

# Introduction to Biological Dark Energy: Experimental Evidence of Information Transfer under the Influence of Taheri Consciousness Fields and Investigating the Effects of the Fields on the Properties/Behavior of Water and a Biological Cell

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## Abstract

The effects of Taheri Consciousness Fields (TCFs) on living organisms and non-living materials have been investigated. Since there is no physical intervention in applying TCFs, the findings suggested that the information transmitted from the Cosmic Consciousness Network is crucial in affecting the objects under the study. The authors performed two experimental studies prior to this research. In the first experiment, the pH of pure water decreased significantly under the influence of TCFs. In the second experiment, the effect of TCFs on the Adenosine Triphosphate (ATP) production in the human HEK 293 cell line was investigated. It was found that the treated cells were able to generate a much greater amount of ATP compared to the control. This energy was released within a short period of TCF treatment (one hour) without sufficient glucose as the predominant fuel for cells. This study discusses the effects of TCFs by calculating the amount of information exchanged in the previous two experiments. According to Taheri, receiving information from TCFs requires a mental body. In other words, the behavior of water, and the human cell line alters under the influence of these fields because of receiving information through their mental bodies. Moreover, the shortage of time and resources to produce ATP in the TCFs treated cell strongly suggests that regardless of biological pathways, there is an alternative way to increase ATP in the immediate time, which is associated with an increase in information and a decrease in entropy of the system. This kind of energy is introduced and named “Biological Dark Energy” by Taheri.

**Keywords:** Information; Entropy; Taheri Consciousness Fields; Biological Dark Energy

## Introduction

Nowadays, we are encountering several theories describing the nature of *consciousness*. Indeed, consciousness has been the subject of extensive investigations in various scientific fields, ranging from philosophy and cognitive science to neuroscience, biology, and physics. For example, the 'Orch OR' theory (Hameroff, 2021), the Higher-order theory of consciousness (Brown et al., 2019) and the Integrated Information Theory (Seth and Bayne, 2022). Even some scientists, such as the cosmologist Max Tegmark, introduce consciousness as *a new state of matter* (Tegmark, 2015). Moreover, the relationship between energy, matter, information, and consciousness is one of the most important topics for researchers. For example, Integral Relativity, an extension of General and Special Relativity, states that energy is the action potential and kinesis of awareness. In other words, one of its tenets is nothing, but the equation of awareness with energy and extends the law of conservation of energy to the conservation of awareness. So, awareness and energy are two sides of the same

coin where the coin is considered *information*. This theory predicts that energy with superpositioned awareness is Negentropic (Neale, 2018).

One of the first models of information theory is the communication model introduced by Shannon and Weaver (Shannon, 1948). They defined communication *as all the procedures by which one mind may affect another*. Their communication model includes an information source, signal transmitter, signal receiver, information receiver/destination, and noise source (Figure 1).

According to Taheri's theory of T-Consciousness Fields (TCFs) with a history of 40 years, existence was initiated from a third primary component in addition to matter and energy, called T-Consciousness, which mediates the information of its transformation into matter and energy (Figure 2-a). In fact, in this relationship, matter, energy, and T-Consciousness have a common denominator called information (Figure 2-b).

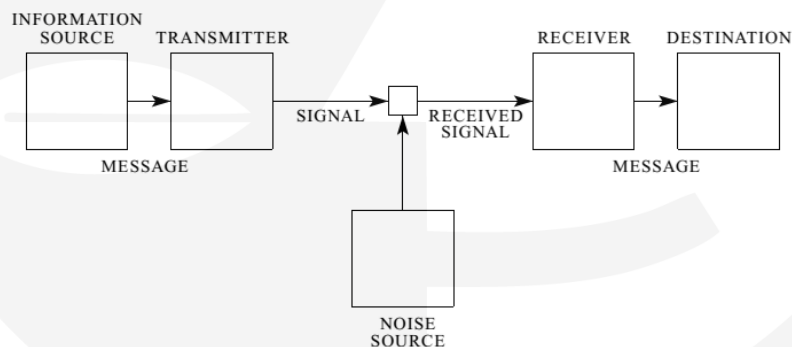


Figure 1- Schematic diagram of a communication system (Shannon, 1948, p.2).

