academy of Frontal Problems (FPIA). One of the objectives of the expedition was to develop technologies to improve the adaptive capacity of human beings under conditions of rapidly changing external factors.

Adaptive GDV monitoring of the participants of the expedition was carried out using the sensor GDV Eco Tester.

Studies have shown that the more active a person is in the activities of FPIA, the higher his level of glow, the less the impact of external factors, the higher his stability and adaptability. The most evident patterns were manifested in the graphs of the normalized glow area. The highest stability in the glow area parameter was demonstrated by the users of the system adapters Svetlitsa - Super and Svetlitsa - Good, developed by the Laboratory of Information Engineering (LIE). System Adapters (SA) LIE is a series of devices intended to harmonize the human structure with structures of other objects. The users' of the system adapters Time Frame overall trend of the glow area decrease almost failed to appear. This suggests high performance system adapters LIE to significantly reduce the negative trends of the influence of various environmental factors, both natural and manmade.

## FIELD, GDV AND HAEMODIAGNOSTICS OF FOOD PRODUCTS

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Haemodiagnosics as a method of choosing a diet for healthy and sick people with various illnesses has been tested over the years and has proved to be highly effective in outpatient clinical practice [1]. In [2] it is established that human energy field (method PVA) actively responds to different substances in a test tube in his hand. The same effect was expected from the use of GDV method [3]. It was of interest to evaluate the possibilities of PVA and GDV in terms of determining individual sensitivity to foods of a specific person, which is the subject of this work.

A volunteer with health problems was selected as a subject. Haemodiagnosics of food was carried out in accordance with the [1] by comparing the data of the obtained ESR blood with the addition of food extracts with the control (ESR blood without the addition of extract). Field diagnosis of products placed in a sealed tube in the left hand of the subject was carried out by changing the index of bioactivity of the field of the right hand compared with the control (without tubes) using PVS [4]. GDV diagnostics of the same products (extracts) in the test tube which the subject held in his left hand, was performed as follows: changes in the GDV parameters of fingers of his right hand were compared with the control GDV parameters of the same finger when there was no tube in the left hand.

Stress from GDV diagnostics on the human body (20 outbreaks) was close to an ordinary procedure of taking pictures. The session consisted of taking pictures of 10 products and 10 controls. It is because of restrictions on the use of the method it can not compete with the first two in this issue.

The table shows haemodiagnosics data - deviations from the target ESR control for a number of products (their extracts). Clearly visible is a positive reaction of the blood to cabbage, wheat, mustard and grapefruit and negative to potatoes.

Table. Indices of bioobject reaction to food \*

Method	Cabbage	Apple	Chicken	Millet	Mustarda	Potatoes	Onions	Grapefruit
Blood test	+2↑	+0,5↓	0≈	+2↑	+1↓	-1↓	+0,5↑	+2↑
PVA	+3,9↑	-3,6↓	-0,7↑	+7,1↑	+3,4↓	+0,6↓	+0,6≈	+6,0↑
PVA**	-1,6	+8,8	+4,1	-7,4	-1,2	-5,1	+4,1	-7,5***
GDV	-0,3	+15,3	+4,5	+7,0	-0,1	-4,1	-0,3	+6,0

\* Deviations from the control in conditional relative units. Arrows indicate the direction of the deviation of index compared to the previous one. \*\* Body in the state of asthenia. \*\*\* Orange\*

The table (see the second line) shows PVA data for the same subject obtained 2 days later in the form of deviations of the index of biological activity of the field from controls. A marked positive (activating the seeds - PVA method) reaction field is observed to cabbage, wheat, mustard and grapefruit and negative - to apple. The comparison shows that the four products - cabbage, millet, mustard and grapefruit are identified by two independent methods as positive for the person which is fundamentally important. However, a more significant result is observed in the nature of changes in data obtained by both methods, the transition from one product to another. It can be seen (see arrows) that these two independent methods, PVA and haemodiagnosics in the row of the given products change symbatically. This shows their validity, which causes no doubt with the use of haemodiagnosics, thus confirming it again. At the same time using the method of field diagnosis, based on PVS data, the result is direct evidence in favor of its correctness.

