

Medical & Clinical Research

# Enzyme Therapy - A Revolution in Medicine?

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# A New Biodynamic Enzyme Therapy. First of all, without Enzymes There is no Life!

- When the term "enzymes" is used, the first thing that comes to mind is digestion. However, there are two types of enzymes: those for digestion, which break down carbohydrates, proteins and fats. These are not the focus here. It is about the intracellular enzymes in all cells of the body, which are more important.
- Digestive enzymes are not the therapy we are talking about here, but the enzymes that carry out all the biochemical processes inside the cells. They are highly molecular, highly qualified proteins.

# **Enzyme Deficiencies**

- Nowadays, almost everyone suffers from enzyme deficiencies and dysfunctions. This affects energy production in particular, resulting in tiredness up to exhaustion. A standard diagnosis is mitochondriopathy (=enzymopathy). This is where enzyme therapy comes in.
- All intracellular enzymes have a swarm consciousness that is in constant contact with epigenetics (the blueprint of genes).
- This enables DNA breaks in the cell nuclei, for example, to be recognized and repaired.

#### Concrete

- The Milan-based company <a href="www.citozeatecsrl.ch">www.citozeatecsrl.ch</a> has succeeded in producing enzyme products that are manufactured in the same way as in the cells themselves. They are all available as a syrup and can be administered orally and into all orifices of the body. There are no intolerances.
- This enzyme therapy is scientifically and biochemically based, yet it is not yet used by conventional medicine. In principle, it can be used to treat all diseases, either as an add-on or as the sole, and often most effective, treatment method. There are many scientific publications on its success.

#### Concrete 1

- The syrups taste moderately sweet and contain various sugars, but not in the usual form, but "phosphorylated", as it also takes place inside the cell in the citrate cycle ("Krebs cycle") and in the respiratory chain.
- This does not have a negative effect on blood sugar. There are 12 such remedies, which are used differently for each clinical picture in the form of a so-called "protocol". Common treatment goals such as prophylaxis, detoxification or weight loss can also be achieved.

# **Intestinal Cleansing**

- If oral intake is started, the intestines must first be cleansed and their environment improved. This effect of the enzymes leads to flatulence and diarrhea, which is unavoidable for some days.
- Once the bowel has been cleansed and rebuilt, bowel movements normalize. If diarrhea occurs again later, this indicates that the intestinal environment has deteriorated again.
- From there, the path of the enzymes continues: blood, intercellular space, intracellular space, cell nuclei.
- Incidentally, the enzymes are surprisingly inexpensive.

#### Concrete 2

- Since its regular use, we have experienced success even in difficult cases. In doing so, we incorporate the cell pathology of Prof. Rudolf Virchow, which was published as early as 1871: "If the cell is healthy, the person is healthy".
- This can significantly improve the body's self-healing powers and regulatory capacity. So far, positive results have been achieved in the treatment of many diseases, such as inflammations, autoimmune diseases, viral diseases and tumor diseases. There are instructions for more than 100 diseases: so-called "protocols".

#### Life

- In his book "Living Food", Ernst Guenter defines enzymes as special substances that contain the spark of life by controlling all biochemical processes of the organs in humans, animals and plants so precisely that they must be endowed with higher intelligence or a swarm consciousness.
- Although enzyme therapy is still rarely used today, it is nevertheless based on the classical medical principles of biochemistry.
- This is turned on its head here.

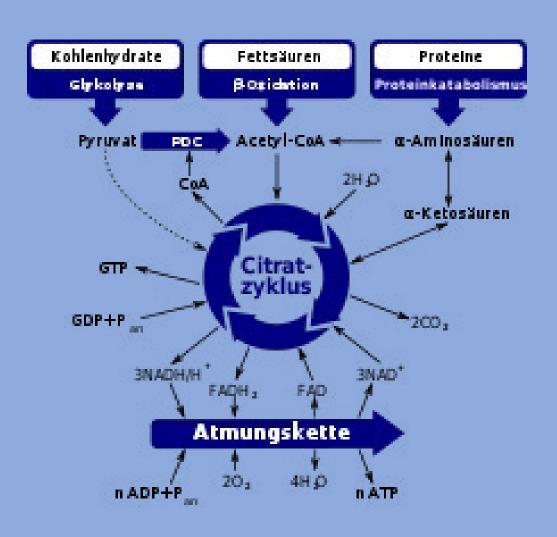
#### Prof. Otto Warburg

- The best-known German cancer researcher and Nobel Prize winner Prof. Dr. Otto Warburg wrote in the foreword to a book towards the end of his life in 1966:
- "Such endogenous causes of respiratory damage in the mitochondria can be of various kinds. For example, the blood flow velocity in a growing tissue may be chronically too low; or the hemoglobin content of the blood may be too low; or there may be a deficiency in the active groups of the respiratory enzymes. If the development of endogenous cancer is to be prevented in such cases, care must be taken to ensure that all normal, growing cells are always saturated with oxygen; and furthermore that all body cells are always saturated with the active groups of the respiratory enzymes.
- The active groups of these ferments/enzymes can now be produced industrially in any quantity. As components of the respiratory enzymes, they are completely non-toxic. They are not broken down in the stomach and intestines. They can therefore be given per os and then combine in the body, as their use as vitamins shows, with their specific ferment proteins, the so-called apoferments."

