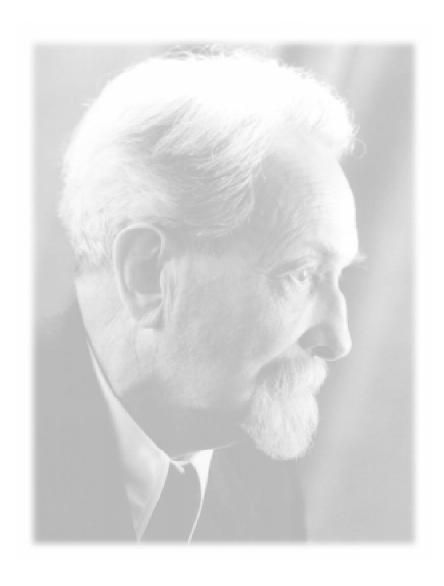
Understanding Pleomorphism and Isopathic/Homeopathy

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PROF. DR. GÜNTHER ENDERLEIN 1872 - 1968



WHO WAS GÜNTHER ENDERLEIN?

Günther Enderlein (1872–1968) of Germany was and is *the* researcher who will forever be inseparable from Pleomorphism and Isopathic/Homeopathy. Enderlein built on the research of Antoine Béchamp and proved that blood is not sterile, and that a microorganism can appear in various developmental stages and in diverse forms, without the loss of its specific characteristics. Through intensive research, Enderlein came to the conclusion that the monomorphistic perspective of disease conditions favored by Pasteur and others could no longer be maintained and that a pleomorphic perspective more accurately reflected the disease process. Enderlein devoted his whole life and all of his scientific work to proving this thesis and to developing the isopathic/homeopathic medicine that rose from it.

WHAT IS PLEOMORPHISM?

Pleomorphism rests on the idea that every warm-blooded organism houses a primal plant germ, which can change in form through environmental influences. Allopathic medicine rests on monomorphism which assigns only a single form and function to microorganisms and does not recognize cyclic developmental changes. Thus pleomorphists believe in the fundamental mutability of form in microorganisms and that microorganisms can abruptly change from an avirulent benign form into a potentially virulent, i.e. pathogenic, form.

WHAT IS ISOPATHIC/HOMEOPATHY?

Enderlein discovered in 1916 that primitive microorganic forms prepared in a remedy, when combined with change in the biological terrain of the body, can cause the virulent forms to return to their original avirulent condition bringing healing to the host body. He found that when the tiniest, mobile living forms of bacteria, which he called "Spermits," exchanged genetic material with higher developmental organisms, the highly developed organisms became suddenly invisible, having been broken down to their primitive avirulent forms. Using this knowledge, he developed isopathic/homeopathic remedies from fungal cultures. When these living remedies contact virulent microbial masses, the masses are induced to return to their avirulent form, and then leave the body through the natural organs of elimination.

WHO IS SANUM-KEHLBECK?

The founder of Sanum-Kehlbeck acquired the original Enderleinian cultures. Sanum-Kehlbeck has the sole right to manufacture these original formulas by Prof. Dr. Günther Enderlein. While other companies have attempted to copy these products, only those produced by Sanum-Kehlbeck and available in North America through Pleomorphic Product Sales, Inc. are manufactured from the specific disease-eradicating strains that came from Enderlein's original research which are maintained in the German repository for biological cultures. Besides these original Enderlein isopathic/homeopathic remedies, Sanum-Kehlbeck has developed a number of other remedies based on Prof. Dr. Enderlein's research which are also dealt with in this booklet.

WHAT IS PLEOMORPHIC PRODUCT SALES, INC.?

Pleomorphic Product Sales, Inc. was founded by Chrystyne M. Jackson as part of her ten-year battle to bring these indispensable isopathic/homeopathic remedies to North America. PPS is the only source of these FDA-sanctioned remedies in North America today. Mrs. Jackson has had extensive experience in the field of complementary medicine through her work and has had personal knowledge of their effects since she was healed of cancer and multiple sclerosis through alternative medicine. Only such a person, who has had the benefit of regaining health through biological medicine, could have had the conviction to complete this decade-long task.

ORIGINS OF PLEOMORPHISM

The concepts of pleomorphism and symbiosis are in the current perspective inseparable from the name of the great researcher and microbiologist, Professor Dr. Günther Enderlein (1872–1968).

