INTERNATIONAL CONFERENCE AND SCIENTIFIC DEBATE CLUB New Informational Technologies in Medicine, Biology, Pharmacology and Ecology Ukraine, Crimea, Yalta-Gourzuf, May 31-June 9, 2010

The reactivation of biochemical memories as a nutraceutical prevention mechanism

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## From water memory to Biochemical Memory some consideration of GDA

Dalla memoria dell'acqua alla memoria biochimica

L' acqua è un medium per la vita

Le sostanze biochimiche sono un ulteriore medium per la vita

Memoria dell'acqua: stato dell'arte, conseguenze applicative, evidenze, controversie E' possibile un concetto analogo nella biochimica?

La biochimica porta informazioni attraverso sostanze..

Può portare informazioni senza sostanze o con un minimo di sostanze..

Cosa è l'analogo della diluizione dall'acqua alla biochimica..

Un meccanismo? Certe molecole vengono modificate da sostanze, farmaci o altro Quelle molecole vengono replicate da meccanismi biologici ...

Può essere una modalità per la presenza di informazione in biochimica.

Il caso degli enzimi

Questi sono agenti estremamente complessi

Influenzano molti processi biologici

Per influenza informativa e/o per presenza chimica?

Quali possono essere le evidenze per evidenziare la memoria biochimica..

A voi ...

## Biochemical memories today Computation comes to life

http://www.computerworld.com/s/article/99996/Computation\_comes\_to\_life?taxonomyId=12&pageNumber=1

For years biologists have used computer models and highperformance computers to simulate and understand living processes. More recently, computer scientists have drawn inspiration from biology to immunize information systems against malware and to create algorithms that mutate without human intervention. In all such cases, the underlying computer architecture has remained traditional and unremarkable - software running on silicon-based digital processors. But now researchers are taking the marriage of computer science and biology to a remarkable new level, turning cells into living computers with programmable DNA and biochemical memories, sensors, actuators and intercellular

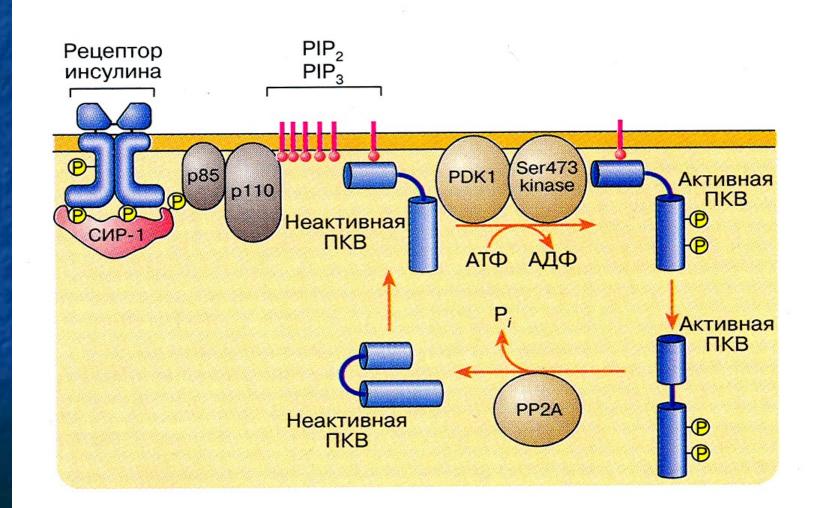
communication mechanisms

## NEW MECHANISM FOUND FOR MEMORY STORAGE IN BRAIN

http://www.hopkinsmedicine.org/Press\_releases/2007/07\_18\_07.html

Our experiences - the things we see, hear, or do-can trigger long-term changes in the strength of the connections between nerve cells in our brain, and these persistent changes are how the brain encodes information as memory. Previously, the long-term changes in connection were thought to only involve a fast form of electrical signaling in the brain, electrical blips lasting about onehundredth of a second. Now, neuroscience professor David Linden, Ph.D., and his colleagues have shown another, much slower form of electrical signaling lasting about a second can also be persistently changed by experience.