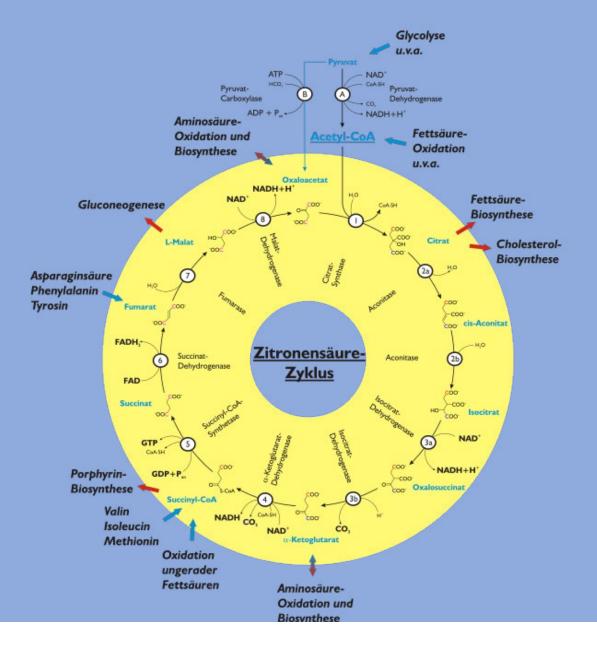
#### Nobel Prize in Medicine 2019

- The prize was awarded for deciphering the responsiveness of cells to different oxygen supplies.
- A specific protein called "NIF" plays the main role in this. It is a fragile protein that is broken down by the "proteasome". The proteasome consists of enzymes.
- If the oxygen content is normal/high, HIF is destroyed by the hydroxylases. If it is low, these enzymes are inactive.
- Although enzymes are responsible for all processes in this process, this is not mentioned. Enzymes are too self-evident.

# Citrate Cycle Simplified (Wikipedia)



#### Citrate Cycle in More Detail (Wikipedia)



# There are a number of substances that act as co-enzymes and are used therapeutically: NADH = coenzyme 1, Ubiquinol = Coenzyme Q10, Carnosine...

Substance name	Coenzyme name	Derivative of	Function type
Adenosine triphosphate (ATP)	-	-	supplies the activation energy by splitting off a <u>phosphate</u> , transfers phosphate to the substrate ( <i>phosphate donor</i> )
Adenosine diphosphate (ADP)	-	-	accepts phosphate from the substrate (phosphate acceptor)
Nicotinamide adenine dinucleotide (NAD)	Coenzyme I	-	NAD <sup>+</sup> : Electron and proton acceptor, oxidizing agent
			NADH: electron and proton donor, <u>reducing agent</u>
Nicotinamide adenine dinucleotide phosphate (NADP)	Coenzyme II	-	NADP <sup>+</sup> : Electron and proton acceptor, oxidizing agent
			NADPH: electron and proton donor, reducing agent
Flavin adenine dinucleotide (FAD)	-	Vitamin B <sub>2</sub>	FAD: electron and proton acceptor, oxidizing agent
			FADH <sub>2</sub> : Electron and proton donor, reducing agent
<u>Pyridoxal phosphate</u>	-	Vitamin B <sub>6</sub>	
<u>Tetrahydrofolic acid</u>	Coenzyme F	<u>Vitamin B</u> <sub>9</sub>	Methyl group donor
Cobalamins	Coenzyme B <sub>12</sub>	Vitamin B <sub>12</sub>	
<u>Ascorbic acid</u>	-	Vitamin C	Reducing agent
Coenzyme A	Coenzyme A	-	
<u>Ubiquinone-10</u>	Coenzyme Q <sub>10</sub>	-	
<u>α-Lipoic acid</u>	-	-	

# Coenzyme Therapies

- These substances have the disadvantage of only activating the cycle at one position (out of ten). The rest remain unchanged.
- This causes the gears of the overall cycle to stutter.
- It makes more sense to offer the cycle all its substrates. This allows it to independently increase its speed and produce more ATP.
- This causes cells with a lactate metabolism (cancer cells), for example, to reactivate the normal singlet oxygen metabolism.