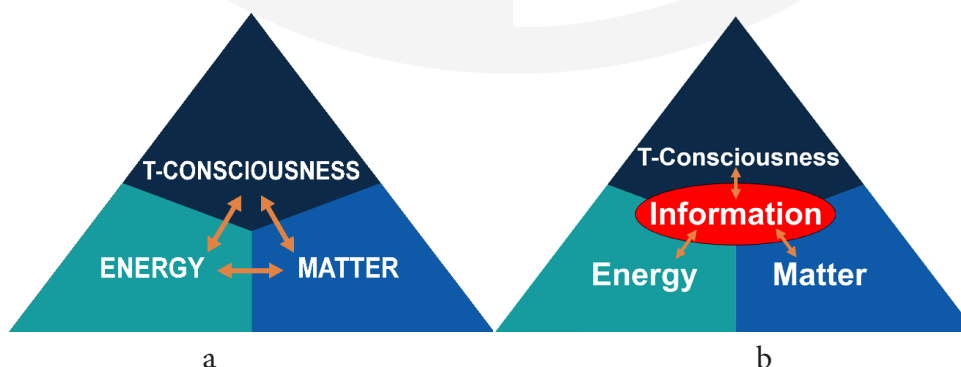


Figure 2: (a) The relationship between T-Consciousness, matter, and energy, (b) the relationship between information, T-Consciousness, matter, and energy.

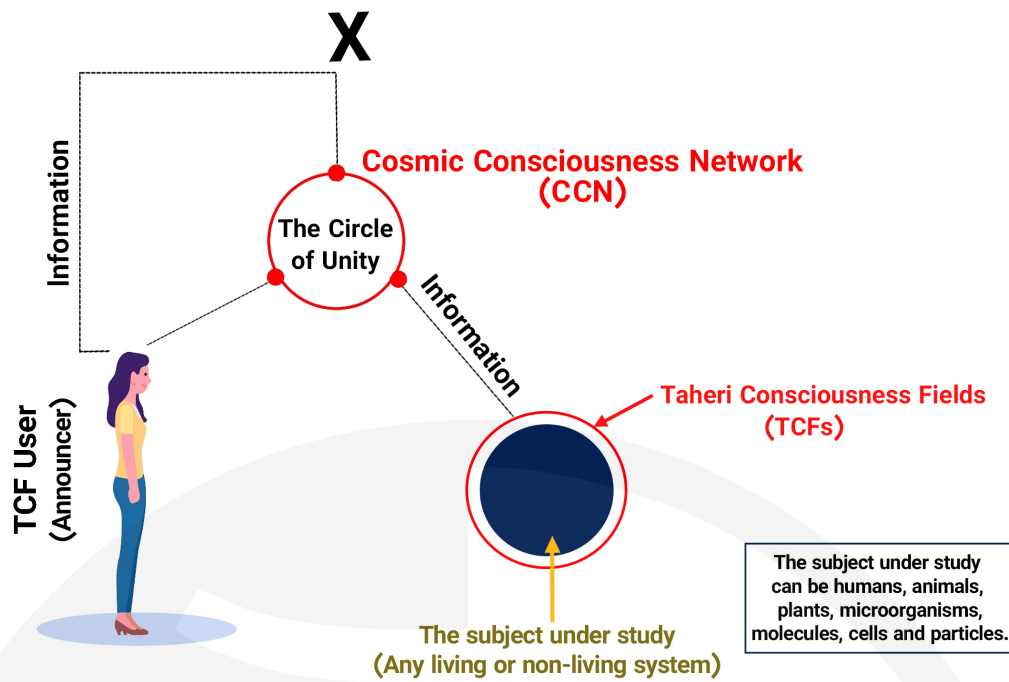


Figure 3: Schematic Image of Connection to the T-Consciousness Fields

Information is transferred to the object under study through TCFs, and the human mind plays the role of Initiator in this relationship (Figure 3).

Since *information* has a significant contribution to the theory of TCFs, the definition of *information* in the theory of information and the theory of TCFs will be examined further.

### Theory of Information

Even though information and energy are interrelated, their relationship might not be obvious at the first glance. Maxwell was the first to realize the connection between these two 130 years ago and by proposing it, he challenged the second law of thermodynamics (Leff and Rex, 2003). He designed a thought experiment called Maxwell's demon, indicating that the second law of thermodynamics could be violated, considering that the total entropy decreases instead of increasing. The interesting point of Maxwell's demon thought experiment is that for such a process to occur, his demon must have information about the particles in the chamber (know the speed of the particles). In other words, obtaining information from the

system reduces entropy. The higher the entropy of the system, the more information is required to fully understand the system. To reduce the uncertainty about the system and increase knowledge about it, it is necessary to reduce the entropy of the system.