## Cell Signaling or Signal Transduction Elena Markvicheva



## Water Memory connected with Biochemical Memories?

- An increasing number of data indicates that water in the liquid state is endowed with very peculiar properties and undergoes structures which may retain in a stable manner some conformation's information.
- Physicists (and also Preparata, Del Giudice, Trukhan, Zhadin) elaborated several theories about these structures, which deserve experimental checking.
- Anyway, in the last century researchers like Giorgio Piccardi, John Eccles, Jacques Benveniste have come to similar conclusions based on bio-quantum-chemistry experiments.

Hypothetical mechanism of biological effects at high dilution. Oscillating fields and intermolecular communication 1991 JB

If the active molecules are absent (or, better, present in such low number that they cannot induce a chemical response), we have to admit that the specific effect which we detect is of non-molecular origin.

At present the physical basis of this phenomenon is unknown.

### Molecular signalling Jacques Benveniste 1991

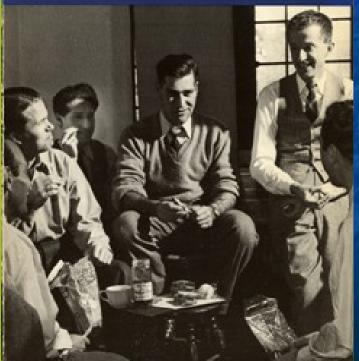
The question as to the nature of the intimate mechanism(s) of molecular signalling, which are fundamental to all of biology, is not only, without response, but has not even posed. We propose that the essential molecular function: recognition (at distance?), interaction activation, secondary and tertiary structure, and conformational change (triggering, directing, stopping of movement in the new conformation, ....) are, in fact, determinated by electromagnetic mechanism.

### Vacuum and Coherence in Nature Webnar, 25 July 2007

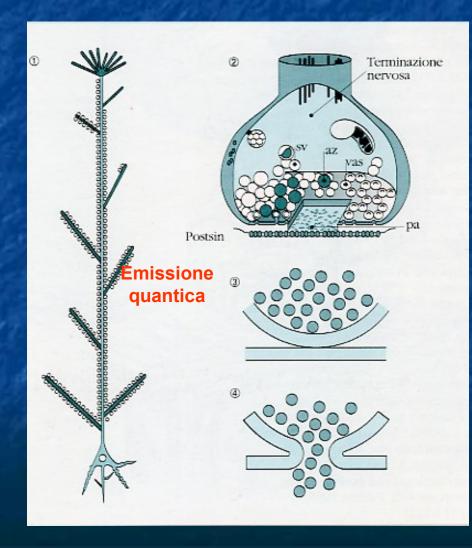
**M.TIENGO** Il dolore: dalla materia alla mente. L'ipotesi quantistica di John Eccles e la teoria della coerenza di Giuliano Preparata

MIND FROM MATTER?

MAX DELBRÜCK



#### The psycone coordinates exocitoses by means of quantum probability fields Sir John Eccles

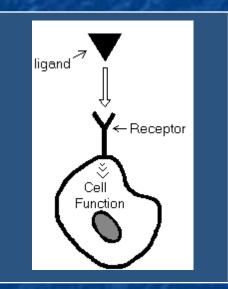


www.digibio.com.

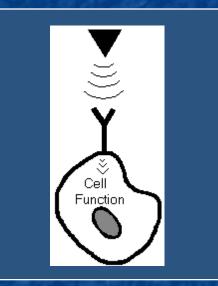
Theoretical Considerations

### **Molecular signaling**

#### The Current Theory: "structural matching"



The 3D structure of ligand matches that of the receptor. Physical proximity induces receptor conformational changes which in turn triggers the cascade of events prompting cell function. The Benveniste Theory: "electromagnetic signals"



Proximity favors resonance of ligand-receptor specific EM signals. Resonance serves <u>as an</u> <u>iperconductive mechanism</u> for activation changes which occur at all steps of the cascade inducing cell function.

