

## A Look to the Bioenergetic Medicine from the Human Physiology

Richard Marcelo Álvarez Orbea, Ana Elena Rodr guez Cadalso, Regina de Caridad Rodr guez Muñoz, Viviana Silvia Rodr guez J men éz, Marelys Calzada and Jesús Manuel Cadalso Men éndez *The Branch of Medical Sciences "Elena Fernández of Castro" of Trinidad, Trinidad 62600, Sancti Sp ŕitus, Cuba* 

**Abstract:** Objective: To relate biochemistry of the human physiology with the application of the bioenergetic medicine. Methods: Search about the topic in the last 5 years and present a general view of some biochemical processes that allow to apply the bioenergetic medicine, due to the need to open new alternatives based on holistic methods. Conclusions: It was based on the search of articles in the Virtual Library in Health (Spanish: BVS) and using the key words: bioenergetic medicine, vibration, energy, breathing, chakras, biomagnetism, translated into the quality of life's improvement and the welfare of human being.

Key words: Bioenergetic medicine, vibration, energy, breathing, chakras, biomagnetism.

### 1. Introduction

The origin of Natural and Traditional Medicine (Spanish: MNT) is intimately joined to humanity and to the man's history in their fight for surviving. Along the history, man has thought about the problem of the balance between health and illness. Initially it was thought that illnesses were originated by the dissatisfaction of gods or demons. Approximately 2500 years ago, in the Chinese, Indian and Greek old civilizations, the belief in the supernatural thing was substituted by the belief that health was the result of a balance of the natural forces in the body, and that illness was the evidence of its lost [1].

The World Organization of Health (Spanish: OMS), in the context of its 29 World Assembly taken place in 1978 in Geneva, Switzerland, recognized for the first time the importance of professionals of the traditional and natural medicine and that of the medications and techniques they use; but it also promotes the appropriate use of traditional systems of medicine like part of the programs of primary attendance of health and stimulates in this way the study of the potential utility of them, like one of the basic pillars on those, this attention should be sustained [1-3].

Bioenergetic medicine is an integrative medicine between the traditional medical practices and the orthodox medicine, for that reason it is a point of union between natural medicine and the technological one. It values and considers illness understanding the individual like a group of bodies: the physical body, the mental body and the spiritual body, Bioenergetics or also denominated Quantum Medicine, works with the existent human energy field in all the vital aspects: be already spiritual, physical, emotional, behavioural, attitudinal or psychological.

With the vertiginous development of science and technique, it has been able to arrive to discover that, far from demerit of the actions of the Bioenergetic Medicine it has reinforced its importance, which stimulates many people to unite in the matter with the conception that it is easily integrated to modern medicine and it can be used, combined with this, to achieve a bigger effectiveness in its therapeutic results [1]. That is why the objective of this work is to relate the biochemistry of the human physiology with the

**Corresponding author:** Ana Elena Rodr guez Cadalso, professor, research fields: the sciences pharmaceuticals in a general way that it includes the medicine bioenergetics and natural, and the sciences of the education like pedagogic profile.

application of the Bioenergetic Medicine.

### 1.1 Development

Natural and Traditional Medicine was conceived as unique patrimony of the Eastern hemisphere; however, with the course of time it has been extended for the world and it can already be found with certain transcendence in many countries. In the International Conference on Traditional Medicine for the countries of Southeast Asia, taken place in February of 2013, the general director of the OMS, Dra. Margaret Chan, declared that traditional medicines are of quality, security and proven effectiveness that contribute to assuring the access from all people to the attention of health.

For many millions of people, preparations with the help of grasses, traditional and practical treatments of traditional medicines represent the main source of sanitary attention, and sometimes the only one. This form of attention is next to the homes, it is accessible and affordable. Also, it is culturally accepted and many people trust in them. The accessibility of most of the traditional medicines makes them more attractive in the context of the vertiginous rise in the price of the attention of health and of the almost universal austerity. The traditional medicine also stands out as a means to not confront the incessant increase of the chronic transferable illnesses. Independently of the reasons for those that are appealed to the Natural and Traditional Medicine, undoubtedly the interest for them has increased, and it will surely continue being increased in the entire world [1, 4].