The basis for his work was the book by the French researcher A. Béchamp, titled "Microzymas". It described that a microorganism can, under precisely determined preconditions, occur in diverse developmental stages and, especially also in diversified forms, without the loss of its specific characteristics. The microorganism may vary from the smallest rungs of electron microscopic magnitude up to the large, multinucleic and highly developed stages, such as of bacteria and fungi.

Moreover, Béchamp was able to prove that all animal and plant cells contain tiny particles which continue to live after the death of the organism and out of which microorganisms can develop. In this book, Béchamp laid the foundation for the concept of pleomorphism. The view that microorganisms can undergo a considerable variation in form, without losing their specific functions, stood and continues to stand diametrically opposed to the prevailing opinion of monomorphism, which admits only a single form and function to an organism. Naturally, that opinion has also resulted in a monomorphistic view of every disease process. Thus, in contrast to the opinion of Pasteur, that microorganisms simply exist without any developmental changes, Enderlein through intensive research came to the conclusion that the monomorphistic perspective of disease processes can no longer be maintained and had to be given up in favor of a pleomorphic perspective. He proved that every organism houses a primal plant germ in erythrocytes, which can very well become subject of a variation in form through exogenic influences.

PLEOMORPHISM AND CYCLOGENY

The opinion represented by pleomorphic bacteriologists of the fundamental changeability of forms holds the possibility for microorganisms to abruptly change from originally avirulent into potentially virulent conditions.

Enderlein devoted the bulk of his scientific work which stretched for more than 40 years, to the complex question of pleomorphism, symbiosis and cyclogeny of microorganisms. He published over 500 scientific articles. His chief work was titled *Bacteria Cyclogeny*, Berlin, 1925. (It is currently published by Semmelweis Verlag, Hoya, in the German language, soon to be published in English.) In this book he described in detail the changes and development of the parasite in its variable forms and its cycle.

This research was initiated by Enderlein in the year 1916, while he was working on typhoid. In blood using a darkfield microscope he observed mobile, tiniest living forms, named Spermits, which copulated with higher organized structures, whereafter the product of the copulation became suddenly invisible. Enderlein interpreted this as sexual processes, whereby tiniest, final products occurred, which are not visible to the eye of the light microscope. He named the symbiotic, primal plant germ in the erythrocyte Endobiont. This Endobiont lives in genuine symbiosis with the host organism, that is, with mutual benefits. Through outer factors, the Endobiont can multiply and develop—a process which can considerably disturb the symbiotic equilibrium. A healthy organism is capable of restoring the equilibrium. In this process, the more highly developed pathogenic germs are broken down into avirulent primitive forms through the copulation described by Enderlein. They leave the body through the natural organs of elimination.

THE NATURE OF THE PRIMAL GERMS AND SYMBIOSIS

However, the capacity for regenerating symbiosis is usually massively weakened through unhealthy lifestyles that are not in harmony with nature! Symbiosis is completed when the symbiont makes itself independent and becomes a parasite. In this, the Endobiont undergoes 3 basic phases: colloid-bacterium-fungus. This means, it develops from the apathogenic, non-mobile, tiniest albuminoid particle (Protit)—which is to be classified in size with the viruses $(0.01 \, \mu m)$ —via the nonvirulent chondrit stage into the parasitic, pathogenic stages such as bacterium and fungus. According to Enderlein, they are not representing unchanging organisms that are independent of each other, but altogether they form a singular, common cycle, which has its origin in the colloidal, albuminoid substances that are contained inside of each particular cell.

DISEASES OF THE ENDOBIOSIS COMPLEX

Assisted by darkfield microscopy and using living blood, Enderlein was able to deliver clear proof of this vital, microbiological process in both its origin and cycle. As soon as this vital happening leaves a defined condition of equilibrium, all signs of parasitism occur, whereby out of the apathogenic symbionts (Protits and Chondrits)—with their enzymatic and metabolic active properties, they develop pathogenic microorganisms.

This explains, according to Enderlein, that all diseases of the Endobiosis complex are based on the upward development of the Endobiont into higher valenced, parasitic growth forms with their own metabolism that is harmful for body fluids. These disease processes are difficult to fathom, as they make themselves known in the beginning by functional disturbances in most diversified organs, such as, by headaches, high or low blood pressure, feeling poorly, unmotivated attitude, lack of appetite, drab complexion, coated tongue, wounds in the mouth, pimples, sores, hoarseness, catarrhs, ear noises, diarrhea, lowered capacity for seeing and hearing, depressions, weak concentration or poor memory.