#### A. Widom Y.N. Srivastava, V.I. Valenzi The Biophysical Basis of Water Memory: Entropy, Structure and Information in Water" International Journal of Quantum Chemistry (Wiley and Sons), published <u>on line May 19, 2009 [DOI: 22140]</u>

**Conclusion:** We have only briefly indicated how electric and magnetic dipole moments carry entropy and thereby information in aqueous electrolytes. Storing information allows biological properties to depend on past histories of electric and magnetic dipole moments within the water solvent. Since electromagnetic waves from sources far removed from the information storage can nevertheless have effects on such memory, <u>it is</u> <u>clear that biological wireless connection may exist</u>. Such notions as information memory capacity and biological programs are quite common in describing polymer genome analysis. It should not be surprising that such concepts should be present in other types of biochemical systems. For example, the communication between human memory residing in the human brain and the environment which evokes such memory relies on information carried by nerve cells whose electrical signals critically depend on ionic conduction. Although we are far from working out the relevant ionic electrical connections in life forms more complicated than (say) a lobster, *it is very clear that electrolytic ionic information (i.e.* entropy) plays an important role in the resulting electric circuitry.

Interdiscip Sci Comput Life Sci (2009) DOI: 10.1007/s12539-009-0036-7

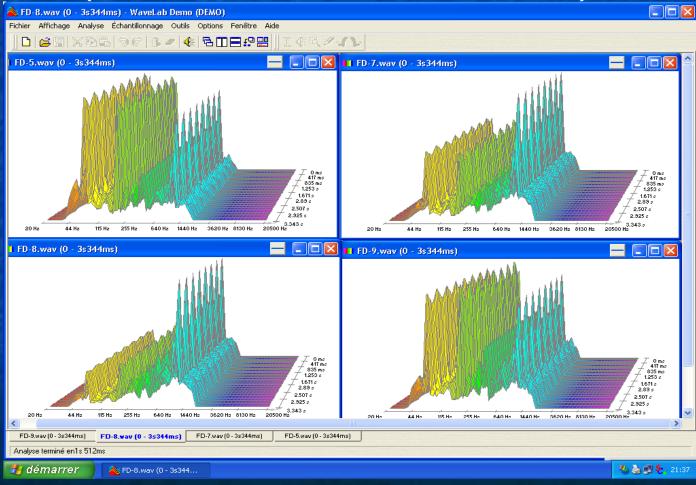
Electromagnetic Signals Are Produced by Aqueous Nanostructures derived from Bacterial DNA Sequences Luc MONTAGNIER, Jamal AÄISSA1 St¶ephane FERRIS Jean-Luc MONTAGNIER, Claude LAVALL¶EE

Abstract: A novel property of DNA is described: the capacity of some bacterial DNA sequences to induce electromagnetic waves at high aqueous dilutions. It appears to be a resonance phenomenon triggered by the ambient electromagnetic background of very low frequency waves. The genomic DNA of most pathogenic bacteria contains sequences which are able to generate such signals. This opens the way to the development of highly sensitive detection system for chronic bacterial infections in human and animal diseases.

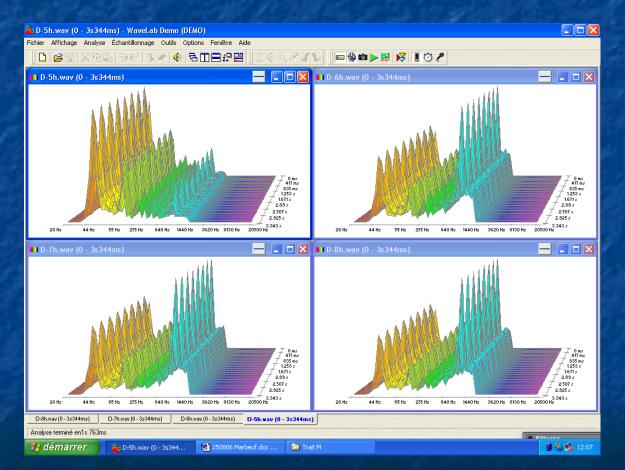
Key words: DNA, Electromagnetic signals, Bacteria.