# ENZYMATIC THERAPY WITH BIODYNAMIC PREPARATIONS

- Thanks to their ability to stimulate intracellular bioenergetic metabolic processes (citrate cycle, glycolysis, gluconeogenesis, urea cycle) which are essential for all other processes in the cell they are known as biodynamic. The so-called self-healing powers can only become active by means of enzymes.
- It should be noted that enzymatic complementary therapy does not use external enzymes, but normalizes internal enzymes. This is done using substrates that are perfectly recognizable by all specific enzymes, because they have been produced by biotechnologies with successive enzymatic transformations that faithfully reproduce the biological cycles of the cells.

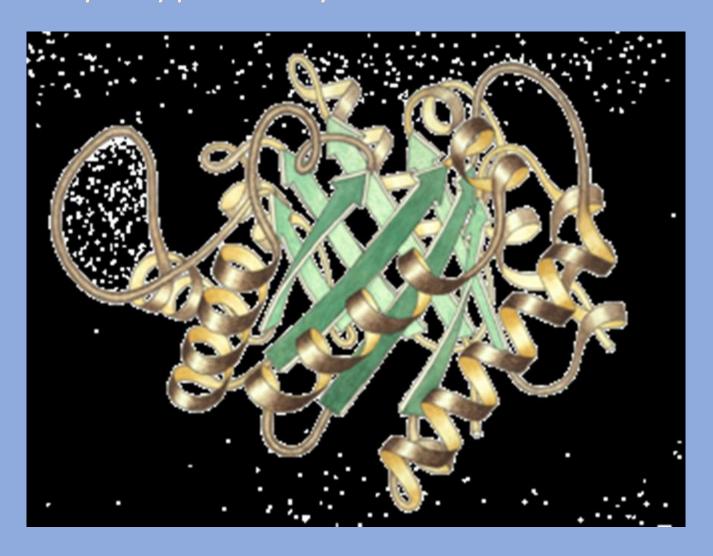
#### Manufacture

- The citrate cycle is reproduced on a large scale (each station: a 10,000 liter container). The starting substance is organic maltose.
- The enzymes produce large quantities of substrates at ideal temperatures. In the end, the enzymes are inactivated at 43 degrees. They are reactivated in the body at 37 degrees.
- The substrates remain and are also applied.
- As no external enzymes are administered, the products are not medicines/drugs, but micronutrients.

# THE WORLD OF ENZYMES IS THE WORLD OF THE CELL

- Wikipedia writes: "Enzymes play a central role in the metabolism of all living organisms. Almost every biochemical reaction is accomplished and controlled by enzymes. However, the importance of enzymes is not limited to metabolism; they are also important in the reception and transmission of stimuli. Receptors with an enzymatic function are often involved in signal transduction, i.e. the transmission of information within a cell. The activation and deactivation of the carriers of the information, i.e. the hormones, are carried out by enzymes."
- The next figure shows the complexity of the structure of the enzymes. They have a primary, secondary, tertiary and quaternary structure. <a href="https://de.wikipedia.org/wiki/Enzym">https://de.wikipedia.org/wiki/Enzym</a>

Ribbon model of the enzyme triosephosphate isomerase (TIM) of glycolysis, a stylized representation of the protein structure, obtained by crystal structure analysis. TIM is considered a catalytically perfect enzyme.



# Phosphorylation

- If one of these mechanisms tends to get out of balance, a domino effect of disastrous consequences arises, leading to the development of what we call "disease".
- An example: the substrate " $\beta$ -D-fructose-2,6-bisphosphate" is a potent activator of the enzyme phosphofructokinase-1. Fructose itself is not capable of this, only the bi-phosphorylated form, as present in the preparation called "Citozym".
- There is no disease that is not associated with a change in the enzymes.

#### A NEW PARADIGM IN MEDICAL STRATEGY

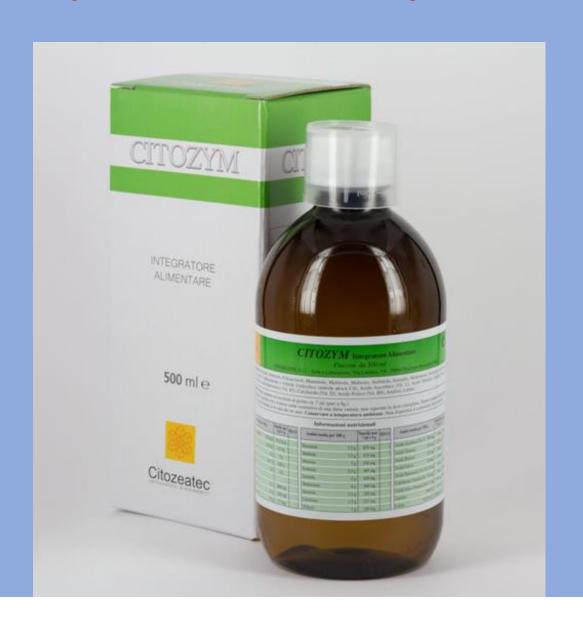
- There is one constant in the pathogenesis of many diseases: dysfunction or hypofunction of the mitochondria, the "energy centers" of the cell, where the electron transport chain and the citrate cycle enable the highest yield within ATP synthesis in the presence of oxygen.
- To date, this problem has mainly been associated with the generation of radical oxygen species (ROS), a phenomenon to which other factors such as regression to a primitive metabolism typical of prokaryotes (anaerobic lactic acid metabolism) are added, especially in cancer. Enzyme therapy also has a firm place here.