Bioenergetic Medicine understands that all dysfunction is first energetic and later physiologic or organic, therefore it acts reequilibrating or regulating, before the organic alteration is produced.

It considers that the illness is consequence of the harmonic rupture among the relationship of the different denominated energy aspects that is finally materialized in the physical body [5]. In consequence, the objective is to potentiate the balance of the energy field and to take out the interferences for which the energy flows. Bioenergetic sees the human being like a unit of conscience where different vital aspects interact. It does not dissociate medicine of the psychology, neither the corporal dimension of the spiritual, because it sees man like a multidimensional being where energy is the base of everything. Then, we can define Bioenergetic like the one that looks for the welfare of the human being [6, 7].

# 2. Basic Principles of Biochemistry in the Human Physiology

Universe is made of matter and energy. Matter is made up of atoms and molecules (that are groups of atoms) and energy makes that atoms and molecules are in constant movement, rotating around themselves, vibrating and creating life.

What is even more interesting is that Physics has worried so much to study the matter that has created a branch called physics of particles which studies the elementary components of the matter (atoms and subatomic particles) and the interactions among them [8-10].

This branch of Physics as it has gone descending in the microscopic world has discovered that particles seem to disappear so in undulatory entities or vibrations, then that matter is essentially empty, it is not that atoms and molecules do not exist, but rather when seeing more to detail, what we find is an intense palpitation of particles that are created and destroyed continually, so "the hole" is really full and impregnated of subatomic particles (electrons, protons and neutrons) as small points.

A famous theory called THEORY OF STRINGS exists, whose essential idea is that if we could see a subatomic particle with a very potent microscope we would realize that in fact it is not a point, but a small knot or rope that VIBRATES in the space-time, said in another way these strings are vibrational states, and what makes vibrate these strings is the ENERGY. It is necessary to aim the relationship among "vibration", "frequency" and "resonance".

Vibration is the propagation of energy waves and it can be considered like an oscillation or repetitive movement. Frequency is the quantity of times that oscillates (it ascends and it lowers) an energy wave during one second and it is measured in hercios or Hertz (Hz). Basically frequency is the "music" in which atoms of the matter move and resonance is the phenomenon that takes place when coinciding the internal wit an external frequency. These concepts are registered in our brain.

The brain is an electrochemical organ and therefore it plays a fundamental paper in these processes. Four types of cerebral waves exist (Beta, Alpha, Theta and Delta) with different frequencies, eachone directly related with a state of conscience. The quickest cerebral waves correspond to a conscience of smaller frequency while the slowest cerebral waves belong together with a more open and higher state of conscience [11-13].

In each level we behave in a different way and we experience all of them, for example, during the dream in its different phases (Table 1).

As we have seen, cerebral waves are related with different types of state of conscience. These, together with all the other vibrations that are part of the day by day and that are fruit of the physical state, thoughts and emotions will conform what we know as personal vibration [14-16].

Taking into account that the reality of our external physical world is in a constant state of vibration, we should know that this vibrational energy moves in form of waves that at the same time possess a series of amplitudes and frequencies that provide some characteristics and different behaviors. Let us take as an example our electromagnetic spectrum, fundamental when measuring one of the four basic forces of physics. The left end corresponds with the waves of low frequency that goes growing from the radio waves until the Gamma Rays (Fig. 1).

To the human body it is not possible to perceive a very small part of these waves by means of our senses but all of them are present and we are exposed to them in practically all our daily activities. Our surrounding world is oscillating permanently [17].