#### The case of HIV/AIDS

(in collaboration with CIRBA, Ivory Coast) African patients, generally infected with the A/G HIV1 subtype (in vitro : CEM cells infected with HIV1 Lai)



### Plasma from patient with Alzheimer Disease EMS (+) between 10-6 and 10-11

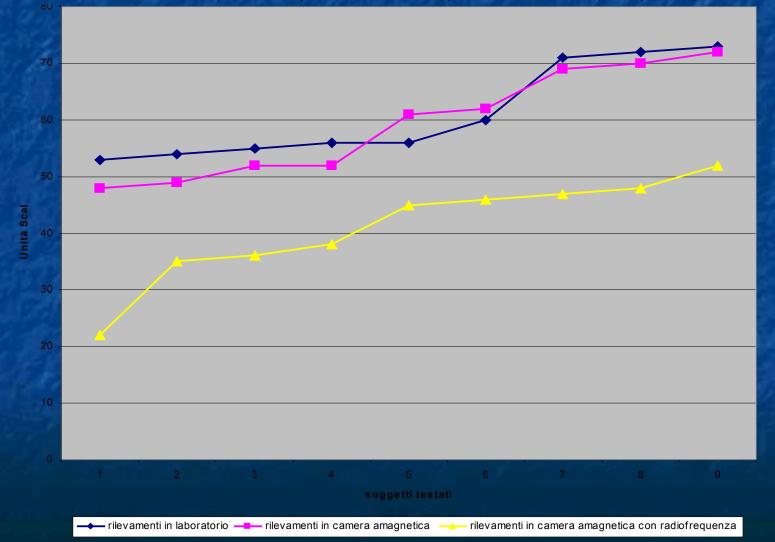


## The substrate for em and quantum signal seems to be the meridians. The Ohm Law in Therapy and Biology

- Measures on meridians highlighted in subjects with meteoropathies and various pathologies, that the electrical resistance increased in physical electric circuits with a medium of about 43 scale unites of SEP corresponding to 130,000 Ω.
- After the administration of a coherent therapy, we saw a resistance fall in medium at 39,000 Ω (70 us), with an improvement of bioelectric performance due to an increase of physical electric currents, in accordance with Ohm's law, I=V/R.
- Power in the biological system vary with W=V×I, with functional correlations (performance status, immunological status, muscle power, pain, inflammation, allergy, dyspnea, etc.).

#### Effects on the conductivity by magnetic field of cell phone antenna 10 V/mt - 900 GHz on seven men exposed in amagnetic room

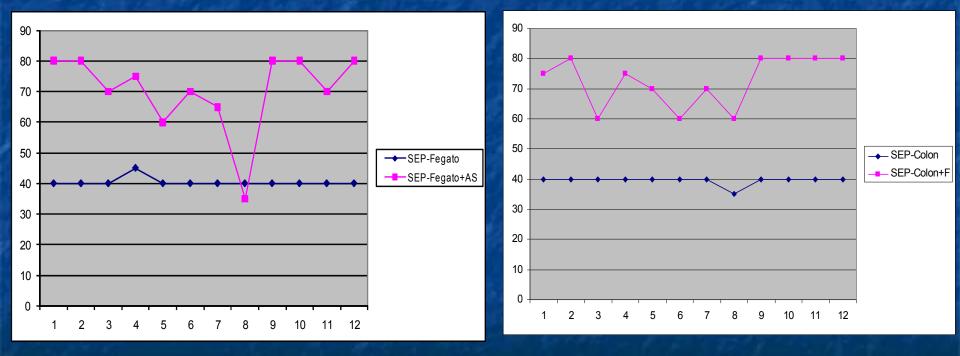
V.I.Valenzi, S. Grimaldi, G. Quartieri, G. E. Gigante; G. Mileto, G. Monaco: *Osservazioni sulle variazioni bioelettriche nell'uomo indotte da campi elettromagnetici in camera amagnetica*. Ricerca Aerosp. Pag. 33-38, Anno XXI- N. 1. 2005



# SEP variations on subjects with chronic constipation in hydropinic treatment with molecular signaling of water

A. Pisani, V.I. Valenzi, M.C. Lucchetta, M. Grassi, A. Serio, P. Avino, M.V. Russo, A. Fraioli

VII International Conference "Cosmos and Biosphere", 1-6 October 2007, Sudak, Crimea