Another fact follows from a comparison of PVA data shown in the second and third line. The latter were obtained in exactly one week after the first; on the eve the subject refrained from eating, and on the day of the experiment in the morning blood was taken from his vein. It is evident that the second measurement data are directly opposite to the first (except onions). This result after the transition from a sufficiently sthenic state of the organism to the weakened is not unexpected. Obviously, in asthenized state the body subordinates to external influence, whereas in sthenic it is able to resist, which is reflected in its opposite reaction. This phenomenon has been established previously in comparing the effect of sound on the strong and weak seeds of barley [5]. Another interesting fact was established by comparing these two methods, obtained at different time. It turned out that PVA method allows us to perform differential diagnosis of the state of body. The results are further proof of how the consistency of the method of field diagnosis, its prospects, and the reaction of strong and weakened organisms to external weak impacts.

The high level of correlation of GDV parameters with data of the reliable methods indicates the prospects of further studies of the influence of various biological and synthetic liquid and solid substrates on man using this technique.

### References

1. The method of determining individual sensitivity to food and correction of pathological states of the human body in some forms of illness in outpatient settings. Guide for physicians. - Approved by the Health Ministry 14.12.2004, Moscow: Erebus-Print. 2004.2.
2. Korolev S., Egorov VV Field diagnosis of substances./ / Small doses in biology. Jubilee Proceedings Department of Inorganic and Analytical Chemistry. - M.: MGAVMiB. 2009.



S.86.3.

3. Korotkov KG Fundamentals of GDV Bioelectrography., St. Petersburg., 2001.
4. Egorov VV Patent RF № 2325842. 2007.
5. Egorov VV Low frequency in biology. - M.: MGAVMiB. 2007. C.18, 21.

## **THE PRINCIPLES OF BALANCE-THERAPY OF CANCER**

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In recent decades, life expectancy and long-term survival of cancer patients almost ceased to change. Traditional treatments have actually reached the limit of its capabilities. This research has shown that even in rapidly growing tumors the processes of proliferation dominate over the processes of cell death only by 5-6%. The change of these ratios by 2-3% changes the prognosis of treatment from fatal to favorable. Traditional methods of treatment aimed at the destruction of the tumor, take from 1-3 to 5-10% of the total life expectancy of cancer patients. At the same time, the processes of proliferation and death, ultimately determining the rate of growth of tumors, and, consequently, the time of reaching a "critical" volume incompatible with life are continuous. Therefore, a continuous effect on these processes - a decrease of proliferation and an increase of cell loss seems a fairly obvious way to increase life expectancy of cancer patients. Such approach, the essence of which is not so much the destruction of the tumor but the balance between cell proliferation and cell death of tumor is called a "balance-therapy".

The principles, results and prospects of the balance-therapy of patients with malignant neoplasms are discussed.

## **GDV-EVALUATION OF ADAPTATION RESOURCES OF STUDENTS MANIFESTING SOCIAL MALADJUSTMENT**

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The study involved two contrasting samples of three and four-year students formed on the basis of statistical deviations from the group average values according to the basic testing, evaluating the psychological characteristics of individual students and adaptation resources of their bodies. In the studied sample of students (48 persons) 10% of students on average have expressed signs of maladjustment and poor psychological health. No signs of maladjustment and good psychological health manifested 20% of female students. Disadapted students reliably differ

from their healthy classmates assessing their health as less good, they manifest lower levels of total and non-verbal intelligence and worse adaptation resources and the following psychological characteristics. They have lower values on the scale of femininity S. Böhm, higher scores on the scales of psychotism and neuroticism in test PEN, a higher number of emotional inversions, a larger value of DHS and are characterized by more frequent use of projection, substitution and compensation; they are more volatile in selection of colors in M. Luscher test.