Landau and Bennett further clarified the relationship between entropy (a kind of energy) and information to justify Maxwell's demon Paradox (Leff and Rex, 2003). They stated that in order for Maxwell's demon experiment to be implemented, it is necessary to store the measurement results in the demon's memory, and since its memory is limited, it must be cleared in the end so that it can perform new measurements. Thus, the way to relate energy to information was provided based on Landau's principle. This principle implies that whenever a bit of information is erased, some energy enters the environment and is wasted, which is at least equal to the following value:

$$1) E = k_B T \ln 2$$

where  $k_B$  is Boltzmann's constant and  $T$  is the ambient temperature. In this way, the entropy of the environment increases as much as  $k_B \ln 2$ .

Therefore, according to Landau's principle, energy consumption, and total entropy reduction in Maxwell's demon thought experiment are due to the erasure of the demon's information.

It should be noted that information is not directly related to physical quantities. In fact, information is neither matter nor energy, indeed matter and energy may be needed to transmit it. Therefore, the amount of information cannot be directly measured with a device or expressed based on physical quantities. The information content of a message is the amount of information obtained by understanding the values of the bits that make up the message. So, information is related to our ignorance about the message.

The second law of thermodynamics and entropy, with two types of thermodynamic and statistical definitions, are used in different and sometimes incorrect concepts in scientific texts (Ben-Naim 2019). The use of the thermodynamic concept of entropy in explaining the definition of information in the system has been presented accurately and authentically by Shannon. In other words, in classical physics, the most valid relation demonstrating how much we do not know about the system is Shannon's entropy relation. Shannon quantified the relationship between entropy and lack of consciousness or information based on Leo Szilard's study on decreased entropy in thermodynamic systems (Szilard 1964). Shannon considered a bit as the unit of information. In other words, one bit is equal to the amount of information that a classical binary system can carry. Shannon showed that the weighted average of information hidden in the system based on the probability of occurrence of all possible events is equal to:

$$2) I = -K \sum_i P_i \ln(P_i)$$

where  $P_i$  is the probability of the  $i$ th event, and  $K$  is a positive constant that merely amounts to a choice of a unit of measure. Shannon called this average amount of information entropy. Hence,

Shannon's relation became known as Shannon's entropy (Shannon, 1948).

In information theory, thermodynamic entropy can be interpreted as the missing knowledge required to specify the state of any system, that is, the microstates of that system. By comparing the Shannon entropy relationship with the thermodynamic entropy relationship, the identity of different parameters can be determined as follows:

$$3) S \equiv I$$

$$\ln \Omega \equiv \sum_i P_i \ln(P_i)$$

$$k \equiv K = \frac{\text{bits}}{\ln 2}$$

Therefore,

$$4)$$

$$1 \text{ bit} = 1.38 \times 10^{-23} \frac{\text{joule}}{\text{Kelvin}} \times \ln 2 = 0.95 \times 10^{-23} \text{ J/K}$$

So, one joule/Kelvin can be written as:

$$5) 1 \text{ J/K} = 1.05 \times 10^{23} \text{ bits}$$

And thus,

$$6)$$

$$\frac{1 \text{ J}}{\text{K.mol}} = \frac{1.05 \times 10^{23} \text{ bits}}{6.02 \times 10^{23} \text{ molecule}} = 0.174 \frac{\text{bits}}{\text{molecule}}$$

The inverse relationship between entropy and information ( $I = -S$ ) is one of the precise applications of entropy in biology, which is used from the level of a biological molecule to the whole genome and beyond it (Roach 2020).

## TCFs and *information* in Taheri's approach

TCFs are newly discovered non-material and non-energetic fields with diverse functions and a subset of the Cosmic Internet Network. The main difference between the theory of TCFs and other theoretical concepts presented in regard to consciousness is the application and practical use of TCFs. These fields can be applied to all living and non-living organisms such as humans, plants, animals, microorganisms, materials, etc.