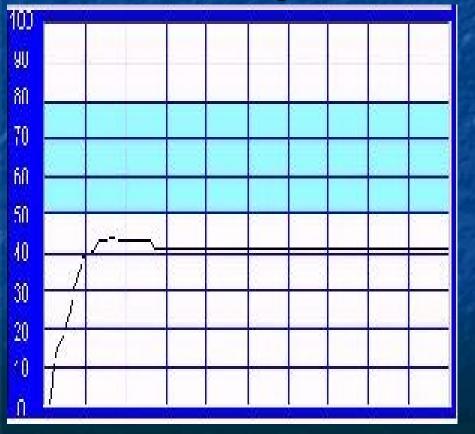


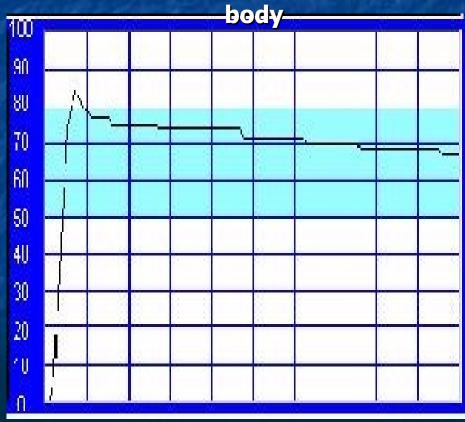
Skin Electric Parameters and molecular signaling of drug DRUG EFFICACY AND/OR INTOLERANCE IN METEOROPATHIC OSTEOARTICULAR DISEASES WITH 8 FANS TESTED http://web.tiscali.it/numedi/arc2002/0902/12.html

> V.I. Valenzi and M.L. Roseghini After Nimesulide

#### without drugs

1,5 cm max far from





## POTENTIAL VECTOR

The Potential Vector extends to a nearby large area, without transporting energy but just information, exerting a "fine influence", we could say "informatica", that alters the phase of the present coherent systems.

> *Giuliano Preparata & Emilio Del Giudice (Scienza e Conoscenza, 17/2006)*

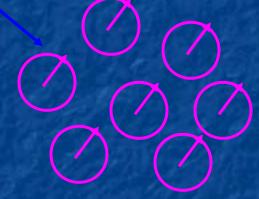


-Luca Gamberale Pirelli Labs — Materials Innovation Advanced Research (Milano, Italy)

#### N scatters

#### Quantum phase

Quantum incoherent Cross section like N



Quantum coherent Cross section like N<sup>2</sup>

N~10<sup>23</sup> !!!

### Vector Potential in Puthof's Patent 5845220

" with advent of quantum theory, however, the traditional picture change. In the prior art literature, the (vector and Scalar potentials A and  $\Phi$ ) formalism has emerged as more fundamental because it predicts certain quantum interferer effects that have been observed and are not apparent from the (E, B) approach. This difference was first set forth in an unequivocal way in a seminal 1959 paper by Ahranov and Bohm, entitled **Significance of electromagnetic potential in the quantum theory**" Physical Review 1959 and 1961.

In these papers it is shown that in certain two-leg electron-interferometer configuration in which the potential A and  $\phi$  are established in a region of space, but B and E are absent. It is nonetheless possible for the potentials A and  $\Phi$  induce changes in electron quantum interference patterns.

That is , electron that are in an electromagnetic field-free region and therefore do not encounter an electric or magnetic field are nonetheless acted upon by the presence of the A and or the  $\Phi$ potentials.

### Vector Potential in Puthof's Patent(2)

- Such an effect is now referred to broadly as a Ahranov- Bohm effect, and device have been built which demonstrate this effect in laboratory. For a recent overview, see, Y Imry and R. A. Webb," Quantum interference and the Ahranov-Bohm effect" Scientific American" 260 (April 1989).
- A second quantum interference effect demonstrate the independent reality of the (A,Φ) potentials in the absence of the (E,B) fields (and one which is significant for the technology disclosed by Puthof) is a single-leg electron interferometer effect know as the Josephson effect; see R.P. Feynman,. The Feynman Lectures on Physics 1965) The Josephson effect is based on the fact that the current density J through a Josephson Junction (which consist of two superconductors separate by a thin insulator) is determined by the magnitude of the potential A and Φ, independent of whether E or B are present.