Poor psychological health and manifestations of social maladjustment are accompanied by specific energy and quality of glow parameters measured by GDV technique: the maladjusted students show significantly smaller frontal glow area without filter, as compared with mentally healthy girls; entropy reaches fairly high values in series captured without filter, compared to series with filter, symmetry without filter is significantly lower than that with filter. Healthy women have similar qualitative characteristics of the energy field under both conditions of registration. Thus, deterioration of psychological health and social adaptation is manifested not only at the psychological level, but is also accompanied by a deterioration of the objective characteristics of the level and quality of the adaptation of the resource, measured by GDV, and signs of autonomic nervous system dysregulation.

#### **EXPERIMENTS WITH THE GDV CAMERA AND THE FIFTH ELEMENT IN STUDIES OF THE IMPACT OF PLACES OF POWER ON HUMAN ENERGY**

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From mighty and great civilizations of the antiquity we received a legacy of Places of Power as the places of communication with the highest levels of our universe and the opportunity to harmonize relations between man and nature. Being the acupuncture points on our planet, the Places of Power play an important role in the harmonization of the whole Noosphere - Earth's biosphere; maintain constant contact between it and humanity. From ancient times all peoples and religions, have used the Places of Power, such as dolmens, stone circles, menhirs, mountains, pyramids, labyrinths, etc. to solve the problems of spiritual, magical and religious practices, of health and destiny. The well known geometrical signs marking the Places of Power are a cross, a circle, a labyrinth, the swastika, spiral, magic signs, runes, ornaments.

One of such places is situated in Kostanai region; the unusual nature of it is that it has a swastika, a square, runic inscriptions, points and lines. A traveler driving along this area, uninformed and uninitiated into the mysteries, will not notice anything; the signs are visible only from Space.

In August 2009 we conducted an experiment to evaluate the impact of Places of Power on human energy. In a group of 17 people aged 10 to 60 years GDV images were measured before the trip, in the Place of Power and after the trip; the Fifth Element was used to take measurements of water, earth and air. Result: all subjects featured changes in the GDV parameters: there was an increase of glow in the Aura, Chakras and Diagram, and the area difference between the measurements made with the Fifth Element in town and in the Place of Power was 1.5 times bigger.

### **INVESTIGATION OF NATURAL AND BOTTLED WATER BY STIMULATED ELECTROPHOTONIC EMISSION**

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It is known that of GDV technique is extremely sensitive in the study of liquid-phase objects.

It was of interest to investigate the stimulated emission of natural and bottled waters. We used a commercially available device GDV camera made by Biotehprogress Ltd.

Measurements were made with the suspension of a liquid meniscus over the electrode. GDV images were captured in an automatic mode. The number of measurements in the series - 100, the interval between shots - 5 seconds. The objects of study were narzans of Kislovodsk, bottled water of the North Caucasus, and water of the mountain rivers Great Zelenchuk (village Upper Arkhyz, Karachay-Cherkessia), and Ullu Murudzhu (District Dombai Valley).

The investigations led to the following conclusions.

1. Variability of the GDV parameters trend characterizes the equilibrium state of water. The lower variability of the trend, the closer the system to equilibrium.
2. The form coefficient is not a linear function of water salinity.
3. The ratio of glow areas at different voltage levels for different types of water has a characteristic value and can serve as an additional criterion for its evaluation.

# INFLUENCE OF WATER BALANCE IN THE BODY ON HOMEOSTASIS – THE EXPERIENCE OF GDV MEASUREMENTS

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In the human body there is more than 70% of water and it plays a vital role in virtually all biochemical processes in it. On the one hand, these are processes of obtaining energy from food consumed by the organism [1,2] and direct conversion of infrared radiation in the high-energy UV - quanta in the structured "borderline" water [3,4], on the other hand, these are all the current functional processes of organs and systems of the body. In medical literature there is an opinion [5] that there is enough water in the body and that small fluctuations in the amount of consumed water are not significant. With dehydration 66% water are lost from the intracellular fluid, 26% - from the extracellular fluid and only 8% are associated with narrowing of the network of capillaries. With age thirst in man is dulled, and, as practice shows, the regular shortage of water in the body results in the emergence of a number of functional changes and disorders that cause chronic and acute illnesses such as diabetes, hypertension, kidney disease, cancer, pathology, etc. [6]. So far, in the literature there is no unified opinion about the recommended amount of the consumed water.