The definition of information in Taheri's theory of T-Consciousness Fields is different from its conventional definition in the world of science. In the conventional physical view, information is carried, moved, and replaced by matter and energy. On the other hand, based on Taheri's theory, *T-Information* is unknown in nature, and is carried, moved, and replaced by T-Consciousness. Accordingly, matter and energy do not carry information; rather, they become shifted (changed/transformed) by it. In other words, by applying any TCF, matter and energy become shifted (changed/transformed) into a form of basic and constructive information. To understand the difference between the nature of physical information and TI, examining the levels of information available on a website is exemplified here: while browsing a website, one has access to the front-end data (secondary information) and is not able to access the back-end data (behind-the-scenes/panel management or primary information). However, by having the admin password, one can access the back-end data, in which case, a higher level of information is accessed on this website that is not publicly available. In this example, the general front-end information of the website (secondary information) is equivalent to the physical information of the systems under study, and the back-end information of the website (primary information) is equivalent to the *T-Information*, according to Taheri's theory of TI. In fact, by using TCFs, not only the secondary physical information known in physics and inherent to matter and energy is influenced, but also by using any types of TCFs, the hidden primary

information behind the scenes of matter and energy is also unveiled and used in line with the behavior of the system.

The influence of the TCFs begins with the Connection between CCN as the Whole Taheri Consciousness of the universe and the subjects of study as a part. This Connection called "Ettesal" is established by a Faradarmangar's mind (a certified and trained individual who has been entrusted with the TCFs). The human mind has an intermediary role (Announcer) which plays a part by a swift and brief attention to the subject of study and then the main achievement obtained as a result of the effects of the TCFs. These fields cannot be directly measured by science, but it is possible to investigate their effects on various subjects through reproducible laboratory experiments (Taheri 2013).

The research methodology in the study of T-Consciousness has been founded on the process of *Assumption, Argument, and Proof*, based on the following statements:

- The Assumption: The Cosmos was formed by a third element called T-Consciousness that is different from matter and energy.
- The Argument: The existence of TCFs can be demonstrated by their effects on matter and energy, e.g., humans, animals, plants, microorganisms, cells, materials, etc.
- The Proof is the scientific verification of the effects of TCFs on matter and energy (according to the Argument) through various reproducible scientific experiments.

Accordingly, to investigate and verify the existence, effects, and mechanisms of TCFs, the following five research phases (Phases 0 through 4), and the goals of each phase are outlined below.

Phase-0 studies aim to prove the existence of TCFs by observing their effects. The nature of T-Consciousness and what it is will not be addressed in this phase. Phase-1 explores the varied effects

of different TCFs. Phase-2 examines the reason behind the varied effects of these fields. Phase-3 investigates the mechanism of TCFs effects on matter and energy. Finally, Phase-4 draws significant conclusions, particularly regarding the *mind and memory of matter* and their relation to the T-Consciousness, etc.

In the article on the mind of matter (Taheri et al., 2022a), focusing on the role and function of the mind without discussing what the mind is, it was shown that the occurrence of different properties/behavior of matter under the influence of TCFs indicates that matter, in addition to the physical body (material and energy constituent) requires a mental body. According to Taheri's theory of TCFs, the mind has different levels, including the basic (common) mind (the mind of matter, which is the common basis in the universe and includes the pure matter software program), the intrinsic mind (biological) (including the human mind, animal, plant, microorganism) and the perceptual mind (specific to humans, which provides the ability to ask questions, be aware of its own existence, and perceive concepts). The TCFs change the behavior of materials by changing the mental state in their mental body. The mental body of matter includes information (regarding each component of the system, the formation process, and all its equilibrium and non-equilibrium states) and mental states that occur during the process of formation of matter and has reached its current state (its equilibrium state). The function of the material mind is to maintain the information and mental states, interact with the TCFs, accept new mental states, and exhibit a behavior that corresponds to the new mental state. According to this model, the TCFs expose the subject's mental body to the selection of a new mental state upon the request of a Faradarmangar (Announcer). The mental body of the material, under the influence of the TCFs, accepts the presented mental state and is placed in that state. After that, properties/behaviors corresponding to the new state of mind provided by the TCFs appear in the material.

In this study, the following analyses are performed: (1) Investigation of the effect of TCFs on the pH of pure water, (2) examination of the changes in the amount of biological energy production of Adenosine Triphosphate (ATP), (3) conformity information theory to the phenomenon of the influence of TCFs on the properties/behavior of pure water and the amount of ATP production in the biologic cells, (4) analysis of the immediate energy observed in the living cell under the influence of the TCFs, and the introduction of '*biological dark energy*'.