INFLUENCE OF A VECTOR POTENTIAL ON A HIV REPRODUCTION IN T-LYMPHOCYTES IN VITRO Pokidysheva L.N., Trukhan E.M., Titova I.V., Miller G.G.

- The examination of a field free vector potential (VP) influence on HIV reproduction in a T-lymphocytes in vitro is presented. Two variants of the tissue culture cells, infected by HIV were used: a human peripheral blood Tlymphocytes (PBL) and a human T-lymphoblastoid cell line MT4. The cultures were exposed to a VP during 0,5 and 1,0 hour before or after they were infected by 100 units per cell of a lymphotropic strain of HIV(R5/LAV-1).
- Some effect of a VP on the mentioned above biological systems was revealed. Some distinctions of cell proliferation index (PI) between the PBL and MT4 were found. Slight increase of PI in PBL may be conditioned by wide presentation of signal Toll-2 (IL-1) receptors on the cell surface, which induce the expression of early dividing genes, whereas they are very rare on the surface of MT4 cell line. However the viral pathogenicity was higher in aMT4 cell line. The phenomena required subsequent evaluation.
- Conference Yalta-Gourzuf , 6 June 2008.

## **Biochemical Memories Nutrition and diseases**

The EU recommendation of April 28th 2010 ( <u>http://www.vdanet.it/posta/28289191.pdf</u>) related to a joint programming initiative of research in the field of a healthy diet for a healthy life points out, among other things, that: "*if common lifestyle risk factors, among others diet-related ones, were eliminated, around 80% of cases of heart disease, strokes and type 2 diabetes, and 40% of cancers, could be avoided".* 

 The research on mechanisms responsible for food allergies and intolerances is still going on in this area and a seminar ( <u>http://www.qctint.com/pdf/scientificmaterials/ALLERGIE%20E%20INTOL</u> ) was held during the conference on "Nutrition: Quality and Life Choices" (<u>http://www.cera.unifi.it/CMpro-v-p-104.html</u>).

## Nutriceutical disorder by damage of Biochemical memories

- Recent developments in the nutriceutical field have found out new ways to correct some dangerous "deviations" of the human nutritional process. A series of repetitive biochemical memories seems to be implied: they play a role in leading Krebs cycles of fats and the urea. If only one of these memories loses its function, some damages may occur.
- Recent studies of computational biology are focusing their attention on the kind of biochemical memories and their role (memory "*switch*" in chemical reaction space by Naren Ramakrishnan and Upinder S. Bhalla ).

# The reactivation of biochemical memories is possible?

A new line of nutriceutical to high concentration and rich of bioinformations, seems to enhance the reactivation of these memories with the aim of correcting the anomalies affecting any of the homeostatic cycle.

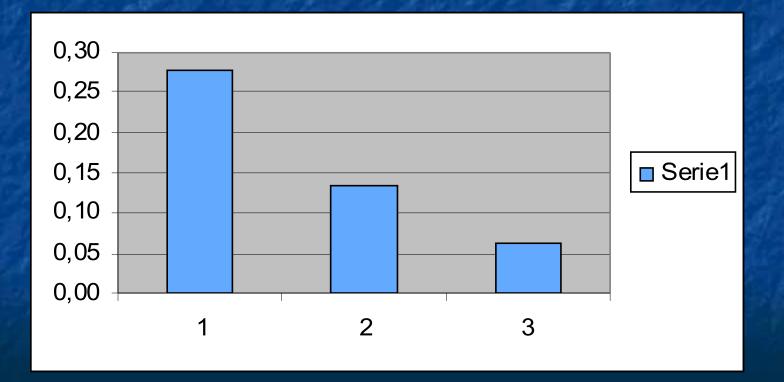
A study on ethyl alcohol metabolism (in its different and deviated Dionysian manifestations as pointed out by recent governmental reports http://www.vdanet.it/posta/nial1240.pdf ) shows that these dietary supplements have achieved encouraging results in leading effectively the enzymatic activities, as in the case of ethyl alcohol pushed towards the Krebs cycle and the aerobic metabolism.