In this paper, based on analysis of GDV parameters an attempt was made to identify patterns associated with the quality and quantity of water consumed.

Analysis of GDV measurements showed the presence of a non-linear correlation between the water balance and homeostasis in the body. The organs most sensitively responsive to the lack of water have been noted. The quantitative differences in the impact of high quality water ("water of life" Prospect of Slovenia) and waters available in the sales network in Germany on the energy of the body have been established.

The measurements were made during the period 2005 - 2009 on a large number of persons.

The following conclusions were made:

- GDV can and should be used in the prevention of dehydration;
- The quality and quantity of water consumed is directly related to the level of energy impact in the magnitude and duration of the body;
- Water of high quality can be recommended as a complementary alternative therapy to restore the energy balance in the body.

## References

1. Samoilov V.O. Medical Biophysics. Leningrad. BMA. 1986 (Russ).
2. Samoilov V.O. Electronic circuit of life. St. Petersburg. Institute of physiology. RAS. 2001 (Russ).
3. Voeikov V.L., Fundamental role of water in bioenergetics. In: Proceedings of International Scientific Conference: Measuring energy fields. Kamnik/Tunjice, Slovenia 2007:15-22.
4. Pollack G.H., Water, energy and surface: In: Proceeding of International Scientific Congress on Bioelektrography: Science-Information-Spirit.
5. Dr.med. Heinz Valtin. Am. Journal of Regulatory Comp. Physiol.283:993-1004,2002.
- 6.. Batmanghelidzh F. Water - natural medicine. Translated from English. 2-nd edition-Mn. «Popurr»,2008.-596p. ISBN 978-985-15-0172-0 (Russ).

## THE POSSIBILITY OF USING ELECTROPHOTONICS IN THE EARLY DIAGNOSIS OF POLYPS AND COLON CANCER

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According to the annual medical reports in Germany and in other leading industrialized countries, a steadily increasing morbidity of colon cancer is going on. In Germany the number of people who fell ill in 2008, has reached an alarming level of 70000, which is probably a consequence of lifestyle and nutrition of modern Western society. As we know from clinical practice, the development of carcinoma from benign polyps in the colon can take up to 15 years or so, therefore, particularly in Germany, for people with health insurance beginning with 55 years of age for those who wish there are held free preventive medical examinations with the use of colonoscopy every 1 or 2 years. However, due to a small number of specialized centers for inspection and specialists, such prophylaxis is associated with long waiting periods. The effectiveness of early diagnosis of colon cancer by colonoscopy has not yet been confirmed by randomized clinical trials. Moreover, colonoscopy - a standard examination for early diagnosis of colon cancer in routine clinical practice has not confirmed the expected effect. The study of control cases revealed no reduction in mortality of the right-hand colon cancer. Also, with left-hand carcinoma the results were below expectations. Therefore, the search for new, effective, noninvasive methods for early diagnosis of colon cancer and following up the development of processes in the areas of the colon are still very urgent.

One of the techniques of effective evaluation of psycho-physiological state of the organism in medicine from the experience of long-term testing is GDV (Electrophotonics). From a physical point of view, the method is

based on the glow response of pulsed electric discharge plasma emission being in contact with the subject's skin in the visible optical range to changes associated with psycho-physiological state of electrical impedance of the body.

Analysis by GDV- measurements and monitoring of the states of people with polyps in the colon and cancer of the transverse colon revealed a definite pattern in correspondence of the GDV parameters to changes in parts of the colon and their development in time. The correlation between the glow shape of the GDV sector of colon and polyps on the corresponding portion of the colon has been revealed. The parameter, sensitively responsive to the emergence and growth of polyps in the colon has been determined. A long-term GDV monitoring of the patient with a cancerous tumor in the transverse colon showed more than 40% of the "normalized intensity" parameter of the part of colon with tumor after 4 years of observations. A parametric difference and temporal parameters dynamics of the whole body and parts of the colon during the emergence and growth of polyps and the presence of tumor have been established.

Further research is needed for more extensive statistical evaluations of the revealed correlations and for implementation of GDV as a medical technique for of early detection of colon cancer and effective preventive screenings.

