ISSN: 2755-0176

Journal of Cancer Research Reviews & Reports

SCIENTIFIC Research and Community

Research Article

Open Access

Earth's Arth's Magnetic Field is Factor that Frges Cell Divsion. Reducing Cell's Magnetic Characteristics Occurs Aging and Death

Nikola Trifunovic

Geophysical Engineer, Geoinstitute, Juzni Bulevar 32, Belgrade, Serbia.

Abstract

Introduction

Despite many studies on cell division, formation and treatment of cancer (Ca), there is not full explication of aging and death of cells. Everything in the Earth's magnetic field (EMF) has paramagnetic and ferromagnetic characteristics. Hence tissue cells and organs have magnetic characteristics (Mc). This paper shows that EMF is a factor that impacts cell division. Anomalous magnetic fields (AMF) and unnatural EMF contributes to continuous cell division that causes cancer. Moreover, it shows that the magnetic characteristics of the nuclei, organelles and substances are tightly related to the metabolism of the cells. The article also explains when the immune system works the best, why it fails in preventing the formation of cancerous cells, and how aging reduces the defense of the organism against intruders.

Results

EMF influences all parts of the cells magnetic characteristics, which in turn impact metabolism. The sequences of the nucleotides in the construction of DNA and RNA match only by magnetic code. EMF impacts the process of crossing over which causes polymorphism and contributes to the evolution. A factor that stimulates cell division is EMF which boosts the metabolism and the immune system. All manifestations of aging are clearly explained by magnetic properties of cells. Intermolecular magnetic force (Mf) in cell varies because they depend on the number of divisions and temperature. With each division, telomeres lose 100-200 nucleotides which reduce the nucleus Mf and metabolism in the cells. The immune system weakens, because of the impact of Mf.

Conclusion

Natural EMF is a factor that infulences cell division. Magnetic characteristics of nuclei, organelles and substances enable metabolism in cell. EMF and magnetic characteristics of cells have a decisive contribution to the world's evolutionary process. During cell division, Mf are decreasing in nucleus so less water enters the cell, resulting in accumulation of toxins. The functions of organs and particularly hormonal activity are declining, which leads to deposition of calcium salts in cartilage (in and around chondrocytes), and lower function of the immune system. All of the above are a manifestation of aging.

Corresponding authors: Nikola Trifunovic, Geophysical Engineer, Geoinstitute, Juzni Bulevar 32, Belgrade, Serbia, E-Mail: ntrifunovic41@yahoo.com

Received: January 01, 2020, **Accepted**: January 08, 2020, **Published:** January 18, 2020

Keywords: Earth's Magnetic Field, Magnetic Characteristics of Cells, Cell Aging, Anomalous Magnetic Fields.

Introduction

In order to explain many unknown concepts, biological science must consider MC which exists and exert their influence upon all the processes on the planet Earth. It is pointed out that no biochemical process is in contradiction to occurrences influenced by MC, they are rather complementary to each other. The role of Earth's magnetic field (EMF), and MC of cells in evolution of all species and reproductive organisms, will be explained in detail. It will, also, be explained why every cell magnetization center is located in its nucleus and how cytoplasm and membranes are generated, which represents a great evolutionary step in the living world. These new scientific explanations further development of biological science from the point of geophysics. This paper will explain: cells division, crossing over, aging and death of cells. In brief, functioning of the immune system and autoimmune diseases appearance will be presented. For easier understanding it will be presented in the following order: cells MC, cytoplasm, nucleus membrane and cell generation. Then: crossing over, and cell's aging and death.

MC in a cell are micro-magnetic fields generated as a product of micro-magnetization of constructing elements in a cell. At the beginning of this paper, it is pointed out that when it is spoken about MC in and around cells, it is referred to micro-magnetic characteristics. MC of cells that are unknown to biological science. The following article shows that every cell contains an MC, i.e. magnetization that depends mostly upon cells' nuclei dimensions. The larger the nucleus, the stronger the magnetization and vice versa. Scientific literature knows where the strongest magnetization in the human body is located - it is in the area around the pineal gland. It is concluded that all cells have a typical MC, and the strongest are in the central nervous system (CNS) - i.e. neurons which usually either have no cytoplasm or where the cytoplasm is extremely thin.

