



# Detoxification of the Body



by

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### **Legal information:**

Please pay attention that all information in this brochure is empirical medical data and may possibly disagree with conventional medicine.

For a basic check (preventive health care), 7 – 10 applications are recommended per patient, the interval between applications should be about a week. Subsequently, one application per month should suffice. For individual therapy, the number of applications and the interval between may vary.

The writer of these articles assumes no liability for the information provided in this brochure. It lies within the responsibility of the reader to examine all information and recommendations given.

The contents of these pages are no propositions for cure. For diagnosis and therapy of diseases as well as other physical disorders, treatment by doctors, alternative practitioners or therapists is required. Data on these sides is strictly informative, it must not be used as a substitute for medical treatment. The risk of wrong diagnoses or treatment can only be reduced through the inclusion of doctors or therapists, respectively.

# 1. BODY - DETOXIFICATION - THEORY

## 1.1 What is important for the basis of health?

A system of basic regulation – our extra-cellular matrix (the entire connective tissue) – traverses the entire organism. It builds a transit route between vessels and cells, by which all body cells can be nourished, which then can dispose of their metabolites.

Hence, the matrix is a vital molecular sieve and is of utmost importance to the ability of regulation of the body.

Required for the ability of regulating the body are a good microcirculation (blood flow), a normal electrochemical membrane potential of the cell and a pure extra-cellular fluid. In order to maintain this ability, it is necessary to cleanse and de-acidify the matrix from time to time.

Precisely this is the strength of the electrolytic foot bath, for it cleanses and de-acidifies primarily the matrix and maintains the membrane potential of the cell. These detoxification baths, therefore, are enormously significant to stay healthy.



## **1.2 Detoxifying through electrolytic foot bath**

The electrolytic foot bath allows an efficient detoxification through the skin. Within the water of the foot bath, a flow of electrons is created. This generates a bio-energetic field which is in syntony with the body fluids – i.e. a gentle bio-energetic resonance floats through the body by which the Chi – the energy flow in the meridian system – is brought into motion. Thereby, the meridian system of the body is harmonised. This stimulation of bio-energy has an effect on the microcirculation of the body, the blood flow is improved. This is an important condition for health.

By freeing the body of all the toxic pollution and stabilising the membrane potential of the cell, the cellular metabolism – i.e. the absorption of oxygen and nutrients into the cell and the excretion of toxic metabolites – can again function optimally.

This way of detoxification is convenient and stress-free for the organism, all parts of the body are detoxified.

### 1.3 Effects of detoxification

Detoxification leads to a general improvement of health and physical well-being. Discomfort in organs, joints and other body parts vanishes, flexibility increases, pain is reduced or disappears completely, blood pressure and cholesterol level are regulated. This allows a radiant appearance of the skin and more relaxed general impression.



**BEFORE**



**AFTER 30 MINUTES**

## 2. FIELDS OF APPLICATION

### 2.1 The foot bath is used supportively for ...

- effects of metabolic diseases such as gout, rheumatism, etc.
- chronic fatigue, burn-out syndrome
- vegetative disorders
- pain therapy, e.g. with headache and migraine
- heavy metal burden
- liver and kidney diseases
- dysmenorrhoea (period pain)
- therapy blockades
- allergies like asthma, hay fever, etc.
- diseases by which drains are necessary



## 3. THEORY OF THE OPERATING PRINCIPLE

### 3.1 Introduction

Everything is vibration, everything vibrates in its own rhythm.

If this state is reached in the macrocosmic as well as the microcosmic sphere, complete harmony and order prevails. Our organism has found its balance.

Biological systems can only exist if the controlling and information flow of cellular processes function in harmonious vibration. This only works when the extra-cellular matrix (our connective tissue) is clean. The medium for the transmission of information is, in this case, the water.

Disturbances in the natural frequencies of any matter, whether coarse or fine material, create dissonance. In relation to the human organism, the loss of rhythmic order through de-compensated controlling mechanisms leads to chronic symptoms.

Therefore, it is important for recovery to regenerate the vegetative rhythm in order to activate the rhythmic processes produced naturally in the body.

Curing is always connected to restoring order.

Probably the most important system of regulation at all is the extra-cellular matrix, the connective tissue. Consisting of solid components and fluids, it builds a functional unit together with the vegetative neural endings, the capillaries of the blood circulation and the lymph vessels. Nowadays, this is regarded as an independent organ system.

The matrix goes through the entire organism and it is the only connecting link between organ cells and blood circulation, nerves and lymphatic system, playing a central role. Consequently, the healing process is dependent on the condition of the matrix.

In an acidotic state, the fluids of the matrix assume a gel-like state, which entails congestions in the supplying and disposing paths. This weakens the blood flow and causes a lack of oxygen which again results in further acidosis of the tissue.