## **EXPERIENCE OF LONG-TERM OBSERVATIONS OF GLOW DYNAMICS OF PULSE SURFACE DISCHARGE**

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An electric pulse discharge in the gas of atmospheric pressure on the dielectric surface, called sliding discharge-SD, is well studied and applied in technology (e. g. - plasma electrodes in the discharge of powerful pulsed lasers). SD plasma glow (unfinished discharge) in the visible optical range is currently effectively used in GDV Cameras for psychophysiological analysis of human state and other phenomena that affect the parameters of SD plasma glow. For over seven months we have been measuring, almost daily, with GDV camera, the glow parameters of SD that forms between the metal cylinder (test object) and the glass surface. Measurements are made before noon at 10-11o'clock local time on the

same spot in the room at room temperature. Analysis of the results suggests a strong correlation of the GDV parameter "area glow" with the phases of the moon according to the lunar calendar and solar activity. The first surveys of healthy and chronically ill people also showed sensitive changes in their states associated with the glow area values of the test object. To obtain reliable patterns the works in this field will continue. The results can be used in future for more effective, predictable stability of electronic and optical devices, as well as in medicine.

### **MEDICAL HISTORY AS A NECESSARY CONDITION OF FORMING DIAGNOSTIC CONCLUSIONS IN BIOELECTROGRAPHY ANALYSIS OF THE ORGANISM**

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A peculiar feature of GDV diagnosis is that the same set of gas discharge characteristics may be due to different symptoms and complaints from the patient. There are also reverse situations, where a different set of gas discharge characteristics may be manifested by one complaint. Conditions for occurrence of these complaints will be different. To distinguish these conditions the doctor needs to formulate to the patient a series of questions, thus the answer to them will reflect the real pathogenesis in the picture of GDV characteristics and show the essence of the correlation between the pathological syndrome and the observed GDV picture of this patient. Therefore, a professional must read and interpret the obtained GDV results, he must see a semantic content and specific pathophysiological mechanisms in the area, fractality and other GDV parameters, which require from the user of a GDV device both the method of knowledge of the pathogenesis of diseases, clinical course and pathological stages of the process, meaning on the whole his medical education.

The significance of the above characteristics is of fundamental importance, as the result of the bioelectrography survey will be specific recommendations to the patient, that will determine the further tactics of his monitoring, the choice of methods of the corrective treatment, the therapeutic doses and prognosis.

# MONITORING OF GDV PARAMETERS TO PREDICT THE DEVELOPMENT OF POSTOPERATIVE DELIRIUM

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Postoperative delirium up till now remains an insoluble problem of modern medicine. One of the promising methods of objective prediction and early detection of changes in mental status in the postoperative period will probably be the method of gas-discharge visualization (GDV).

**Objective:** using GDV technique to determine the possibility of predicting postoperative delirium in patients undergoing surgery for abdominal organs and identify the most informative GDV parameters.

**Materials and methods:** 122 people were surveyed using a prospective GDV technique. Three groups were examined. The first (control) were 47 healthy people surveyed by GDV against the background of psycho-emotional well-being. The second group included 50 patients operated on the abdominal organs. GDV-grams were recorded in the group at the following stages: before surgery and during the next five days postoperatively. The third group consisted of 25 patients treated at the clinic of psychiatry with the abstinent syndrome in pre-and delirious state.

**Results:** In our opinion the most informative are glow area parameters. In series taken in dynamics the most significant changes were revealed. Dynamics of the glow area parameter of patients, whose postoperative period is complicated by the development of delirium, is different from the normal distribution and was characterized by high amplitude of this GDV image parameter.

Dynamic changes in the glow area were similar to the dynamics of GDV images of patients with psychiatric profile. However, these changes in the operated on patients 10-12 hours prior to the development of the clinical picture of delirium. As the delirious syndrome subsided, the parameter of glow area of GDV image comes-back to the original data and fits into the standard distribution.