In the human physiology it is indispensable to refer to breathing. When we are born the first thing we make is to breathe or to inspire, and when dying the last expiration or exhalation happens. That is why, to pay attention to breathing means to harmonize the body physically and mentally, and in all the modalities that are applied of bioenergetic medicine they should begin with the control of breathing.

The control of breathing is one of the most effective means of intervening in the corporal and physiologic state. Breathing connects mind and body and breathing exercises can help to relax, to control the anxiety, the insomnia... they are even positive to improve the attention and to reduce negative thoughts.

Breathing is initiated in a spontaneous way in the central nervous system. An inspiration and expiration cycle is generated in automatic form by neurons located in the encephalic shaft and, in general, breathing happens without a conscious beginning of inspiration and expiration.

This inspiration and expiration cycle generated in a spontaneous way can be modified, altered or even temporarily suppressed by diverse mechanisms, which understand reflections that arise in the lungs, the breathing roads and the cardiovascular system; information coming from receivers that are in contact

Table 1Cerebral waves.	Cerebral waves	s.
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Beta	Alpha	Theta	Delta
13-40 Hz	8-13 Hz	4-8 Hz	0.5-4 Hz
	Slower waves. Calm state with	Much slower waves, 1ra phase	Very slow waves. I dream deep. Deep meditation. Somnambulism, deep trance, self-cure.

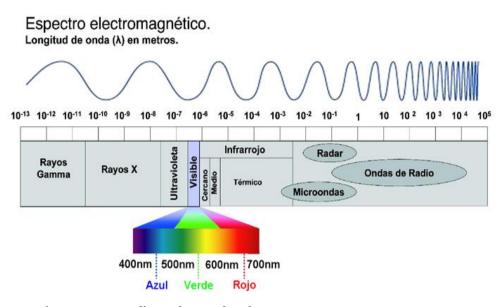


Fig. 1 Electromagnetic spectrum according to the wave length.

with the cephalorachidial liquid (CSF), and orders that come from the superior centers of brain, as the hypothalamus, the centers of speech, and other areas in the cerebral bark then, the centers that take charge of the generation of the spontaneous rhythm of inspiration and expiration are able to alter their activity to satisfy the metabolic demand increased on the breathing system during the stress, or they can even be supplanted or suppressed during the speech or the maintenance of breathing [18, 19].

Control of breathing to calm mind and body is not something innovative. The Buddhist and oriental cultures have practiced these techniques for centuries.

Practice of a deep breathing stimulates the parasympathetic nervous system, the responsible for the involuntary activity of the organism when we are in rest. The practice of a not very deep breathing stimulates the sympathetic system that takes charge of putting into operation different organs to get ready for the action. This last one is the one that is activated in periods of stress, and its activity is the one that we want to counteract, learning different breathing techniques.

Diverse breathing techniques can be mentioned that are frequently used and that are especially effective for concrete purposes: clavicular or high breathing, diaphragmatic or abdominal breathing and costal or thoracic breathing.

Controlled breathing not only maintains mind and body working in the best way they can, but rather it can also lower the sanguine pressure, to promote feelings of calm and relax and until helping to eliminate stress. This breathing technique provides the body a superior state of calm and relaxation. The body receives a great oxygen contribution, reducing the heart rate, sanguine pressure and cortisol levels in blood that increases the sensation of anxiety [20, 21].

It is evident the relationship between the breathing apparatus and the circulatory system, both works together with the same end, to guarantee the constant supply of oxygen for the correct biochemical functions of all cells that form the body.

Cellular or internal breathing is the group of biochemical reactions for those which certain organic compounds are degraded completely inside the cell, by oxidation. This metabolic process needs oxygen and provides profitable energy to the cell, mainly in form of Adenosin Trifosfosfato (ATP) [18].

The global chemical reaction of the cellular breathing is as follows:

 $C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + energy (ATP)$ 

Therefore in the process of cellular breathing a molecule of glucose plus 6 oxygen molecules become

in 6 molecules of dioxide of carbon and six molecules of water liberating biochemical energy usable by the cell in form of ATP.