Diseases, however, also indicate healing processes, which attempt to return a disturbed symbiosis to the original healthy condition. Whether the biological self-healing forces of the organism will win over the disease, or whether the symbiont is able to develop unchecked into a parasite, depends on the condition of the milieu in which the disturbance plays out. If the inner milieu is damaged through unhealthy nutrition and lifestyles, with their resultant disturbance of the acid-base equilibrium, through environmental toxins, through constant infections, or even through psychological depressions, then our self-healing forces are incapable of restoring our symbiotic equilibrium. Disease will manifest and damage the body. According to Enderlein, the milieu-conditioned cyclogenetic rise into higher stages of those microorganisms developed from the symbiont always determine the disease.

FOUNDATIONS FOR ISOPATHIC THERAPY

Enderlein developed Isopathic Therapy with its specific biological remedies for all nonspecific, general symptoms that pertain to the Endobiosis Complex, based on the knowledge of the mutability of forms and the fact of the biological, and essential for life symbiosis between the mammal organism and the Endobiont. This unique perspective, at that time, distinguishes Enderlein as a pioneer of a modern, ecological world-view and puts monomorphism, which is still being taught, in question.

In his *Bacteria Cyclogeny*, Enderlein describes the development of the two mold fungi species *Aspergillus niger* van Tieghem (SA 4-20) and *Mucor racemosus* Fresen (SA 4-11), beginning from the primitive phases as tiniest colloidal albuminoid particles, via the bacterial phase, up to the fungal stage.

Both fungal species, which are likely obtained transplacentally, can occur as Endobionts in all their developmental stages within mammal bodies. Although their occurrence may be more or less frequent, they are to be seen as the cause of numerous ailments. The tubercular and paratubercular diseases, caused by pathogenic Asperaillus stages, do not occur quite as frequently as the disease processes more frequently caused by pathogenic *Mucor* phases arising from the *Mucor* symbiosis. The presence of the Endobiont in mammal organisms has been termed Endobiosis by Enderlein since 1946. By this are meant the apathogenic, low valanced phases of the Mucor racemosus Fresen (SA 4-11) (Protits, Symprotits, Chondrits, Fibrin). Fibrin is the highest developmental form of the Chondrit, before the Endobiont changes from the primitive phase into the bacterial phase (analogously to Siphonospora polymorpha v. Brehmer). In these lower valences, the symbiont supports the metabolism of the host organism, thus strengthening the defense. The higher the Endobiont rises in its developmental series, the more it increases in toxicity. The upward development of the Endobiont via the Chondrit form and higher is the cause for the endobiontic diseases, up to the death of the host organism. In the course of this process, the Endobiont is most likely partaking in the development of tumors. In the stages of precancerosis, one finds higher valenced Endobionts in the blood. According to Devrient, the cancer problem cannot be solved without regard to blood parasitism and polymorphism of the microorganisms. For Enderlein, "cancer is for the host organism a fermentation and decomposition condition, forced upon it by a parasitic fungus and its developmental forms."

Because the Endobiont devours protein greedily, its upward development and the Endobiosis or congestion resulting from it are especially co-created through improper nutrition. Among these diseases belong vascular changes, pathological coagulatory processes, geloses, rheumatism, arthritis, spondylosis, tonsillitis, lymphogranulomatosis, diabetes, gout, tumors of every type (even those that are benign and their prestages), anemia, leukemia, cerebral sclerosis and paralyses.

The restriction of protein intake causes the return to lower phases, which then leave the body via the organs of excretion.

THE ISOPATHIC PREPARATIONS OF THE FUNGAL PHASE

Another possibility for the breakdown of higher forms into lower stages is the exogenous supply of the so-called Chondritins in the quoted isopathic therapy. According to Enderlein, Chondritins are apathogenic, low developmental stages of diverse fungi, which can be either of a specific nature, as in the *Mucor racemosus* Fresen (SA 4-11) and *Aspergillus niger* von Tieghem (SA 4-20), or of an unspecific nature such as in *Penicillium notatum* (SA 4-30) and *Penicillium frequentans* (SA 4-31). The specific Chondritins metabolize the virulent, parasitic microorganisms by copulation, thereby initiating their breakdown. The nonspecific Chondritins act as stimulating irritants by supporting the defensive capacity of the human organism through absorbing the ferments of foreign microbes.

