

FOOD INFORMATIONAL MATRIX

INFORMAȚIA MATRICEI ALIMENTARE

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Abstract. *Food represents human's ecological niche, that's why the permission to food and a proper alimentation is a fundamental human right. Man, using all irrational action, changed the natural food chain; thus, nowadays, he has the duty for himself and for the nature to try to maintain biodiversity. Otherwise, unhealthy food will harm us! Alimentation and its metabolic pathways affects deeply the humans' evolution and the health status, by complex mechanisms between genetic activity and metabolism. A major part of the vital information needed for our existence it has to be provided through food that becomes 'Biologic information carrier'. Therefore, it has been resulted the notion of "Food Matrix" that it is in the same time a "Biological and a Genetic Matrix". Beyond traditional or conventional food, new genetic modified organisms (gmo's) food or deriving from gmo's food emerged on market. In this context, it is the specialists responsibility to apply the precaution principle and to monitor gmo's food, which in fact, it represents a deep bioethics item. Maybe, the best way is to harmonize ourselves with Nature, if considering that "our nature is still natural".*

Rezumat. *Alimentul reprezintă nișa ecologică a omului, de aceea dreptul la aliment și la o alimentație corespunzătoare este un drept fundamental al omului. Omul, prin acțiunile sale iraționale, a modificat lanțul natural alimentar, de aceea astăzi mai mult ca oricând are datoria față de el însuși dar și față de natură să încerce să mențină biodiversitatea. Altfel, "alimentele bolnave" ne vor înbolnăvi! Alimentația și lanțul metabolic ne influențează sănătatea prin mecanisme complexe între activitatea genetică și metabolism. Alimentația și efectele sale metabolice influențează profund evoluția și starea de sănătate a organismului, prin mecanisme complexe de legătură mediată prin semnale între activitatea genetică și metabolism. Astfel, a rezultat noțiunea de "Matrice alimentară" care este în același timp și "matrice biologică" și "matrice genetică". Pe lângă alimentele tradiționale au apărut și alimente care sunt sau provin din organisme modificate genetic. În acest sens, intra în responsabilitatea specialiștilor din domeniu să aplice principiul precauției și să monitorizeze organismele modificate genetic, ceea ce de fapt reprezintă o profundă problemă de bioetică. Poate, cea mai bună cale este aceea de a ne armoniza cu natura, în măsura în care "Natura noastră mai este naturală!".*

If considered from the point of view of the quantum physics, Universe is a huge computer which processes information in the most accurate way, allowed by the natural laws.

A universal informational matrix crosses the Universe and substance cannot be separated from information in anyway.

Sub-atomic Universe (quantum) and the atomic one are organized by a dynamic information matrix - ISET: Informational, Substantial, Energetic, Temporal.

The Computer Universe is calculating. It calculates itself, it calculates the quantum fields, the chemical substances, the living beings, human included, stars and galaxies.

Consequently, all living beings, human included, are some open informational systems featured by self-regulation, self-reproduction and evolution and they are ruled by ISET matrix organizing patterns.

A living system is defined by a configuration of its sub-systems, stored in ISET matrices which determines the material structure of the system.

The dynamic continuous process of concretization of these patterns stored in the ISET matrices means LIFE.

The whole Universe is ruled by an informational matrix. All the beings living on the Earth are organized and function according to an informational matrix. Man himself is an information – energetic- substance, sited in a dynamic balance and directly connected to the universal informational matrix. The humans being's connection to the ISET matrices is done through various information channels. Food is one of the human's strongest information channel.

Food is made up by the over-atomic and quantum Universe elements and it is the subject to these laws, being an information bearer.

Food's information is the deepest and most important feature of the food quality, triggering its nutritional effect and its biological value.

Food, as environmental element, is one of the most important epigenetic factor which connects every living being to the universal informational matrix.

More the food becomes man made, more its information gets changed, triggering effects on the individual and on the environment.