The Generation of Cytoplasm

In biological science it is well known that cytoplasm and cell membrane generation is a big evolutionary step in the living world. However, how they were generated is unknown. As far as it can be told, the generation of cytoplasm has been discussed often, but a clear explanation has not been given. In this paper, it will be contributed to answering this question.

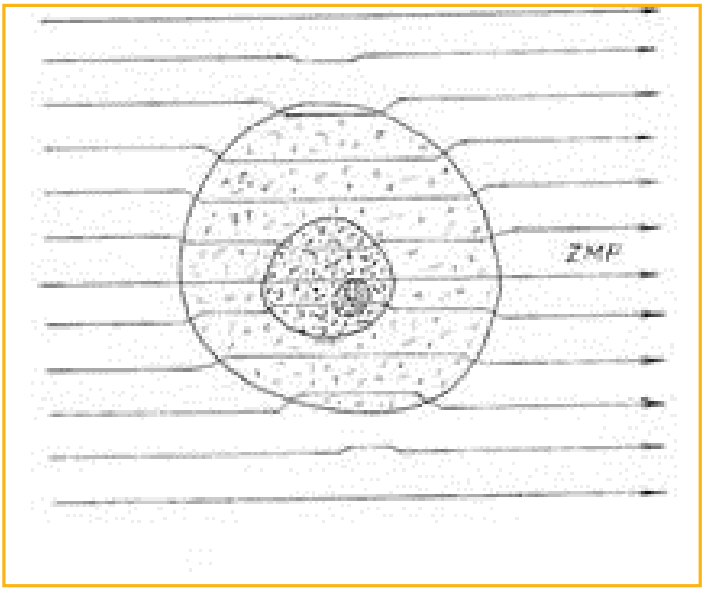


Figure 1: Magnetic flux around cells and inside the cell. (Magnetic characteristics of Cells).

It is supposed that life has been generated through the first self-replicate RNA, which consists of molecules with paramagnetic characteristics, and around it there are protein molecules. Thus, the magnetic field of the first one-membered RNA enabled, by magnetic separation gathering of substances around RNA, cytoplasm and the first membrane generation to form. Cytoplasm has a different molecule construction and density compared to substances outside the cell. By an induced magnetic field, originating from the cell's organelles, cytoplasm was produced. It is logical and substance's density enables density of magnetic force lines. Through evolution, RNA has been generated, at the first place, then membrane, later on nucleus and nucleus membrane and, finally, organelles.

Nucleus and Cell Membrane Generation

Concentration of paramagnetic substances in a nucleus, which contains mostly chromosomes and chromatin, produce an induced magnetic field around the nucleus. On the interface of the induced magnetic field, there is a concentrated substances of a typical magnetic field,. This typical magnetic field comprises a double-layered cell nucleus membrane.

Besides the nucleus, a cell contains cytoplasm, a

number of organelles - all of which contain membranes. The genesis of the organelles is similar to the one of nucleus' membrane, and it was also constructed by paramagnetics. They have characteristic magnetization vectors that produce an induced micro-magnetic field around organelles. These magnetizations gather according to vectors laws and complete the cell's magnetic field. As it is known, there exists a macro-magnetic field (EMF) around the Earth. On the connecting point between the organelles magnetic field and EMF there is a concentrate typical substances, right at the point of balance of two magnetic pressures (it is a resulting organelles' magnetic field in EMF). This point is characterized by substances that construct the cell's membrane, i.e. plasma-membrane, which consists of two layers of "lipid molecules in which various proteins are built" (1). These substances are concentrated due to the magnetic field enabling only separate gathering. This can be seen through a microscope as a two-layerd cell's membrane. These explanations are acceptable, considering that biological science has not given any appropriate explanation of these phenomena.