## Results and Discussion

Previously, the effects of TCFs on the pH of pure water (Current Issue, pp. 6-32), and biological energy production in a human cell line (Current Issue, pp. 33-54) were investigated. In the present study, by calculating the amount of information exchanged as a result of TCFs' effects with the goal of completing the previous research, the results are argued according to Taheri's theory.

## Investigation of the effect of TCFs on the pH of pure water

Table 1 shows the amount of information exchanged via the pH change in the test samples of pure water under the influence of TCFs compared to the control samples. To explain

Table 1- The amount of information exchanged via the pH change in the test samples of pure water under the influence of TCFs, compared to the control samples

	$\Delta G$		$\Delta S$		$\Delta I$
	Calculated (kJ/mol)	Difference with Control (kJ/mol)	Calculated (J/K.mol)	Difference with Control (J/K.mol)	Difference with Control (bits/molecule)
<b>Control</b>	-36.26	-	124.5	-	-
<b>TCF1</b>	-33.02	3.2	113.1	11.4	2
<b>TCF2</b>	-27.60	8.7	94.6	29.9	5
<b>TCF3</b>	-19.79	16.5	67.7	56.8	10

The results of applying TCFs on the pH change of pure water demonstrated that the entropy and Gibbs free energy decreased under the influence of TCFs, while leading to small enthalpy change. The maximum difference between the enthalpies of the control and the samples under the influence of TCFs was 0.04 kJ/mol, which is much less than the amount of energy that is out of reach of the system distribution (more than 3 kJ/mol on the effect of TCF1 which is the lowest value among the samples). Therefore, the amount of differential energy does not appear as heat. According to Taheri's theory of the mind of matter, these changes in material behavior occur as a result of transferring information from TCFs towards the mind of material. According to this theory, the mental body of matter includes information on each component of the system, the process of formation and all its equilibrium and unbalanced states, and mental states that were formed during the process of formation of matter and its equilibrium state. The function of the mental body of matter is to maintain the information, to interact with the TCFs, to accept new mental states, and to exhibit behavior appropriate to the new mental state. To illustrate, by analyzing the amount of total entropy reduced in the pH change of the

the data in Table 1, an example is discussed: the loss of 16.5 kJ/mol of sharable energy of the test samples under the influence of TCF3 is equivalent to a total entropy decrease of 56.8 J/Kmol, and this means that the information exchange has been made as much as 10 bits/molecule in this situation.

pure water test samples (for example, 56.8 J/K.mol under the influence of TCF3), it can be concluded that the unavailability of the sharable energy of samples under the TCFs treatments occurred as a result of interacting the mind of matter with TCFs (Taheri et al., 2022a). These results encouraged the authors to calculate the amount of information exchanged under the influence of TCFs.

By analyzing the amount of information exchanged in TCFs treated samples, it can be concluded that the amount of ignorance about the system has decreased based on information theory, for example, 10 bits/molecule under the influence of TCF3 treatment. In other words, the amount of information about the system has increased as a result of TCFs treatment. According to the results of this experiment, the released energy has not been converted into matter or heat, but into information. By this analysis, one can conclude that under the influence of the T-Consciousness Fields, the law of conservation of matter-energy is being replaced by the law of conservation of matter-energy-information. It is evident that more experiments are required in order to evaluate the effects of TCFs on the properties of materials

and biological samples and gain sufficient evidence to prove this novel law and theory. It should be noted that the information theory does not answer the question of how or based on what mechanism the behavior of material changes towards the *announced* request or how the material interacts with the *announcer*. Moreover, this analysis does not answer the question of where the out-of-reach sharable energy has gone. Nevertheless, according to Taheri's theory of information, this energy can be converted into T-Information, as explained above.

Considering the theory of information along with Taheri's theory of information (Taheri, 2013), in addition to justifying the altered behavior of treated materials, it seems that the samples affected by TCFs have a kind of negentropic behavior.

### Investigation of the effect of TCFs on the amount of ATP production in HEK-293 cell line

According to the results published in a previous study on the HEK-293 cell line, application of TCFs 1, 2, and 3 in less than one hour resulted in a respective 5, 11 and 7-fold increase in the number of ATP molecules of test samples

compared to the control (Current Issue, pp. 33-54). Enhancing the rate of ATP production in biological pathways, not only requires sufficient time but also enough energy substrates. This experiment was conducted in one hour, and there were limited fuel cell resources. Therefore, this increase in ATP levels could not be due to the normal biological pathway of cytosolic and mitochondrial glucose oxidation.