Chondritins from diverse mold fungi and yeasts are available for application, for example, in the following preparations (see Table of Contents):

Pleo™Alb (Albicansan). Candida albicans

Pleo™Ex (Exmykehl), Candida albicans, Candida parapsilosis, Penicillium roquefortii

Pleo™Fort (Fortakehl), Penicillium roquefortii

Pleo™Lari (Larifikehl), Laricifomes officinalis

Pleo™Mucedo (Mucedokehl), *Mucor mucedo*

Pleo™Muc (Mucokehl), *Mucor racemosus*

Pleo™Nig (Nigersan), Aspergillus niger

Pleo™Not (Notakehl), Penicillium chrysogenum

Pleo™Pef (Pefrakehl), Candida parapsilosis

Pleo™Pin (Pinikehl), Fomitopsis pinicola

Pleo™Quent (Quentakehl), Penicillium glabrum

Pleo™Rub (Ruberkehl), Aspergillus ruber

Pleo™Sancom (Sankombi), Mucor racemosus, Aspergillus niger

These remedies have been developed partly by Enderlein himself and partly on the basis of his most valuable research. They act in the way of isopathy; that means, they are not directed against the disease or its symptoms, but they support the body's own capabilities for regeneration, whereby genuine healing processes become possible. Isopathic Therapy nonviolently normalizes the symbiontic equilibrium between the Endobiont and its host organism on a basis of species-identical organisms.

In addition, through the administration of the so-called anti-Chondritins (Pleo™Muc Ex) and Pleo™Nig Ex, antibodies for the fungal Chondritins, both their breakdown and their elimination through the urinary paths, the bronchi, the skin, and especially the intestine, can be accelerated.

The preparations Pleo™Lari, Pleo™Rub, and Pleo™Pin represent fungal preparations, which have had traditional healing reputations in folk medicine; these preparations are produced as isopathic substances based on the knowledge of Prof. Dr. Enderlein.

THE THERAPY OF CANDIDIASIS WITH ISOPATHIC PREPARATIONS

Pleo™Alb holds a special position among the isopathic preparations. This preparation contains Chondritins of *Candida albicans* in diverse homeopathic dilutions as its active substance. The therapeutic principle of the Candida preparations is based on the dimorphism of the yeast organism, sometimes also referred to as "Soorpilz". The organism may exist in several growth forms or developmental phases, as yeast and as fungus. Consequently, it is living proof for the accuracy of Enderlein's Theory of Pleomorphism. In its yeast form, the organism exists as a single cell. Candida yeasts are saprophytic, which become pathogenic only under certain preconditions. A weakened immune system, or antibiotic treatment, promotes the pathogenicity of Candida yeast cells enormously. They are the cause for the far-spreading Candidiasis in the form of a superficial colonization on mucous membranes.

If the infested host cell dies, the yeast cell comes into contact with dissolving cell fragments and the cell fluid. This is the signal for the yeast cell to rise within the cyclogenetic series into a parasitic, mycelia forming fungus, which then grows invasively into the tissues and, thereby, initiates the widening of tissue lesions.

The preparation Pleo[™]Alb takes this dimorphism (the varying between yeast and fungus) into account in the therapy.

Researchers have succeeded in cultivating the microorganism as yeast phase and also as fungal phase, side by side, through appropriate conditions of cultivation. Therefore, the superficial mucous membrane associated forms of Candidiasis, the deeper settled, tissue infiltrating infections, and also massive intestinal mucosal forms can become therapeutic.

Moreover, the well-proven preparation Pleo™Pef is available for Candidiasis therapy. It can also be applied, among other possibilities, as a cross antigen reaction that is effective for superficial *Candida albicans* infections. Pleo™Pef is a preparation from the yeast form of *Candida parapsilosis*, which is predominantly isolated from the skin, from nail bed infections, Otitis externa and Endocarditis in human beings; a most effective preparation. A must for every practice!