Considering all the above, we would conclude that every cell has a characteristic magnetization, i.e. MC. They are important for metabolism in every cell. It is pointed out that there is a lot of evidence proving that cells have MC; for instance, magnetic resonance (diagnostic method in medicine) functions on the principle of different magnetization in cells. Crossing Over is a great argument proving the existence of MC in cells.

Crossing Over

A big proof that chromatid on chromosomes are magnetized is Crossing Over, i.e. exchange of tied in genes. In thish process, homologous chromosomes exchange homologous segments. "In the area of bridges, one-chained DNA breaks easily. If this break occurs in the north-south direction, two recombined chromatid appear. Therefore, homologous chromosomes have exchanged their parts and Crossing Over has occurred. If a break occurs in the east-west direction, one thread of DNA is intact and the other one is recombined" (2). As it is known, EMF's direction is north-south, so the vectors of EMF have magnetized parts of chromatid so much so that they break in the location of bridges, right in the north and south direction. This would mean that what is magnetized in the north, breaks and goes to south, while magnetized material in the south, break and goes to north.

The exchange of genes on one DNA thread in the east-west direction points out that magnetic forces are the ones which have enabled this process. Genes that divide toward the east-west direction have diamagnetic characteristics. Lines of magnetic forces push them either toward east or west, and are replaced by other molecules. This magnetization and magnetic pushing of diamagnetic genes is relatively strong, due to chemical connections between genes and chromatid breaks. There are two more proofs confirming the magnetization of chromosomes. One of them tells that "if genes on chromosomes are close to each other, they divide rather rarely. The further they are from each other the greater the possibility for their separation" (2).

If genes are very close to each other on homologous segments, magnetization of genes is unique. Elementary magnetic domains (molecules that have magnetic poles in the north-south direction and can orient themselves in the magnetic field) are connected through genes on homologous segments of chromosomes. This unique induced magnetic field is on all segments of both chromatid and there is no exchange in the form of Crossing Over. If homologous genes on chromosomes are far from each other, then elementary magnetic domains (which have magnetic momentum) are of independent orientation. Since genes magnetize differently, so do the genes' segments which get southern magnetization to move further north. Similarly genes that are north, use the magnetization to move south. This brings up a break in homologous segments on chromosomes in the north-south direction.

The second proof that chromosomes are magnetized is the following: "There are many hypotheses on Crossing Over mechanism, but the most acceptable one is R. Holliday's. Homologous segments must posit one against the other, and to stay in such position long enough" (2). This gene complex must stay in such position for a long time since magnetization takes time. In order for elementary magnetic domains to orient themselves and gain induced magnetization of homologous gene segments. Only then separation will occur. "Crossing Over is a very important mechanism that enables genes' recombination, and with that, polymophism" (2).

This is a clear proof that EMF has a great role in the living world's evolution, i.e. in the living world's adaptation to the changes of external environment. In literature it is written that "exchange on chromatid caused by, for example, radiation, chemical matters, viruses, bacteria, and malignant diseases, increases the frequency of the parts of chromatid exchange" (2). It should be pointed out that the research on the cause of malignant deceases show that they occur only in an anamolous magnetic field and therefore the frequency of crossing over increases (3).

Based on these proofs, it can be concluded that chromatid gets magnetized and that is why the magnetization center of each cell is in the nucleus.