## The case of Ethyl Alcol

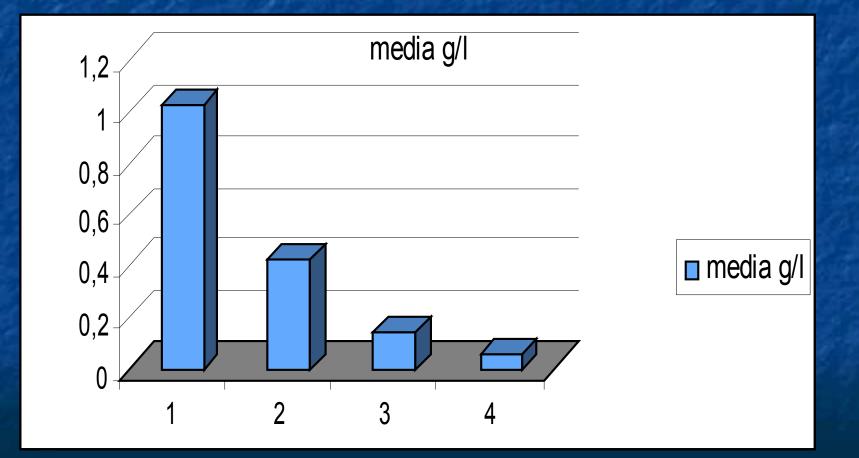
Interesting preliminary results have shown how some biodynamic supplements can reduce effectively the blood alcohol content and improve cenestesis – that is to say, the sensory perception of feeling well or bad – and your own performance status

# Average reduction of level of blood alcohol after taking Equi® in Vinitaly

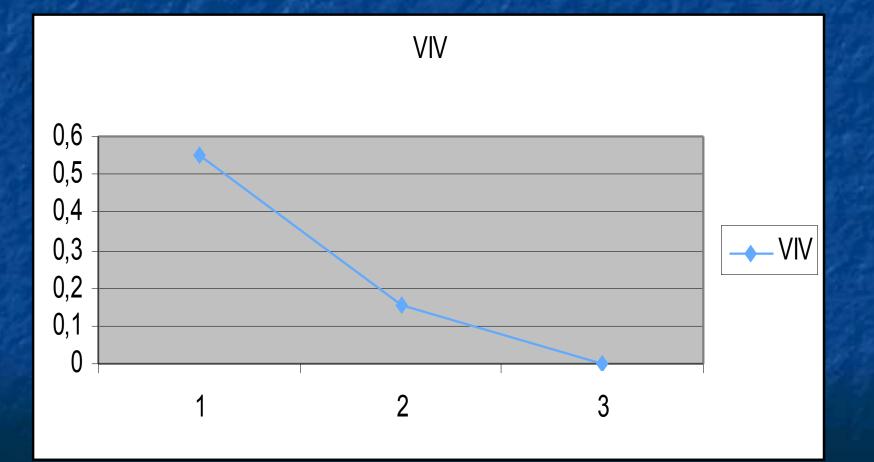
www.citosalus.it



## Average reduction after taking Equi® after dinner restaurant 10 s



# Personal case after 4 glasses of wine and 1 Equì



# Enzymatic reactivation in Alcohol metabolism

It has been specifically observed how the tested dietary supplement can help recover cenestesis and psychophysical efficiency, besides reducing the blood alcohol content (this effect was measured and proved through precision instruments). This important outcome has nothing to do with miracles. It is simply linked to the ability of the dietary supplement to activate alcohol dehydrogenase enzymes and aldehyde dehydrogenases which might convey easily the ethyl alcohol towards the aerobic metabolism with the production of ATP, water and carbon dioxide.

# How Biochemical Memory is registered and used ??

The mechanisms with which the ingredients of the dietary supplement would enable this enzymatic activation, need to be analyzed in a deeper way, but the reduction of the blood alcohol content and the recovery of the psycho-physical efficiency encourage to carry on the research both on the clinical and the cellular side (in cooperation with international research institutes) in order to verify these results in the academic and institutional fields as well.

