



# **Deacidification - a Basic Therapy**

**Acids and Bases require Equilibrium in the Organism**

**by Dr. med. Michael Worlitschek**



As trees can draw their strength from their root system, so also does the human being depend on his nourishing „root-system“ - namely, the intestinal system. When this root system is disturbed, basic functions of life can no longer be maintained, or they are persistently irritated. The acid-base management also pertains to this and it must be kept in equilibrium within the body.

Statistically seen, the human being of today reaches increasingly a higher life expectancy. This rise in aging is paid for by an increase in heart and circulatory diseases, diseases of the spine and limbs, decreased defensive capacity, increase in cancerous diseases, fungal diseases, and many more.

From a biological perspective, these are acid-diseases, or the hyperacidity is significantly involved in the development of the disease. Acids that are a waste product of the metabolic processes – unless properly eliminated - get deposited in the connective tissue and in organs, and they can lead to appearances of decomposition and overstrain.

Also the preparation for allergic diseases can be explained by them. The acidic waste products deposit themselves in the connective tissue of the skin and, together with an external irritation, there can develop, for instance, the disease profile of an urticaria.

In living organisms, energy is won through the burning of carbohydrates. In this way, energy becomes released in small sequences and the cell draws from it

for its diverse metabolic performances. In this burning process, there develops a substance that can become dangerous for the cell, if it gets too much increased: carbonic acid. Through it, the interior cell becomes „acidic“.

The metabolic processes depend on a maximally balanced pH-value within the cellular space, which may fluctuate only minimally between pH 7.34 and 7.40. If it wavers to higher or lower, certain enzymatic reactions fail to occur, which regulate the cellular metabolism. The action of these enzymes depends on very precise acid degrees that are optimal for them. If they deviate far to the acid side from their optimum, the metabolism stops. That means the poisoning of the cell, and its death. Therefore, acid represents cell poison in general.

This danger gets removed through a series of balancing mechanisms, for instance, the breath. With every breath we take in oxygen and, simultaneously, release carbonic acid. For this reason, the simplest form of maintaining healthfulness is natural, good breathing!

However, interior to this, important regulatory mechanisms come into play at the place of the carbonic acid development. Right within the cell, mineral substance, especially potassium and sodium, neutralize the newly developed acids into a harmless salt, which subsequently gets eliminated via the circulation and the kidneys. The mineral substances used up in this must be replaced, otherwise the detoxification stops.

Our most important problem consists in the constant development of acids, on the one hand, and the consumption of mineral substances that represent the bases, on the other hand. In most people, the acid-base relationship lies nearly constantly in the acidic area.

Hyperacidity is the beginning of many diseases! Disease is an expression of an extremely stressed acid-base management and the simultaneous effort, to balance the deficit in bases. Fundamentally, all regulatory mechanisms serve the purpose of balancing the developed acids without damage for the cell.

Only when all possibilities have been exhausted, the body breaks down entirely with an incurable, chronic disease. Contrastingly, acute illnesses are the attempt of the body to mobilize reserves; they are a call for reconsideration and to point out a threatening break-down early.

### **The significance of the connective tissue**

In the connective tissue, the body finds an opportunity for depositing acids. All cells and organs are surrounded by connective tissue that can catch and deposit acids released from the cells. Such depositing is an important relief measure for the kidneys.

After physical work or a meal, there occur such amounts of acid that the kidneys are incapable of immediately eliminating the salts which have developed during the neutralization; they work too slowly. During the nightly rest, the kidneys



can manage to eliminate the deposited acids. For this reason, the most acidic urine normally occurs in the morning.

The degree of acid accumulations in the connective tissue can be determined very easily. The originally smooth and soft condition of the subcutaneous cell tissue becomes firm, hard, and it responds to pressure with pain. The skin becomes jelly-like and undergoes changes (cellulitis).

According to Kern, the worst catastrophes due to acidity are the cardiac infarction, and stroke. Hyperacidification is an essential cofactor for neuroses and gangrene of the lower extremities, which usually force a leg amputation. Fortunately, during one's youthfulness, the deacidification capacities of the metabolism are still functioning well and the biological strength of resistance to acidic damages is still good, so that disturbances are not noticed. With age, both the measure of acid in the tissue and organs and also the susceptibility to acid damages increase.

The acid-base management, like a strict bookkeeper, regulates one's breathing, circulation, digestion, elimination, hormonal production, defense, immunity, and much more. In anesthesia and emergency medicine, the measuring of the acid-base value is standard procedure. In this, the content of oxygen and carbonic acid of the blood are established along with the pH, and the basal deficiency gets calculated. However, no measurement of the buffer capacities is undertaken.

Joergensen has developed a measuring method for acid compounds in the blood, and Sander has developed a titration method for the urine.