Cell Division

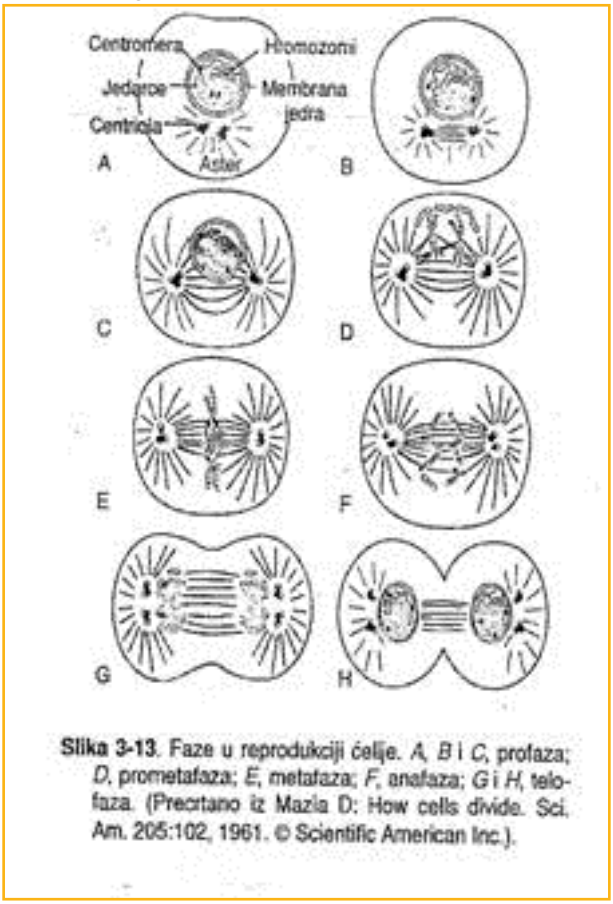
Tissues and organs generate and develop in the EMF. Cells, as the basic mass of tissues and organs, are made up of ferro-magnetic, para-magnetic (have MC, and their susceptibility is from 0-10), and diamagnetic (have no MC) substances. Tissue and organ growth develops through two different processes. The first one includes the basic cell's mass growth, i.e. cytoplasm and nucleus increase, and the second one focuses on cell's division. The growth develops during a rather long life period of the cell, and it is called an interphase, while the second part of the growth is division-cell mitosis, and it lasts for rather a short time period. Mitosis is divided into four morphological phases that are as follows: prophase, metaphase, anaphase, and telophase. The mitosis process is mostly the same in all eucariot cells (cells with differentiated nucleus) (2).

Interphase

Interphase usually lasts for two thirds of the cells life cycle; and the very division lasts for one third of the cycle. Here, it should be noted that the peaceful phase of EMF generally lasts for two thirds of one day, and one third of it belongs to the natural EMF variations. In terms of time, it means that interphase lasts cca 16-20 hours, and the very division cca 1-2 hours. The interphase is long enough to enable EMF to support intensive metabolism by its magnetization, which is manifested through chromosome changes. Because of magnetic and electro-magnetic characteristics of the molecules on chromosomes, despiralization of chromosomes occurs in the nucleus amd enables chromosome DNA replication and RNA synthesis, i.e. transcription.

Material from extracellular space provides accumulation of substances in the cell for replication and transcription by magnetic separator attraction thanks to the resulting magnetic fields of the organelles of the cell.

Separated substances of typical MC enter the cell due to the characteristic temperature in and around the cell, i.e. temperature allows only certain substances to obtain the typical MO, to selectively enter into the cell. Paramagnetic substances are built into the DNA ladder by magnetic "code", i.e. it replicates itself, and also the same principle is used for transcription of nucleotide for RNA. Upon completion of interphase, division-mitosis begins, i.e. prophase.



Slika 3-13. Faze u reprodukciji ćelije. *A, B* i *C*, profaza; *D*, prometafaza; *E*, metafaza; *F*, anafaza; *G* i *H*, telofaza. (Preuzeto iz Mazia D: How cells divide. Sci. Am. 205:102, 1961. © Scientific American Inc.).

Figure 2: Cell divisions. Characteristic radial morphology around the magnetic poles (4).

Separated substances of typical MC enter the cell due to the characteristic temperature in and around the cell, i.e. temperature allows only certain substances to obtain the typical MO, to selectively enter into the cell. Paramagnetic substances are built into the DNA ladder by magnetic "code", i.e. it replicates itself, and also the same principle is used for transcription of nucleotide for RNA. Upon completion of interphase, division-mitosis begins, i.e. prophase.