# How biodynamics supplement seems to work

- Citozym it is an energetic substance (exergonic) containing a sort of information of the enzymes used for the catalytic conversion.
- The quality of the product it is determined to the timing of staying in contact with the enzyme, as from the number of the population of enzymes introduced into the biological reactor, different for each reactor, do so to obtain the correct memories and in fact to be recognized from the cell's enzyme at equal dynamism.

As we just specified the products (Citozym, Ergozym, Ergozym Plus, Dulcozym and Propulzym) are coming out from a coordinated activities of biochemical process from plant raw material odd mais, grown with **rigorously biological techniques**, getting out a series of vitamins, glucydes (carbohydrate), acetyl CoA, perfectly conjugated with the principles of human biochemistry.

## A new line of research

Further studies seems to be needed to analyze the enzymatic involvements in the food metabolism and the restorative power of this line of biodynamic supplements. This is because of the precautionary goals set out in the above mentioned EU recommendation on prevention through a healthy diet and may be the reactivation of the normal biochemical memories. This appears to be a new goal of prevention and a nutraceutical supplement in the treatment of many current diseases.

The follow clinical case and reports from the colleagues that use these biodynamic supplements suggests more research at many levels

### Holistic Approach to Epithelial Damage Varicose Ulcers (Ulcers Trofica)

with Citozym amuchina magnetic field

By dr Paolo Rossaro





Other experiences in nutraceutical integrative approach to rehabilitation and wellness with reactivation of Biochemical memories

http://www.citozeatec.net/index.php?option=com\_content&view=article&id=45&Itemid=57&lang=en

- Contrast side effect of drug (GDA Case)
- Immune response stimulation against virus bacteria, etc.
- Improvement of lipid metabolism
- Improvement of performance status in normal people and in sportsmen
- Improvement of enzymatic activity in some genetic disease as leucodistrofia, Duchenne, etc., with some clinical results observed

## The poetry of Life

- Profumi. Odori. Sparsi nell' aria salubri o velenosi..! Ci sono anche nel corpo? Certamente dentro di noi ci sono molte fabbriche di odori e profumi salubri o velenosi..ma anche piacevoli poi dannosi. Gli alimenti ne sono di fatto l' origine. Un buon bicchiere di vino ci dà qualche cosa di positivo così la buona tavola, ma il fegato non sempre lo gradisce. Il vecchio adagio che "tutto ciò che piace fa male" si applica in questi casi.
- Avendo sentito di una sperimentazione su un integratore (qualcuno mi ha detto biodinamico) che va contro il vecchio adagio, migliorando la carburazione metabolico-energetica. Ho deciso di provarlo. Ho sperimentato. Ne ho presi quattro cucchiaini da caffè diluiti in acqua al mattino a digiuno.
- In due giorni ho vissuto una nuova situazione.. Non ho più sentito la necessità di alcuni additivi alimentari di cui sentivo da molto tempo il bisogno. Mi sentivo normale. Mi svegliavo prima, riposato, pronto alla vita di ogni giorno! E quella pigrizia mattutina sparita.. E forse molo altro.. Certamente maggiore attenzione, maggiore normalità, nessun desiderio di eccesso in nulla.. Desiderio di adempiere agli impegni con regolarità..
- La stessa con cui insisto nei quattro cucchiaini da caffè di Citozym al mattino.
- Giovanni Degli Antoni
- http://www.citozeatec.net/index.php ?option=com\_content&view=article&id=45&Itemid=57&lang=en

## **Debite on Memories**

- >>> http://www.vimeo.com/10883097
  >>> Colloquium with Larissa Brizhik Institute of Theoretical Physics of Kiev
- >>> http://www.vimeo.com/10761564
   >> Colloquium with Vladimir Voeikov, Organic Chemistry at Lomonosov University of Moscow
- >>> www.colombre.it/montagnier >>> Colloquium with Luc Montagner
- >>> http://vimeo.com/11108801
   >>> Colloquium with Settimio Grimaldi CNR Rome Involves Francesco Bordino

## Thank you, lovable Crimea!!!