Pleo™Ex represents a combination of *Candida albicans, Candida parapsilosis* and *Penicillium roquefortii.*

GENERAL COMMENTS ON ISOPATHIC PREPARATIONS

In the application of isopathic preparations, the guiding rule is that an increase in the dosage may be undertaken only when the previous or identical dosages no longer bring effective action. Every overdose has an excessive production of toxic decomposition forms as its consequence. The task of the tissues in removing these decomposition products out of the body, namely through the skin, the intestine, the urinary passages and the bronchi—can, then, only be insufficiently or not at all fulfilled. In the case of massive disease foci, such a condition can occur even with greatest precaution, and it can bring the healing processes to a slower pace or even stop them. By repeated injection of detoxified active fungal antibodies (Anti-Chondritins), the elimination of each form of decomposition is accelerated and, thereby, the effectiveness of the isopathic preparation becomes enhanced. The darkfield examination of the blood reveals such "toxic" conditions, caused by the congestion of endobiontic decomposition products. At such times there is a fundamental need to look well to the effective functioning of the organs of elimination (stool, urine, sweat, sputum). Under circumstances, a detoxification therapy (enemas, baths, teas, electrolytes) may be required.

The decomposition products of the Endobiont that are eliminated on an ongoing basis without treatment under healthy conditions may, in patients, again adopt higher valences or higher developmental stages during their outward passage through the skin, intestine, urinary paths and bronchi. This way, especially in cancer cases, short rods frequently form in the intestines. Because they are shaped like coli bacteria, they are easily misinterpreted as degenerated coli bacteria. These forms are usually easily decomposed within 12 hours after administration of the relevant capsule form, which decompose them again into the Chondrit stage. These forms, which are also referred to as Paracoli, cause intense constipation and must be closely watched in cancer cases. For this reason, Isopathic Therapy plays an important role also in the treatment of obstipation and dysbacteria.

Because Pleo™Muc (*Mucor racemosus*) also effects decongestion of agglutinated erythrocytes, leucocytes, thrombocytes, etc., an appropriate massage of connective tissues and muscles is of especially supportive significance. The myogeloses, painful points, etc. affected thereby are nothing but the accumulation of low-valanced developmental stages.

Every isopathic treatment can be performed with oral, inhalable, or percutaneously rubbed-in preparations, suppositories, or through injection. These diverse forms of application can be combined or alternatively administered, according to the situation of the case. The intake, inhalation and rubbing are milder in effect and suitable for prophylactic treatment during the intervals that are free from injections, and for follow-up treatments. Drops are also very effective when dropping 1-2 drops into each nostril.

APPLICATION AS INJECTIONS (not available in the USA)

In general, one begins an injection series with the weakest strength (for example, 7X). In case of no reaction, one changes to 6X and finally to 5X.

APPLICATION OF THE FUNGAL ANTIBODIES

Fungal antibodies (Antichondritins) serve for freeing the blood of stronger infestation by decomposition products of the Endobiont after Chondritin injections. These do not affect the higher cyclic forms, such as bacteria, but only the decomposition products in the primitive phases. On the first or second day after administering injections, 1 ml is injected s. c. or i. m.; this can be repeated in identical intervals.

EXTERNAL APPLICATION

Percutaneous application, according to the style of the Ponndorf Inoculation or the Baunscheidt Method, raises the effectiveness of the isopathic remedy. In the area of the diseased organ, or else in the elbow bends or groin, 5–10 drops daily, or at longer intervals, externally rubbed in on injection-free days. Eye drops are dropped into the palpebral tissue. The ointment is applied thinly on the affected skin portions 1–3 times daily, or spread knife-thick onto the bandage.

APPLICATION AS AN INHALATION

Using a sterile pocket inhalator, the drop form is externally inhaled; 10–20 drops inhaled deeply, 2–3 times daily through the mouth and nose. The inhalator must not contain even a trace of any cleaning agent!

INTERNAL APPLICATION

The oral fungus preparations support the effect of the injected, rubbed in and inhaled preparations; they have, moreover, a local impact on disease processes, especially in the gastro-intestinal canal. Tablets or capsules can be taken with or without food. One swallows the capsules with a little water. The tablets should be allowed to melt under the tongue.

The appropriate combination of preparations from the endobiontic series is definitely possible and useful. However, Pleo™Not (*Penicillium chrysogenum*) must not be taken simultaneously with Pleo™Muc (*Mucor racemosus*), Pleo™Sancom (*Mucor racemosus*/Aspergillus niger) or Pleo™Nig (*Aspergillus niger*) because these preparations weaken or nullify their effects mutually (antagonism).