Prophase

In prophase, each chromosome consists of two chronomenes, connected by their proteins, called chromatid.

They are connected by the centromere. EMF magnetizes all chromosomes. In the vicinity of the nucleus there can be seen two pairs of centriols, which, under the influence of EMF, are magnetized with the same kind of magnetization and they separate and move towards opposite poles of the cell. Between centriols, fibrils appear and make a dividing spin. "The mechanism of the dividing spin is still unknown." Claiming that microtubules (constructing substances of the dividing spin), allegedly move centrioles toward the cells opposite poles does not make sense (2). The following should be repeated: The existing pair of centriols consists of paramagnetic substances, so EMF it is magnetized with the same kind of magnetization, and that is why they separate and move towards cells opposite poles. Between the centriols there appear filaments of star-shaped morphology (Sketch 2, this is typical for magnetization around magnetic poles), made in the form of accumulation of substances with a characteristic MC, and called micro-tubules. Micro-tubules connect with each other and make a dividing spin. Generation of the nucleus' membrane suggests that the membrane disassemble due to the change in the magnetization center, namely centrioles, by their magnetic forces resulting in fragments mixed with cytoplasm (1).

Metaphase

Metaphase follows next. This when chromosomes are outstanding and can be seen together with their number and shape , and that is metaphase. Chromosomes in the central plane of the dividing spin are connected with centromeres by fibrils which connect with centrioles (2). This configuration is called an equatorial plate.

Anaphase

In this phase, chromosomes get magnetized more and more, with the same kind of magnetization. Now comes the instance when centromeres divide, and chromatid separate and move towards the opposite poles of cell, just because of their same-kind-magnetization (1). This conclusion can easily be assumed as an axiom. This phase is called anaphase. The following will be emphasized: "although there are several hypotheses, the phenomenon of chromatid moments toward the opposite poles of cell, has not been explained definitively." The explanation above is logical and unambiguous (2). An equatorial plate is degraded due to the weakened inter chromosome magnetic forces that consumption of couple of molecules of ATP enabled by increasing temperature.

Telophase

The chromatid reaches the opposite poles of cells, and this phase is called telophase. The chromatid, concentrated around cell's poles, now make their own magnetic field. According to the law of vector addition, a unique magnetic field is generated on whose border the nucleus' membrane is created. Material for membrane is a paramagnetic substance of endoplasmic retuculum fragments. Probably, something similar happens to the other cells organelles, which also divide (i.e. first they disintegrate, and then are generated in the cells cytoplasm). Next a collective induced magnetic field is made by the cells organelles, which by their magnetic field first make a dividing furrow and then a membrane for newly generated daughter cells. In literature it is said that "the controlling mechanisms of dividing furrow formation are not sufficiently clear, yet" (2). In the equatorial part of the dividing cell, there begins collection and separation of cytoplasm. This is the answer to the existence of two separate magnetic fields and why the dividing furrow is made right on the border between two magnetic fields and the characteristic two layer lipid membrane. Since lipids are typical paramagnetics and are concentrating in the balance area of EMF pressure resulting in micro magnetic field of nucleus and organelles (4).

It should be noted that telophages in the vicinity of nucleus are concentrate substances with outstanding MC left out from nucleus. They replicate and during the interphase, they grow, resulting in centriols which function during the division.

Finally, it's important to quote the following: "Cell's division has been studied intensively, and although morphological changes have been described in full detail, many important biochemical processes in the foundation of these morphological changes have not been completely explained such as factors inducing the cell division, and many other processes, mentioned before. For unknown reasons, some cells begin to divide uncontrollably, which leads to tumor appearance"(3).