### **The significance of one's nutrition**

My blood examinations according to Joergensen's method have shown that a nutrition which is oriented too strongly along „modern“ regimens can, for the majority of cases, lead to strong hyperacidification. This is particularly the case, when only the theoretical nutritional values of foods are being considered and not the capacity for digestion; this leads to a chronic intestinal fermentation process and, thereby, to hyperacidity.

A weakening of the digestive capacity can be explained through the cardinal errors in nutrition (according to F.X. Mayr): One eats too fast, too much, too often, too heavily, and too late!

One important physiologic factor is that the border cells of the stomach not only form hydrochloric acid, which is decisively important for the digestion in the stomach, but simultaneously sodium bicarbonate. It gets immediately conducted to those organs that favor bases: the salivary gland, liver, gallbladder, pancreas and intestinal glands, by flooding them. The symptomatic acid stomach is usually a call from the body to supply bases.

Foods that are rich in protein contain sulfur and usually also phosphorus. After the digestion of proteins, these elements remain over in the form of sulphuric acid and

phosphoric acid, and they have to be neutralized by calcium, sodium and potassium before the kidneys can eliminate them. Foods rich in protein are counted among the acid-forming foods, because they withdraw basic elements from the body. It is not well known that most grains contain sulphur and phosphorus, that is, they are also acid-forming in their baked form. However, in fruits and vegetables, the organic acids contain many elements such as potassium, sodium, calcium, and magnesium. These organic acids (such as in lemon juice) get to be carbon dioxide (carbonic acid) and water through their burning in the body, whereby the basic elements remain over. An important pointer: Organic acids should always be taken in sufficiently diluted, because it has been observed that the human body cannot always stand up well under the concentrated attack even of these „well-meaning“ acids.

In the common kitchen, meat dishes are often served. That cannot be protested, apart from the high consumption of proteins, if the meat is served with sufficient amounts of salads, vegetables, and especially potatoes. Potatoes, especially those with their skin on, have a high base value. Thereby, the meal has both acid and base forming elements and remains within the acid-base equilibrium.

But also in a full-value-nutrition, a balance must be created between grains, fresh salads and mildly prepared vegetables of organic (biological) synthesis. Otherwise, even by a false full-value nutrition, an excess of acids will develop.



### Therapy for hyperacidity

Extra amounts of minerals and trace elements are required for athletic training, hard physical work, during growth, after a serious illness and when under stress. Also sensitivity to the weather has its cause in hyperacidity, or deficiency in bases. Migraine conditions can be cured to a high percentage through patience and a deacidification therapy.

A considerably raised need for bases also exists during pregnancy. Complaints and weaknesses during that time are also hyperacidification symptoms, from a holistic perspective. A timely and sufficient provision with minerals can help avoid the very inconvenient and unpleasant pregnancy sickness and also acid stomach.

Today's human beings become acid-stressed from childhood on (sweets, fast foods), so that in every therapy as much balancing as possible must be applied. Therefore, it is urgent to give bases in good time.

Prof. Mehnert, a well-known diabetes researcher, recommends a hyperbasal nutrition for the diabetic, because that allows for a better metabolism for insulin. Before the era of insulin, diabetic patients were given 30 gram sodium bicarbonate daily. Sander recommends the following basal powder:

*Rp. Sodium phos.*

*Potassium bicarb. aa 10.0*

*Calcium carb. 100.0*

*Sodium bicarb. ad 200.0.*

This basal powder by Sander is an ideal mixture of the most important

minerals and sodium bicarbonate to take in after meals, 1-2 x daily, 1 tsp. each, in water.

Besides, there are ready-made preparations that have proven themselves in my practice: Acidovert tablets, ALKALAN-powder, Basica powder, Basofer Drg., Bullrichsalz-tablets and powder, Kaiser Sodium-Hydrogen-Carbonate tablets and powder, Neukoenigsfoerder Mineral tablets, Deacidifications Salt of Dr. Bösser, Metabolic Dragees of the Fa. Molitor.

An external therapy is possible through basal baths by adding sodium bicarbonate (Kaiser Natron, Bullrichsalt). The very good healing effects in rheumatic diseases due to thermal waters containing sodium-hydrogen-carbonate are explainable by the deacidification via the skin.

Everyone for himself can gain an overview on the personal situation. One measures the pH-value of the morning urine with a pH-measuring strip, and additionally several values distributed through the day. The morning urine will be between 5 and 6, and during the day the value should also reach 7. During long-term treatments, the morning urine pH-value should be at 7.5, which corresponds to the balanced value of the blood, and it shows that the kidneys neither need to eliminate an excess of acids or bases. The kidney has a maximal capacity for elimination at a pH of 5.4. The kidney function can be irritated through often unknown pre-disease conditions. This can be avoided by giving bases in the

evening. With the deacidification therapy, the energy level rises and other therapies become more effective. (*First published in Volkshelkunde“ 11/93).*