ADDITIONAL MEASURES

The normalization of the blood pH must be given very special significance in all diseases of the Endobiosis complex. This is especially required if the patient's blood shows a Protit veil after a Chondritin injection, because it always points to a raised pH or rH2 value of the blood. The stress that is thereby exerted on the circulation of the blood aggravates or blocks the desired copulation of the Chondrits. An injection of L(+) lactic acid ($Pleo^TMSan$) several minutes before the Chondritin injection is recommended for the necessary adjustment of the pH value.

In regard to additional biological therapy in general, the therapist naturally remains in control of all possibilities during the period of isopathic treatment.

Unfortunately, there continues to be insufficient awareness that the presence of a focal disturbance field can limit or cancel the effectiveness of every holistic treatment. It should be a precondition to examine the patient and to undertake sanitizations before the administration of isopathic/homeopathic preparations. Not only should the usual foci in teeth, tonsils, paranasal sinuses, intestine, etc. be considered, but also the amalgam fillings play an important part in the sense of focal toxicoses through years of releasing mercury. The replacement of these fillings by neutral materials is desirable.

An article by Dr. med. A. Baum on "Paravertebral Whealing" (Sanum Remedy Production Book {yellow}) points out the importance of a possible Neural or Segment Therapy. This opens many possibilities, regardless of whether one wishes to apply only the blocking infiltration methods, acupuncture, or manual forms of therapy.

In diseases from the Endobiosis complex, and especially in cases of overweight, a diet rich in vitamins and vital substances, low in calories, giving concentrated nutrition, is of fundamental importance. It is a precondition, not only for the healing process, but also for the effectiveness of every isopathic and immunobiological treatment of endobiontic conditions. Nutritional intake requires special attention in cases of Endobiosis, including cancer. It should be lacto-vegetarian, rich in raw foods and devoid of superfine flour and sugar, as well as all addictive substances. With a vegetarian diet, attention must be given to include sufficient lactic acid food for the body.

THE IMMUNOBIOLOGICAL

PREPARATIONS FROM THE BACTERIAL PHASE

Beside the previously described isopathic preparations of the fungal phase, the immunobiological preparations from the bacterial phase fill an important place in biological therapy:

Pleo™Art "A" (Arthrokehlan "A"), Formol toxoid of the *Propionibacterium acnes* DSM 4217

Pleo™Art "U" (Arthrokehlan "U"), Formol toxoid of the *Corynebacterium* sp. DSM 4223

Bovisan, Mycobacterium bovis

Pleo™Lat (Latensin), Bacillus cereus M. U. 345 a* (DSM 5194)

Pleo™Lep (Leptucin), Propionibacterium avidum

Pleo™Rec (Recarcin), *Bacillus firmus* SA. C. 501* (= DSM 4816)

Pleo™San Series (Sanukehl), Hapten preparations from typical nosode germs

Pleo™Ut (Utilin), Bacillus subtilis M. U. 345* (= DSM 5330)

Pleo™Ut "S" (Utilin "S"), Mycobacterium phlei F. U. 36* (= DSM 4817)

The immunobiological preparations contain diverse fractions of various bacterial species, such as intact cells, cellular extracts, cell wall fragments of polysaccharides. Only especially suitable strains that were cultivated under specific conditions (note strain numbers) are being applied; their effectiveness has been proven by decades of application. They are capable of stepping into the course of a physical immune reaction and to raise the immune system's capacity for response through their nonspe-

cific stimulation. This takes place through their influencing diverse sub-populations of lymphoid and phagocytizing cells which take part in the immune functions. For instance, they indirectly take part in the structuring of humoral antibodies.

ORIGIN AND DEVELOPMENT OF THE IMMUNOBIOLOGICAL PREPARATIONS

I. MYCOBACTERIA

Mycobacteria and their fragments effect a strong stimulation of the T-cell system, inducing cellular defense reactions. This is primarily utilized therapeutically in tumor diseases, among others (J. Hartmann, *Therapeutikon* 9, 1990).

Therapy with the preparation PleoTMUt "S" goes back historically to the application of a pathogen of the sea-turtle tuberculosis for the treatment of pulmonary tuberculosis by Professor Friedmann in the 1920s. Therefore, an outstanding immunotherapy became possible, which worked similarly to the officially sanctioned BCG inoculation, but without the occasional serious side effects. This preparation was further developed into an identically effective preparation of *Mycobacterium phlei* from the special strain FU 36. In recent years, the immunostimulating properties of the cell-wall parts of the *Mycobacterium* have been intensively researched, whereby the equivalence of diverse mycobacterial species has been discovered. A focal point for therapy with BCG (*Mycobacterium bovis*) in modern tumor treatment is presented in its instillation for cancer of the bladder. Here, also, the effectiveness of the *Mycobacterium phlei* FU 36 has proven itself as comparable.