Briefly explaining the operation of the immune system (is) . Magnetic forces (mf) of host cells and intruder cells

Living organisms occur in the EMF and are formed with the balanced intercellular MF. They operate on a homeostatic mechanism at all morph functional levels in order to maintain a healthy lifestyle (4).

Cells of the IS arise from stem cells in the bone marrow since their density is higher so cells with increased MP are formed. The main function of defense cells is to destroy the intruder with MF. In order for T lymphocytes to have balanced MP with other cells of the body, they are passing through the thymus gland where macrophages with its MF destroy T lymphocytes with enhanced MP, in relation to antibodies of all cells in the body, there are 90% and only 10% satisfy the general homeostatic principle (magnetically balanced cells) in the body, and this is an intramolecular magnetic balance B lymphocytes have antibodies on membrane with balanced MP in each tissue (5). They are ready if antigens appear to be disengaged from the T lymphocytes and MF to destroy the antigen (5).

Everything in the EMF has MP, also intruders have magnetization because they have occurred

in the EMF. By entering the body, MP of intruders is added together with the MP of tissue cells, creating stronger MP than balanced MP of cells. Leukocytes are attracted by cells with increased MP and they act, with its MF, on any intruder in order to prevent their harmful effects. The AMF, whose genesis is exogenous, just like intruders, can increase MP of cells. In this way, the cells of anomalous zone get out of the magnetic equilibrium in relation to the other cells in the body and then leukocyte with MF attack its own cells with increased MP and AID occurs (5).

The Immune System in Action (Is)

"The immune system uses a very sensitive process to determine which proteins to attack and which one to leave alone. The way that this process, which is incredibly complex, is failing thus leading to autoimmune diseases is not yet understood. It is only known that the immune system loses its ability to distinguish between the cells of the body and attacking antigens" (5). These quotes clearly point to MP and that selectivity occurs due to differences between magnetization of leukocytes that are in balance with the cells in the body, and the intruders who were with the cells of the body or with increased MP and they come out of magnetic equilibrium in the body, which disrupts the homeostatic mechanism and then the IS acts to establish intercellular magnetic equilibrium.

It has been statistically determined that the AID "usually occurs after damage of one of its own tissues" (5). The explanation is that during recovery, damaged tissue have a transient temperature in the AMF, which allows the formation of thermoremanent magnetization of tissues that is stronger than VBC (viscous bodily magnetization), and is result of residence in the AMF. When the fever disappears and cells receive strong MP, i.e. get out of balanced MP of organism, then leukocytes attack its own cells and destroy them with its magnetic forces and that is AID (5).

Everything in the EMF has MP, while intruders have magnetization because they have occurred in the EMF. By entering the body, MP of intruders is added together with the MP of tissue cells, creating stronger MP than balanced MP of cells. Leukocytes are attracted by cells with increased MP and they act, with its MF, on any intruder in order to prevent their harmful effects. The AMF, which genesis is exogenous, just like intruders, can increase MP of cells. In this way, the cells of anomalous zone get out of magnetic equilibrium in relation to the other cells of the body and then leukocyte with MF attacks its own cells with increased MP and AID occurs (5).

AID in Detail

AID occurs as a result of increasing magnetization of cells in the tissue. Increased magnetization appears in the body in two ways: Entering the tissue whose cells are with balanced MP, where intruders can reproduce by dividing because they have their natural magnetization, and it leads to the addition of two magnetizations, that becomes stronger than the steady magnetization of cells in the tissue (5). Cells and intruders due to the additive MP, get stronger MP then the cells outside the infected area and attract leukocytes, whose MF, in various ways destroy the intruders and possibly the host cell and thus perform host defense against intruders; Another way of obtaining higher magnetization of cells is residing in the AMF for a long time, where the cells receive an additional induced magnetization that is added to a genetic remanent magnetization of cells and the cells get stronger MP than other cells (5). Enhanced MF of healthy cells attracts leukocytes that attack its own cells.