### Acids (-) and Bases (+) Among Food

#### Vegetables:

Brussels Sprouts	- 9.9
Artichokes	- 4.3
Peas, ripe	- 3.4
Savoy cabbage, white	- 0.6
Green cabbage in March	+ 0.2
Green cabbage in Dec.	+ 4.0
Red cabbage	+ 6.3
Rhubarb (stalks only)	+ 6.3
Leeks (bulbs)	+ 7.2
Watercress	+ 7.7
Chives	+ 8.3
French cut beans	+ 11.2
Sorrel	+ 11.5
Asparagus	+ 1.1
Onion	+ 3.0
Cauliflower	+ 3.1
Savoy cabbage, green	+ 4.5
Lamb's lettuce	+ 4.8
Peas, fresh	+ 5.1
Spinach, end March	+ 13.1
Celery	+ 13.3
Tomato	+ 13.6
Cabbage lettuce, fresh	+ 14.1
Endive, fresh	+ 14.5
Dandelion	+ 22.7
Cucumber, fresh	+ 31.5

#### Potatoes, Root Vegetables:

Comfrey	+ 1.5
Radish, white, in spring	+ 3.1
Rutabaga	+ 3.1
Potato (mag. bon.)	+ 4.7
Potato (blue blossomed)	+ 8.1



Kohlrabi	+ 5.1
Horse-radish	+ 6.8
Carrot	+ 9.5
Red beet, fresh	+ 11.3
Radish, black, in summer	+ 39.4

#### Other Protein Carriers:

Pork	- 38.0
Veal	- 35.0
Beef	- 34.5
Ocean fish	- 20.0
Fresh water fish	- 11.8
Turkey-hen	- 10.5
Yellow boletus	+ 4.0
Chanterelle	+ 4.5

Chicken-eggs have different values, according to feed, between - 18.0 to 22.0. (Average 20.0)

#### Fruits:

Apple, ripe	+ 4.1
Currents, red	+ 2.4
Currents, black	+ 6.1
Strawberries	+ 3.1
Pears	+ 3.2
Cherries, sour	+ 3.5
Cherries, sweet	+ 4.4
Pineapple	+ 4.6
Dates	+ 4.7
Banana, unripe	+ 4.8
Yellow plums	+ 4.9
Italian plums	+ 4.9
Raspberries	+ 5.1
Blueberries	+ 5.3
Plums, sweet	+ 5.8
Pears	+ 6.4
Apricots	+ 6.6
Cranberries	+ 7.0
Blackberries	+ 7.2
Grapes, ripe	+ 7.6
Gooseberries, ripe	+ 7.7
Current (Korinthe)	+ 8.2

Orange	+ 9.2
Lemon	+ 9.9
Banana, ripe	+ 10.1
Mandarine	+ 11.5
Raisins	+ 15.1
Hips	+ 15.5
Figs, dried	+ 27.5

Canned fruits (also home-preserved) show strong minus values nutritionally. Fruit in coolers gets damaged in value through the shock of coldness, but maintains most of the other values

#### Milk and Milk Products:

Hard cheese	- 18.1
Quark	- 17.3
Cream	- 3.9
H-Milk	- 1.0
Buttermilk	+ 1.3
Goat milk	+ 2.4
Whey	+ 2.6
Sheep-milk	+ 3.2
Cow milk (certified)	+ 4.5

#### Fats:

Margarine	- 7.5
Butter	- 3.9

Various table-oils are very different in their values. Refined oils lie higher in the minus area than first-pressed oils.

#### Flour, Pasta, Seed Fruits:

Rice, polished	- 39.1
Rye flour, super-fine	- 16.4
Barley	- 13.7
Rice, natural	- 12.5
Farina (wheat)	- 10.1
Oats	- 9.2
Noodles, white	- 5.9
Green rye, Farina	- 4.6
Rice starch	- 4.6
Buckwheat groats	- 3.7
Wheat flour, very fine	- 2.6

Noodles, whole wheat	- 2.0
Noodles, soy flour	- 0.2
Potato starch	+ 2.0
Lentils	+ 6.0
White beans	+ 12.1
Soy, granulated	+ 12.8
Soy, nuts	+ 26.5
Soy, pure lecithin	+ 38.0

In soy-products, there are great differences in quality, depending on the way of production and land of origin

#### Bread, Biscuits:

Black bread (gray bread)	- 17.0
White bread	- 10.0
Army bread	- 7.3
Biscuit, white	- 6.5
Whole-meal bread	- 6.1
Whole-grain bread	- 4.5
Knaeckebrot (Sweden)	- 3.7
Zwieback (whole wheat)	- 2.2
Whole wheat Knaecke (Sweden)	- 0.5

#### Nuts:

Peanuts	- 12.7
Brazil-nuts	- 8.8
Walnuts	- 8.0
Almonds, sweet	- 0.6
Filberts	- 0.2

#### Other Acid-Formers:

All types of alcohol, with e.g., hard liquor lying higher in minus than wine and beer. Black coffee, black tea, marmalade, chocolate products.

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