2. BACILLUS SPECIES

In folk medicine, tea decoctions using hay, excrement from cows, or peat moss have long been used, without any knowledge of their containing *Bacillus subtilis* as active agent. Farmers in many countries utilized hay infusions for curing intestinal diseases in cattle.

As early as 1887, Metchnikoff described the growth-inhibiting effect of aerobic soil bacteria, particularly of *Bacillus subtilis*, in contrast to pathogens such as *Streptococci, Staphylococci, Salmonella* and *Mycobacterium tuberculosis*.

Works by Ramon and Richou, as well as Jansen and Hirschmann showed in 1943/44 the antitoxic and antibiotic properties of that pathogen, which was generally referred to as "Hay bacillus".

However, the first reports about the oral, subcutaneous and intravenous application of *Bacillus subtilis* strains were published in the years 1938/39 with outstanding therapeutic results. Particularly, its effectiveness with certain pseudotubercular forms was discovered at that time. The general stimulation effect on the nonspecific defensive capacity of the human organism already showed up in these beginnings of Subtilis Therapy. The name UTILIN has been used under trade mark protection for this new, special remedy since 1939. In later years, additional *Bacillus* strains that are closely related to *Bacillus subtilis* found their entry into the therapy under the terms of PleoTMI at and PleoTMRec.

Preparations with Bacillus species have manifold immunostimulating effects. Clinical studies yielded good success in recurring diseases of the urinary passages and the breathing organs in patients with defective immune situations in food allergies, as well as other chronic diseases that were brought about by a reduced immune status (J. Hartmann, *Therapeutikon 4*, 1990).

3. CORYNEBACTERIA AND PROPIONIBACTERIA

The immunobiological preparations Pleo[™]Art "A" and Pleo[™]Art "U" were developed from the *Siphonospora polymorpha* bacterial cultures of Dr. von Brehmer that were made into the preparations Toxinal and Arthrisinal.

Von Brehmer (1883-1958), a contemporary of Enderlein (1872-1968), originally devoted himself to virus research involving diseases of plants and animals. During the examination of an accidentally received human blood sample, he discovered also microorganisms that were partly moving and partly of immobile nature. He gave them the name of *Siphonospora polymorpha*. He was able to prove that even the smallest fluctuations of the blood pH value within the alkaline area effected the cyclogenetic upward development of the *Siphonospora* toward their pathological stages. However, in acidic milieu, these higher stages fall apart again into their apathogenic, tiniest developmental stages. These works brought additional proof for Enderlein's publications on pleomorphism and the cyclogeny of the Endobionts released at the identical time.

Beginning 1935, von Brehmer researched an avirulent *Siphonospora* vaccine for therapeutic purposes. The first material was obtained from a gangrenous tooth pulp and root granuloma. From these sources, von Brehmer developed the preparation Toxinal, which was applied for rheumatic arthritic diseases, neuralgia and *Herpes zoster*, and Arthrisinal, a formol toxoid from highly active rod cultures, with its chief area of indication, the cancer diseases.

The original cultures of Dr. von Brehmer's Research Institute were later purified and identified, the *Propionibacteria* and *Corynebacteria* species were then isolated from them. These improved cultures are now forming the basis of the preparations Pleo[™]Art "A" and Pleo[™]Art "U".

An additional therapeutic development with *Corynebacteria* followed in the application of *Corynebacterium parvum* for infection prophylaxis. This strain was later reclassified as *Propionibacterium acnes*. The activation of the monocyte-macrophage System is a general characteristic of the species *Propionibacterium*. Its antibacterial, antiviral, antiparasitic and antitumoral action are the result.

The latter, in particular, have been intensively examined in the strain *Propionibacte-rium avidum*. Its stimulatory effects on the hematopoietic system qualify it in the immune therapy especially in the treatment of myelosuppressive side effects of a cyto-static or radiation therapy.