Such performance of dynamics of the glow area of GDV images and its fundamental similarity to that of patients with psychiatric profile allows us to speak with confidence about the possibility of prognosis of delirious syndrome in patients operated on the abdominal organs in the immediate postoperative period, even before the development of complications. Research in this area is promising and needs further development.



# EVALUATION OF THE EFFECTIVENESS OF TREATMENT OF PATIENTS WITH CEREBROVASCULAR DISEASES BY COMPLEX SCREENING DIAGNOSTICS OF THE HUMAN FUNCTIONAL STATE

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The purpose of this study was to evaluate the effectiveness of the appointment of intranasal dimephosphon-electrophoresis CMT, CMT nooklerin-electrophoresis, alternating magnetic field, applications of silt-sulphide mud on foot and common siliceous baths in patients with cerebrovascular diseases by screening diagnostics method of functional state with "Diamed-MBS.

The work was done in 2 stages. The first stage reviewed the criteria of informative medical technology. In the course of the survey the state of 140 people was rated, aged 30 to 60 years, selected by a randomized controlled trial. At the second stage the effectiveness of treatment was evaluated using the proven medical technology. 101 patients were examined with primary, chronic (discirculatory encephalopathy of I and II stages) and acute (early recovery period of ischemic stroke) cerebrovascular diseases between the ages of 30 and 60; 42men - 42 men and 57 women.

Dynamic examination of the patients was carried out under standard conditions (time and place of study) and included: 1) a background survey that was conducted in the first days of admission to the hospital, and 2) final examination 2-3 days prior to discharge - after the treatment.

The analysis yielded the following data: 1) diagnostic parameters of the method of screening diagnostics have the following values: sensitivity - 89%, specificity - 84%, accuracy - 86%, predictive value of positive results - 85%, predictive value of negative results - 88%, likelihood ratio positive results - 6. These parameters reflect a high diagnostic effectiveness of complex diagnostic screening of patients with blood flow changes in brain vessels ; 2) The effectiveness of treatment in the group of examined patients with cerebrovascular disease according to a comprehensive screening diagnostics of functional state of the human body is 52%. These data suggest that the tested procedure has a high diagnostic efficiency. Studies of patients with cerebrovascular disease before and after treatment with abovementioned techniques show a high percentage of improvement.

# EVALUATION OF PSYCHO-PHYSIOLOGICAL STRESS OF THE CREW DURING "FLIGHTS" ON A SIMULATOR

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The relevance of this topic is due to the complexity of determining the psycho-physiological state of pilots. Objective: Evaluation of psycho-physiological stress of crews during the "flight" on the simulator using the APC "Diamed-MBS.

Materials and methods: 10 pilots, aged from 26 to 29, who undergo retraining in the 444 center of combat use and retraining of the aircrew, were examined before and after training flights. According to the pilots' preparedness in some cases (machine breakdown) "in the flight" on the simulator, three groups were formed: the first group (prepared), the second group (not prepared enough) and third (not ready). For assessment of the psycho-physiological stress the following techniques were used: external manifestations of emotional response in scores, heart rate, BP (blood pressure), tests of SAS and Spielberg, values of Heart rate variability, electrosomatography and kirliangraphy. Data analysis was carried out by the dispersion statistics with the definition of differences by Stewtend criterion. The results of before and after the "flight" on the simulator are presented in Tables.

Table 1. Parameters in Group 1

	Heart rate	BP	Health	PARS	Anxiety	Stress index
Before	66,9±2,0	115/69±3,5/2,5	5,5±0,2	2,6±0,8	23±2	115±56
After	69,1±2,5	120/72±4,2/3,1	5,3±0,3	3,7±0,7	27±5	251±80

Table 2. GDV parameters in Group 1

	Area	FC	SE	Symmetry	Activation coeff.
Before	24265±888	20,5±0,9	0,28±0,08	93,1±0,6	2,32±0,54
After	24672±597	20,5±1,0	0,34±0,08	93,4±0,3	2,35±0,31

Table 3. Parameters in Group 2 and 3

	Heart rate	BP	Health	PARS	Anxiety	Stress index
Before	86,4±5,0	135/79±7,5/6,5	3,5±0,6	4,5±1,1	43±5	305±106
After	99,1±6,5	140/82±11,2/7,1	2,3±0,7	6,9±0,7	47±8	423±145