Obtained results from Experiment 1, suggested that TCFs may maintain the proton gradient across the inner mitochondrial membrane through ionization of water molecules in the mitochondrial intermembrane space. Indeed, this alternative pathway occurred instead of the oxidation of NADH and FADH<sub>2</sub> electron-carrying molecules in the electron transport chain. Table 2 shows the thermodynamic parameters of the general reaction of the natural biological pathway and the alternative pathway under the influence of TCFs to produce each ATP molecule.

Table 2. Comparison of the thermodynamic parameters of the alternative pathway of biological energy production (water ionization model) with the thermodynamic parameters of the general reaction and oxidation of the electron carriers of the conventional biological pathway; All parameters are normalized for the production of one ATP molecule.

Pathway	Reaction	Stoichiometry	$\Delta G^*/$ kJmol <sup>-1</sup> per ATP	$\Delta H/$ kJmol <sup>-1</sup> per ATP	$\Delta S/$ JK <sup>-1</sup> .mol <sup>-1</sup> per ATP
Conventional Biological pathway	Glucose oxidation	1/32 Glc:1 ATP	-89.69	+90	+602
Alternative pathway under the influence of TCFs	Water ionization	3Water:1ATP	-239.7	-167.4	+242

## Taheri's Theory of T-Consciousness Biology

According to Taheri's theory of the mind of matter (Taheri et al., 2022a), the selection of the alternative path to supply the concentration of  $H^+$  needed to maintain the proton gradient across the inner mitochondrial membrane to increase ATP production can be attributed to the mental body. It should be noted that samples under the TCFs treatment were similar to the control in the aspect of vital functions. These observations led us to wonder how the mental body chooses the alternative path when the amount of free energy required for the formation of each ATP molecule is about 3 times that of the natural biological path (Table 2), and from where the required energy is supplied.

The theory of T-Consciousness Biology (TCB) is being introduced by Taheri in 2022. According to this theory, "life" is nothing but the emergence of T-Consciousness levels, such as the software component of information and memory (without memory, the existence of information is meaningless) to create and control the hardware component. This way, the Cosmos and all its components are alive, thus the emergence of T-Consciousness occurs in a gradual process. Moreover, life has different levels. For example, after preparing atoms and molecules, life on the earth began with the appearance of memory molecules by T-Consciousness programming, and after that, life-mimicking molecules reveal a higher level of T-Consciousness as the initial stage of life emergence. The highest level of life belongs to humans, which has made them understand the concept of "being" and can be aware of their existence.

As stated, the evolution of living organisms occurs in a gradual process, based on the theory of TCB. It includes the memory of matter, the consciousness of matter, life-mimicking molecules, and mental life, respectively. For example, a jellyfish (Scyphozoa) does not have a brain, heart, eyes, etc. therefore, they must operate by a mental life. After going through

different stages and creating infrastructures, other life detectors become visible.

## Biological Dark Energy

Life exists in two forms, light and dark. The energy used in light life is ATP with a constant production rate and cannot be generated in a large amount instantly. In other words, this immediate energy requires another system which is different from the biological reactions involving ATP synthesis, e.g., glycolysis, the citric acid cycle, and the electron transport chain. Therefore, to do some activities that require a huge amount of energy at once, there is an alternative energy that does not rely on metabolism and is invisible. This kind of immediate energy is nominated as "Biological Dark Energy" by Taheri. Dark life is related to software and non-physical components and does not implicate molecular structures to be revealed. Apparently, dark life has its own energy system. Therefore, the above experimental observations are shreds of evidence to confirm this theory. It can be stated that the energy required to advance the alternative path (ionization of water molecules between the two mitochondrial membranes) is the biological dark energy. However, it should be noted that the nature of *biological dark energy* is still unknown and requires further studies.

Using the data in Table 2, the Gibbs free energy difference between the two states, with and without the application of TCFs, is equal to 150 kJ/mol in standard conditions. Therefore, the difference in total entropy changes of the alternative pathway (water ionization reaction in the mitochondrial intermembrane space) in ATP production, compared to the usual biological pathway (glucose fuel and oxidation of electron carrier molecules: NADH and FADH<sub>2</sub>) is equal to:

$$7) \Delta S_{total} = \frac{-150000J/mol}{298.15K} = -503 \frac{J}{K.mol}$$

Thus, in the production of ATP, the amount of total entropy decreases by 503 J/K.mol.