Using the electrolytic foot bath helps the body to achieve an energy balance by cleansing the matrix, and thereby restoring a natural and good condition of health. Already, sensitivity disorders which have a negative effect on human performance, including unspecific symptoms like fatigue, headaches, morning stiffness and muscle tenseness, etc., indicate disturbances in the matrix.





### 3.4 Elektrolysis

The device consists of a foot bath and an innovative electrode system (anode and cathode). Within this system, a continuous current flow is created between the core and a surrounding spiral in an electrolytic medium. Electrolysis occurs at the poles within an ionic solution of salt and water. The electrolytic reaction can be witnessed by small bubbles ascending along the electrode.



*Fig.1:  
electrode during  
resting state*



*Fig.2:  
electrode during  
electrolytic reaction*

The basic principle is very simple. The term "electrolysis" means "dissolution" or "destruction" (lysis) by electricity, especially by galvanic or direct current flow. This process is also often applied in industry.

Electrolysis is the breaking of chemical bonds under the influence of electric current. A transformation from electric energy into chemical energy occurs.

Electrolysis of water consists of two reactions which take place at the different electrodes (anode and cathode).

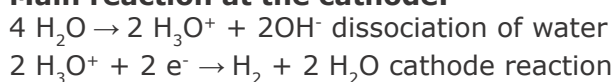


Fig.: process during electrolysis

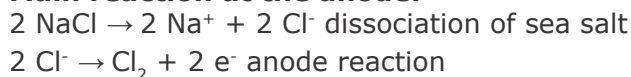
Both poles (on the electrode) dip into water. By adding a little bit of sea salt, the conductivity is improved. The positively-charged ions (cat-ions) move in the electric field towards the cathode (negatively charged), where they absorb electrons.

The negatively-charged ions (anions) move towards the anode, where they release electrons.

**Main reaction at the cathode:**



**Main reaction at the anode:**



Application usually works through the feet, which are ankle-deep in water. The sole of a foot has about 2000 pores which can absorb the ions. By this, the natural balance between positive and negative ions in the body can be restored.

The water of the foot bath is separated from our body fluids only by a thin membrane, namely our skin. This makes the ions of our body start moving.

### 3.3 The pH-factor

It has been determined that most of our water supplies are acid. If more hydrogen ions are in the water than hydroxyl-ions, the water is referred to as acid. This means positive ions dominate. If there are more negative ions, the water is basic.

The pH factor of human blood should be between 7.3 and 7.45. Within this area, the inner environment of the body is balanced.

The acid-base-balance of the human body is very important. Even small deviations, especially towards acidosis, can have negative effects on the biochemical metabolism. The metabolism is primarily managed by enzymes, which only function at their best at a particular pH level.

A basic need is to counterbalance positive and negative ions, whereby the acid-base-balance can be restored.



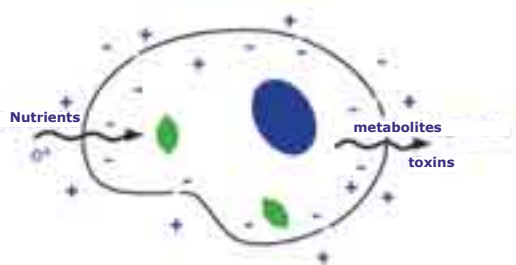
### 3.4 Ion flow

Our body is of electromagnetic nature. All living organisms are controlled and regulated by tiny electromagnetic impulses.

Even very little deviations from the electromagnetic field of a cell can result in the development of diseases.

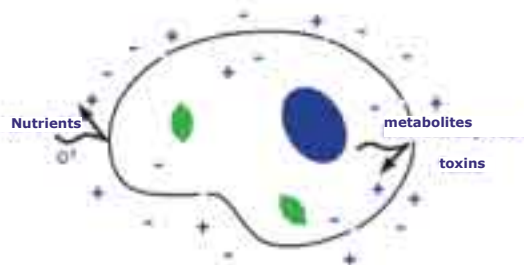
A healthy cell has a trans-membrane potential of 70 – 90 mV. With an injured or stressed cell, the membrane potential slumps, consequently, the cell cannot take in oxygen and nutrient any more, or can do so only limitedly.

**70 - 90 mV healthy cell**



*Fig.1:  
well-balanced membrane potential*

**20 mV diseased cell**



*Fig.2:  
unbalanced membrane potential, reduces the  
absorption of oxygen and nutrients*

The electrolytic foot bath creates an ion flow in the body which increases the processes of diffusion and osmosis and, thus, gently stimulates all body cells. This gives the cells the opportunity to restore their membrane potential enables them to take in nutrients as well as dispose of pent up toxins.

By restoring and harmonising the energy balance, the self-healing powers of the body are activated and therapy blockades relieved.