Table 4. GDV parameters in Group 2 and 3

	Area	FC	SE	Symmetry	Activation coeff.
Before	18156±711	34,3±1,0	0,18±0,03	84,0±1,6	4,45±0,46
After	13765±461	43,7±2,1	0,49±0,08	76,7±2,0	5,20±0,40

Conclusions: The use of "Diamed" as an estimate of psycho-emotional stress of aircrews is quite effective ( $P < 0,01$ ) and can be used to improve the efficiency and quality of training on aircraft simulators. In the first group the pilots before the start had good records, after "flights" they have not changed or even improved (normal and integral area and symmetry increased; the form factor, PARS and stress index decreased). In the second and third groups the figures correspond to low functional reserves, psycho-emotional stress; after "flight" according to the kirliangraphy data the "energy deficiency" has increased.

### **REABILITATION OF SYSTEMS OF ADAPTATION AFTER TOTAL HIP AND KNEE-JOINT REPLACEMENT AND ELIMINATION OF HALLUS VALGUS**

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Studying of recovery of systems of adaptation has done on account of indices of GDV, quality of life (QL), variability of heart rate (VHR) by way of comparing operations of different grade of severity.

There have examined patients of 3 groups. Group 1 is consisted of 50 persons having coxae arthritis and the average age of  $42.7 \pm 20.3$ . Group 2 is consisted of 50 persons having gone arthritis and the average age is  $44.5 \pm 18.3$ . Replacement arthroplasty has been done. Group 3 is consisted of 15 persons having eliminated hallus valgus and the average age of  $46.4 \pm 17.2$ . The tool of "Varikard 2.51" was measuring the VHR in a sitting position after, in every 3 or 4 days after the operation, after removing stitches (the 8th or the 10th days) and in 3 months. Simultaneously there were recording GDV and indices of QL under the scales of HAQ, EQ-5D, WOMAQ.

After operations all the patients have certain ( $p < 0.05$ ) rise of index of systems of adaptation and lowing the constant of VHR ( $p < 0.05$ ). The initial values before discharging have been reached as following: 25% of the total amount in group 1, 14% in group 2 and 40% in group 3. There is certain worsening ( $p < 0.05$ ) of the indices of QL under the scales of HAQ, EQ-5D, WOMAQ for operated joint. It is connected with aggravation of pain syndrome (there increase Kend and Kstr on account of VHR). Those indices and ones of VHR certainly ( $p < 0.001$ ) improve in comparison with the initial indices in 3 months. The same trend is told by GDV-diagrams.

Indices of GDV, VHR and QL are recovering faster by easier operations. The former reflect changes of state of health more quickly.

## TRIPLE BREATH TECHNIQUE FOR PRODUCING HEALING WATER

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Healing water has been produced and applied for solving health-related problems. The technique applied is called Triple Breath (TB). TB is a combination of music, the sound of Ohm and three breaths. While performing the three breaths, the healer visualizes an image of the desired result in order to manifest the healing.

So far the effects of TB have been evaluated by individual observations of test persons and by the use of kinesiology and aura imaging videos. The results indicate that the technique works on many and deep levels and can heal both body, mind and spirit simultaneously. Because TB seems to work on so many levels it can be used for healing almost all kinds of problems related to health. E.g., the effects of **cell phone radiation** on **human** health can be eliminated, and cell phones can instead be used for healing by storing the TB in the memory of the cell phones. TB might even be able to diminish the destructive effects of hurricanes, earth quakes and volcanic eruptions.

The potential and perspectives of TB technique are vast. Many health related issues can be healed using the technique. The healing water is cheap to produce as the TB can be recorded on a file and distributed. In this way it is possible for the public to produce healing water. However, in order to assess the potentials of TB it is necessary to quantify the effects of TB in reproducible experiments, e.g. by the use of Gas Discharge Visualization (GDV) technique. Comprehensive studies of the effects of TB will create more interest for TB healing. This could lead to improved health among the general public.