Knowing the molar amount of ATP produced per cell, the amount of entropy decreased per cell can be calculated.

Based on equations 6 and 7, the added information that occurred in the cellular system for each mole of ATP produced in the samples influenced by the TCFs can be calculated as

$$8) \Delta I = 503 \times 0.174 = 87.5 \text{ bits/molecule}$$

Based on the number of ATP molecules made in the proposed alternative pathway in the samples

Table 3- The amount of normalized exchanged information (normalized to the amount of ATP produced in the control) in ATP production in samples influenced by TCFs in the last hour of the study

Sample	$\Delta$ Mole of ATP (mol)	Normalized $\Delta$ Mole of ATP	Normalized $\Delta I$ (bits/ATP)
TCF1	3.24E-06	4.43	390
TCF2	7.35E-06	10.05	885
TCF3	4.59E-06	6.28	553

According to the theory of information, the change of the material towards the *announced* request is equivalent to the fact that the level of ignorance about the system has decreased, or in other words, the amount of information about the system has increased. However, for the sample under the TCFs treatments to function as requested, it must receive 150 kJ more energy than the control for each mole of ATP production in standard conditions. Now, the question is: where did this amount of energy come from? According to the information theory, the exchange of each information package allocates certain entropy or a level of energy for the system. Therefore, it is possible that information has been converted into energy under the influence of TCFs.

It should be noted that the information calculations in this paper are based on the information theory and are only for the purpose of quantitative estimation of the increased information in the system under the influence of TCFs. Naturally, as mentioned in the introduction section, the information defined

influenced by TCFs during the last hour of the study (in which the TCFs treatment took place), the amount of normalized (to the amount of ATP produced in control) information exchanged in samples influenced by TCFs is shown in Table 3.

by scientists and the *T-Information* introduced in Taheri's theory of Consciousness Fields are different in nature, and these calculations do not mean that they are the same.

## Conclusion

The authors performed two experimental studies prior to this research. In the first experiment, the pH of pure water decreased significantly under the influence of the TCFs. In the second experiment, the effect of TCFs on Adenosine Triphosphate (ATP) production in the human HEK 293 cell line was investigated. It was found that the treated cells were able to generate a much greater amount of ATP compared to the control. This energy was released within a short period of TCF treatment (one hour) without sufficient glucose as the predominant fuel for cells. This study discusses the effects of TCFs by calculating the amount of information exchanged in the previous two experiments.

The attempt to analyze the results of the previous two experiments based on information theory

shows that this theory is not able to respond to the processes that occurred and does not have explanations for the following phenomena:

1. The interaction of the material with the announcer and the way the material moves towards the announced request
2. Providing the necessary energy to advance the alternative path (here: ionization of water molecules between the two mitochondrial membranes) for the natural biological path (glucose fuel and oxidation of NADH and FADH<sub>2</sub> electron-carrying molecules).

However, based on the available experimental data and the analyses carried out, the application of TCFs on non-living materials and living cells (biological samples) can be well explained by combining the conventional concept of information in today's world of science and the Taheri's theory of the mind of matter. Based on this combination, the following conclusions can be made:

- Knowing that according to information theory, the total entropy must be equal to the entropy of information, it can be predicted that since any interaction of matter with the announcer is equivalent to reducing ignorance of the system or increasing information, this interaction should lead to a negentropic phenomenon. In this way, the direction of movement of matter is determined after applying the TCFs.
- It seems that under the influence of TCFs, the law of conservation of matter-energy is affected and gives its place to the law of conservation of *matter-energy-information*. Further explanation of this category requires additional research.
- Applying TCFs to different samples of living materials and cells (biological samples), means the interaction of TCFs with the mental body of the desired samples and entering new information into the system

under study. By establishing this interaction, based on the input information, a new mental state of the samples is activated. After that, the exchange of information between the mental body and the physical body of the samples takes place and leads to a change in the energy level of the system under study. As a result of this change in energy level and under the management of the mind of matter, a change in the properties/behavior of matter occurs.

- In the living system of this research, as a result of the information received from the TCFs, a type of energy different from the biological energy known in the cell is produced under the influence of the TCFs and provided to the living cell. According to Taheri's theory of T-Consciousness Biology, this type of immediate energy available to biological systems, which has a different mechanism and system for production, and its creation does not occur with the conventional pathways related to the routine metabolism of living cells, is called *Biological Dark Energy*.

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