This additional magnetization is solely occurred in the AMF and the cause is AID. It should be repeated that the cells as the building blocks of tissues and these of organs are in full magnetic balance in the body and this allows homeostatic inersomatic mechanism with no attacks on its own cells. Two magnetic vectors formed in a natural EMF, build magnetization of cells. Those are genetic remanent magnetization (that is inherited from the parents after a magnetic code, i.e., genetic code) and the induced magnetization, which depends on the intensity of EMF from the environment, which represents epigenetics. Violation of this balance is the "product of AMF.

The Aging and Death of the Organism

As it is known, telomeres at the ends of chromosomes are made of nucleotides . There are 7000 to 10000 hexa timin, adenin and guanin (TAAGGG) nucleotides, whose task is to protect chromosome ends (4). Evolution has enabled chromosome ends to always have the same magnetisation, and according to magnetisation laws, they can never connect with one another. During every cells division, telomeres lose a small number of nucleotides because, with aging, magnetic characteristics lessen. As every cells magnetisation center is in nucleus, their magnetic characteristics lessen. This is manifested by the weakened matabolism and reduced water entry into a cell, causing more toxin retention in cells. Material in interphase accumulation is also reduced, as well as hormone gland excretion, leukocytes, and lymphocytes magnetic forces, thus immune system's organism protection is weakened. All these factors represent aging.

During natural atherosclerosis, blood vessel congestion increases, thus reducing their volume and all of the cells oxygen and nutritive substances supply. All this manifests aging. Calcium metabolism in cartilage is disturbed, so it accumulates in joints environment, which is again, aging manifestation. All the noted aging characteristics are caused by intermolecular magnetic forces in cells. This aging manifestation is the cause of cell death and apoptosis occurs.

Conclusion

Promoter of mother cell division into two baby cells is Earth magnetic field. Crossing over has an enormous contribution to the bio-world evolution (of a great number of species). Earth magnetic field, with cosmic radiation, enables generation of life and when the field influences upon cells constructive elements stops, death occurs (6). Aging occurs due to the metabolic magnetic forces in cell reduction. Immune system functions due to the cells and intruder's magnetic characteristics which, with aging, weaken, so the immune system masses up. Autoimmune diseases appear only in an anomalous magnetic field from the exterior. To live in the natural Earth magnetic fields is a guarantee of healthy life and immune system perfect functioning. Atherosclerosis nature is a factor that contributes to aging and it is considered as something that is impossible to avoid, but only to slow down. In this paper, the authors assert that it is possible to prolong human life much more than the present length. This will be the subject of future research. Since aging is caused by the cells magnetic characteristic reduction, an increase in cells magnetic characteristics (especially the telomere) would result in life prolongation.

References

1. Trifunovic Nikola, Vladislav Cizmic (2014) Breathing Enable the Magnetic Properties of Erythrocytes (Hem Fe) Oxygen, Cells and Carbondioxide",Jopurnal of Health Science 2, USA. Received: May 19, 2014 / Accepted: June 16, 2014 / Published: June 30, 2014.
2. Vukosava Diklić, Zoran L Kovačević (1991) Biologija sa humanom genetikom"Medicinski fakultet, Beograd.
3. Trifunovic Nikola, Cizmic Vladislav (2015) The Effect of Anomalous Magnetic Fields on Malignant Diseases" Open Access Library Journal. Open Access Library Journal http://dx.doi.org/10.4236/ oalib.1101459.
4. Arthur Guyton, John Hall (2010) Medical Physiology WB Saunder Company, Mississippi, USA.
5. Vladislav Cizmic, Nikola Trifunovic (2016) Autoimmune Diseases: Anomalous Magnetic Fields", Journal of Pharmacu and Pharmacology. Doi:10.17265/2328-2150/2016. 10.000.
6. Trifunović Nikola, Et al (2015) Earth s Magnetic Field and Cosmic Radiation in CNS Function: Anomalous Magnetic Fields, Cause of Mental Diseases", Open Access Library Journal. DOI:10.4236/oalib.1101221.