Ecologically speaking, man is sited on the top of food chains pyramid, being their integrator.

Man has being developing as a biologic being first and later as a social-cultural being, using an extremely various food for several hundreds of thousands of generations.

Food represents information – bearing particles belonging to the environment. These particles constituents are ingested, metabolized and then integrated into the consumer's information.

Analyzing the food contents, we find out that it is made up of vegetal or animal cells, tissues and organs, micro-organisms, composed by macronutrients, micro-nutrients, non-nutrients, additives.

The constituents of a natural food matrix belong to a substance information network which carries environment information, as epigenetic signals. All these are indispensable for the individual proper connection to his own species and to the upper levels of the ecosystems and biosphere.

When processed the food matrix is subject to information alterations. Strongest the processing is, stronger the alterations are.

The food matrix maybe strongly altered and the links between macro and micro-nutrients maybe modified as quality and quantity in an information chemical, biochemical and physical manner. These alterations are converted in a lower biological value from the point of view of nutritional aspect.

The true, healthy food, useful for the humans is a global information borne by a well-balanced and various diet, respecting a constantly practice sport activity.

This way, food and diet (a diet means the total of aliments and of their combinations within a nutritional behavior) supply to humans information nutrients framed in stereo-chemical structures of chemical substances.

The information of individual food matrices and of diet mean major epigenetic factors, which interact directly with the organizing pattern, informational matrix of human and its own genetic information. Nowadays this approach is the subject of study of **Nutrigenome**.

This inter-action determines the state of health or illness at individual and social level.

The man made food and environment have proved that man didn't succeeded to discover the real laws of harmonization with Nature and triggered serious ecological damages.

All these lead to major composition alterations of food matrix. These altered food matrices transmit to the human metabolism information which is completely foreign towards its organization pattern and creates a strong organization and information stress.

If the human organization pattern could find the resources for facing the negative effects of the information altered – food, the human species would survive in a new created equilibrium.

A great part of the life information must be supplied by food to human body. Altered food or improperly processed food cannot be recognized by human metabolism and lead to illness, usually.

The **Nutrigenome**, the inter-action diet-genome, means allow the quantification of one key nutrient, for instance, a micro-nutrient in organic matrices on the profile of expression of thousands genes.

Food contains regulators of the gene's expression, such as:

- nutrients (fat acids, selenium, zinc);
- non – nutrients (phyto-chemicals);
- metabolites of food compounds (eicosanoides);
- final-products of gut-bacteria.

The control of the gene expression maybe done by one single nutrient, but usually this control is complex. It is performed by inter-connections between nutrients or nutrients and hormones.

Food nutrients and non-nutrients interact with the genome-set, influencing the concentration and functions of the cell proteins, by adjusting the gene

expression at different levels, by means of transcription factors. An example might be the lipids metabolism.

The cell receivers have a major parting the intra and inter chemical signals (mainly, an informational signal).

CONCLUSIONS

The Computer Universe is calculating. It calculates itself, it calculates the quantum fields, the chemical substances, the living beings, human included, stars and galaxies.

Everything is contained in a quantum informational matrix.

This is what life is! From the cell level up to Biosphere the living systems networks connected to the universal information matrix calculate and give signals inside and outside themselves. They tend to an integrating dynamic evolution balance.

Living beings, including humans, are information – substance –energy with a space-time existence.

Alimentation and its metabolic pathways influences the health status of humans, by complex mechanisms between genetic activity and metabolism.

Food is a major epigenetic factor and has an important integrating part. Living beings process the food information, the epigenetic environmental factor, very important in the maintenance of system's functions and of its integration in the superior structures.

Food is not only a nutrient but an information. Its combination in a diet gives more value than the value of each food product.

Therefore, the diet is a manner of organizing better the information network with real benefits on individuals and species.

Maybe, the best way is to harmonize ourselves with Nature, if considering that “our nature is still natural”!

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