#### A typical protocol: Detox

#### ENZYMATIC DETOXIFICATION

- First 6 days
- - 10 ml Citozym in the morning before breakfast
- - 10 ml Ergozym with 2 ml Dulcozym in the morning with breakfast
- - 10 ml Citozym before dinner
- From the 7th to the 60th day
- - In the morning before breakfast, dissolve 20 ml of Citozym in a glass of water
- - 10 ml Ergozym with 2 ml Dulcozym in the morning with breakfast
- - 1 stick of probiotic P-450 at 11.00 a.m.
- - 25 ml Citozym with 1 stick of Propulzym dissolved in a glass of water before dinner

# The Basic Preparation: Citozym



### Description from the Developer, 1

- Citozym (500 ml) detoxifies, ensures the correct rotation of the chain of nutrients and amino acids, encodes proteins for the folding of immunoglobulins and mediates the processes of cell-cell recognition.
- Thanks to its memory, Citozym also provides a biochemical heritage required for the proteins to control non-removed adhesion proteins due to defects in the e-amino group of lysine residues that are unable to react with the ubiquitous proteins.
- Citozym was adapted through the sequence of enzymes similar to those found in the metabolic cycles of natural cells (eukaryotes). In the catalytic case, the enzymes donated to Citozym and all Citozeatec products donate the biological information of proteins called enzymes. Citozym is therefore an energetic substance (exoergonic) endowed with cascade information of the enzymes used in catalytic transformations.

### Description from the Developer, 2

- A simple confirmation that Citozym and all products of its species are rich in the specific memory of the cells is obtained by spreading it on the hands; with great surprise it turns out that the blood circulation (proteins, lymph, blood, etc.) increases.
- This enables Citozym to immediately collide with circulating toxins, opsonize foreign bodies including antigens and transport them to the elimination sites.
- The special properties of Citozym are also the stimulation of the immune defense, activation of the excretory pathways of the lysosomes, Golgi apparatus, peroxisomes, macrophages etc. by the enzymes.
- For this reason, ingestion of the product may cause an increase in meteorism due to the conversion of toxins into gas (CO<sup>2</sup>) and water (H<sup>2</sup>O). Thus, diarrhea can be observed (without causing tissue dehydration), which disappears after a few days as the amount of toxins in the intestine decreases.

#### **Studies**

- University studies on the effect of enzyme therapy have been carried out repeatedly in Italy. All with positive results.
- Recently at the Tor Vegata University in Rome: 60 patients with large cell lung cancer. 30 were treated "normally" with chemotherapy (group A), 30 with low-dose chemotherapy plus enzyme therapy (B).
- After 8 months, all patients in group A had died, while no patients in group B had died.
- Amino Acids. 2020 Mar;52(3):445-451. doi: 10.1007/s00726-020-02822-7

# Animal study in rats with implanted liver cancer (University of Rome)

#### • Summary:

- "The results demonstrate the antioxidant effect of Citozym, as evidenced by a drastic reduction in experimental metastases induced by the classical model of experimental oncology.
- All this makes the future expansion of our project possible, which is applicable to perfusion organs of human origin affected by neoplasia.
- The purpose of such research is to emphasize that Citozym can be used as an adjuvant in cancer therapy to drastically reduce the amount of drugs used for chemotherapy."

# Effects: Through Permanent C ommunication of the Enzymes with Epigenetics

Severed fingers can grow back, with all their components.

• Diabetic gangrenous toes have normalized, even in a 104year-old woman.

• Genetic diseases (e.g. Stargardt's disease) can be cured.

# Walter Haege Wrote

- Enzymes are the "spark of life" because they are involved in all biochemical processes in the organism.
- They make metabolism possible in the first place.
- Enzyme research and application is a revolution in medicine.

#### **Thesis**

- The future of therapy will no longer be determined by exogenous substances that do not involve or block the body's self-healing powers (as in pharmacology), but by the body's own disciplines of biophysics and biochemistry.
- Biophysics: Application of informational waves, rays, fields and frequency patterns that go into resonance and activate the body.
- Biochemistry: Application of body-identical intracellular enzymes.

# Thank you