On the other hand it is said that the illnesses are consequence of an energy imbalance and this reaction should happen to a good pH for the health whose alteration owes to the presence of pathogenic microorganisms that distort pH in the organ that sustains.

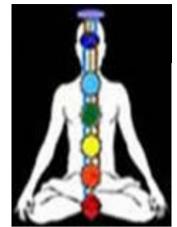
Vital energy of the energy system is denominated "prana", the etymology of this word is of the noun "prāná" that comes from the verb prān: that means "aspire", to breathe, to pant, so it is acquired through breathing.

This energy circulates through the adis, called in this way to the energy channels of the human body that constitutes a kind of intangible arteries. The word "nadi" comes from the Sanskrit and means "tube", "glass" or "artery" approximately. Its function consists on driving the "prana" or vital energy through the non-material energy system; it has energetic points that are the ones called chakras which take charge of the balance of our body and mind, creating a connection among them: psychological, organic, spiritual and emotional parts. These are distributed by the spinal column, from the coccyx until the head, and in turn, they are connected to the different endocrine glands of the body [20, 21].

Each chakra or energy wheel acts in a specific way on some organs and functions of the body. For that reason, if some of the chakras are blocked, with low energy or excess of it, the energy balance that flows through the body is lost.

Chakras are centers that work as valves that regulate the energy flow through the energy system of the body. The term chakra can be translated as energy "wheel".

In total there are seven chakras that are located aligned from the base of the spine until the crown and they are related so much with the physical body as with the conscience (Fig. 2).



Red—Muladhara Orange—Svadishtana Yellow—Manipura Green—Anahata Blue—Vishuddha Dark blue—Ajna Violet—Sahasrara

Fig. 2 Chakras.

The energy often blocked in some of the seven chakras can lead to the illness, for what is important to understand what each chakra represents and what can be made to maintain that this energy flows freely.

The chakras are not tangible, that is to say, they are not something physical, but rather they are part of the conscience and their operation reflects the decisions we take before circumstances of life.

Each chakra is a vision of the world. It is a perspective that organizes our feelings, thoughts and values to be related with the world and to act in it.

These chakras are represented by colors of the chromatic spectrum that divides the solar light and these colors have a vibration frequency.

Previously we referred to electromagnetic waves, "vibration", "frequency", "resonance", and "energy", what explains that the body has a magnetic field, for which ions that travel through the body go, then the human body has electricity and that generates an electro imam of very low voltage, and that electro imam that should have a certain pulse is detracted by illnesses.

### **3.** Conclusions

Biomagnetism allows us to understand the illness from the energetic and vibrational point of view, no longer chemical, no longer clinical, and no longer biological only. We have a pH that comes closer to the neuter thing, however, there are phenomena that alter that pH and drive to the organs toward the acidity or toward the alkalinity. This can produce an alteration that can arrive to the illness. As in the whole universe, duality is also present in the body. In this case, it is not the magnetic field the one that cures, but the correction of the pH altered through the use of imams.

Biomagnetism allows to detect, to classify and to correct the alterations of the pH in the human being. The bioenergetic balance is universal, the repercussions at functional, mental level and until sophrologic that are developed by the presence of microorganisms (bacterium, mushrooms, parasites and virus) influence in the whole organism and they can be, in turn, the result of the bioenergetic alterations of other organs that have already been affected or of the functions of these organs [22-24].

In a general way our body works in this way from the biochemical point of view, these processes can be modified when the harmony is broken on it and illnesses appear. Acupuncture, digit puncture, technical of breathing, guided meditations, kinesiology, TAPPING, also known as technical of emotional liberation, reflexology, bio magnetism and chromo therapy are among others, techniques that can be used.

These techniques do not divorce patients of going to specialists if illnesses appear; they are used as a complementary tool.

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