### **3.5 Blood circulation**

The microcirculation (capillary blood flow) is an important supplier of fluids for the body. For exchanging substances between blood and tissue, the oxygen and nutrient supply of all cells has to be guaranteed and metabolic waste has to be eliminated.

If the microcirculation is good, the body is healthy.

Disorders of the microcirculation develop through acidosis of the tissue.

Electrolytic foot baths help to regulate the acid-base-balance and cleanse our matrix and thereby improve our microcirculation.

Detoxification by means of the electrolytic foot bath helps the body dissolve blockages of our energy field.

By ionising the salt water, the natural balance is restored and ideal conditions for curing patients are established. The cleansing of the matrix ensures “inner hygiene”, the electromagnetism within the complex systems of the body sustains life, creates an ion exchange and improves bio-electricity.

## 4. THEORY OF “IONIC EFFECT”

### 4.1 “Ionic detoxification”

The concept of “ionic detoxification” of the electrolytic foot bath imitates the molecule exchange through the cell membrane in the body of the patient. As a result, the electrolytic foot bath functions as an external source. The balanced chemical conditions help the body to detoxify the cells and restore its balance.

In order to restore the balance of the body cells, it is necessary that the equilibrated chemicals of the foot bath can penetrate the body.

#### How is this achieved?

Under normal circumstances, every cell in the human body is electrically charged. This electric charge allows the transportation of chemical substances into and out of a cell.

The water and salt of the foot bath are stripped into their molecular components by applying electric current. Water, for example, disintegrates into hydrogen ions and hydroxyl-ions. This separation of molecules is made possible by the attraction of cathode and anode within the electrode. Hence, these small electrically charged particles have access to the body by being absorbed through the skin.

Similarly can these small electrically charged particles penetrate the cell membranes, whereby they are bound to be taken into the circulation and, hence, be absorbed by the entire body.

The electrically charged ions of the foot bath are also absorbed and are distributed among the body in a similar way.

Since these small electrically charged particles are part of every healthy cell, they are absorbed and released by the body cells of different body parts, depending on what is needed in order to restore the balance of the organism.

Has homeostasis been restored, a basis for the cell has been created to again achieve its normal function, e.g.:

- the absorption of nutrients and essential substances
- the detoxification of unwanted toxins
- the disposal of waste or unwanted by-products

What happens to these unwanted substances, unnecessary ions and waste products?

Usually they are disposed of in a physiological way:

- through the kidneys (via urine)
- through the liver and the gastro-intestinal tract (gall and excrements)
- through the pores of the skin in the form of sweat or other forms of secretion

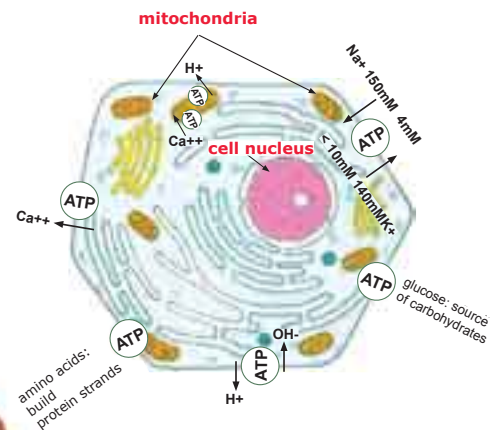
In order to be able to dispose of the loosened substances more easily, it is recommended to drink sufficiently during and after the application, most suitable is good-quality spring water.

## 4.2 Schematic representation

- $H^+$  hydrogen ion
- $Ca^{++}$  calcium ion
- $OH^-$  hydroxyl ion
- $K^+$  potassium ion
- $Na^+$  sodium ion
- $Cl^-$  chlorine ion
- ATP adenosine triphosphat



### Biochemical metabolism



The electrochemical charge creates a resting membrane potential of 70 – 90 mV, whereby the charge is positive on the exterior and negative in the interior. This suffices to guarantee a passive diffusion and the transportation of vital elements into and out of the cell.

Even small deviations of the biochemical gradient, caused by stress, one-sided diets or bad digestion, need to be corrected in order to relieve the body of unnecessary ions and restore the balance.

### Absorption into the cell and circulation within the body

The absorbing capacity of a cell depends on a normal resting membrane potential.

Thus, the cellular transportation system is sustained by the penetrability of the cell membrane.

Hence, a lot of substances can be absorbed through the skin and, within seconds, taken into the blood circulation to be distributed among the body.

### Conductivity of the nerves

This is based on the fluctuating penetrability of the cell membrane for sodium and chlorine ions.

The resulting intra- and extra-cellular changes of ion concentration cause a wave of electric impulses.

This process needs energy, which is supplied by ATP.

### Muscular contraction

It is dependent on the depolarisation and repolarisation of muscle fibres.

By cellular exchange of potassium and sodium ions and also by releasing calcium ions, muscle are able to relax.

This process also needs energy in form of ATP.