4. SANUKEHL PREPARATIONS

The newly developed product series of Pleo™San preparations is based on a special production process, in which the polysaccharides of bacteria are extracted. These preparations are to be considered haptens, made of typical pathogenic Nosode germs, and defined as "antigen absorbers" (Cornelius). Their active principle is based on the binding of the pathogen antigens or pathogen toxins. The latter are commonly mobilized out of their body depots within a therapy with corresponding nosodes. In this way they effect a first reaction. However, persistent antigens can be a considerable obstruction for a nosode therapy. In such cases, the matching SANUKEHL preparation for each nosode is to be applied as middle agent, in order to restore the full nosode efficacy.

Pleo™San ACNE, Hapten from Propionibacterium acnes

Pleo™San BRUCEL. Hapten from Brucella melitensis

Pleo™San CAND (Sanukehl Cand), Hapten from Candida albicans of Serotypes A and B

Pleo™San COLI (Sanukehl Coli), Hapten from Escherichia coli

Pleo™San KLEBS (Sanukehl Klebs), Hapten from Klebsiella pneumoniae

Pleo™San MYC (Sanukehl Myc), Hapten from Mycobacterium bovis

Pleo™San PROT (Sanukehl Prot), Hapten from Proteus vulgaris

Pleo™San PSEU (Sanukehl Pseu), Hapten from Pseudomonas aeruginosa

Pleo™San SALM (Sanukehl Salm), Hapten from Salmonella enteriditis

Pleo™San SERRA (Sanukehl Serra), Hapten from Serratia marcescens

Pleo™San STAPH (Sanukehl Staph), Hapten from Staphylococcus aureus

Pleo™San STREP (Sanukehl Strep), Hapten from *Streptococcus pyogenens*

Pleo™San TRICH (Sanukehl Trich), Hapten from Trichophyton verrucosum

GENERAL COMMENTS

ON IMMUNOBIOLOGICAL PREPARATIONS

The purpose of applying bacterial suspensions consists in the generation of an active immunity in the living organism by artificial means. This is achieved by exerting specific and nonspecific stimulation through application of substances into the organism, which cause tissue cells to become stimulated, and the body to form defensive substances. From the type and amount of these formed substances one can then estimate the degree of currently existing immunity. To be sure, it is possible for active immunity to exist under certain circumstances, without proof that humoral bodies are circulating in the blood. However, these substances can immediately reoccur when a new impulse is given to the reactive tissue through a renewed administration of preparations or through specific or nonspecific stimulants.

FIRST IMMUNE RESPONSE

Occasionally, a first immune response occurs because the immunologic preparations contain biological substances. Therefore hypersensitivity is possible, in which case the remedy should be discontinued.

MANNER OF APPLICATION

OF IMMUNOBIOLOGICAL PREPARATIONS

The preparations can either be given parenterally, that is, bypassing the gastro-intestinal tract, or (orally) through the intestinal tract.

The parenteral intake guarantees a good and generous immunity. One can inject subcutaneously, intramuscularly and intracutaneously. Finally, also the percutaneous and nasal administration can be used by rubbing the suspension into the skin or dropping into each nostril.

ORAL ADMINISTRATION

The oral application of the immunobiological preparations in capsulated form, especially for certain reasons of suitability, for prophylaxis of diseases of the digestive tract, is preferred. Orally taken preparations are intended for reaching immunity and reducing sensitivity toward the relevant infectious pathogen. If a quick and lasting immunization

is the target, one can first bring about a basic immunity through a subcutaneous injection. Then, this effect can be maintained and increased through oral intake.

INJECTION (not available in the USA)

The injecting process of the injection solution must occur slowly and under sterile conditions. Only disposable syringes are to be used.

Important Comment: The ampules must be shaken before use in order to assure even distribution of the bacterial suspension.

SUBCUTANEOUS INJECTIONS (not available in the USA)

Subcutaneous injection is recommended when one targets a lasting effect through slow absorption. Therefore, this type of injection is recommended especially for prophylactic purposes, when one wishes for a maximally long lasting immunity. For the injection, one must naturally avoid locations near the periosteum or nerves and, instead, inject where the correspondingly developed subcutaneous tissue and the musculature beneath it allow for better tolerance. At the beginning of the injection treatment, 0.5 to 1.0 ml 6X are, as a rule, injected into the axillary fold.

INTRAMUSCULAR INJECTION (not available in the USA)

The intramuscular injection is preferred when the goal is to obtain a maximally fast absorption without obtaining a larger general reaction. Therefore, it is highly recommended for therapeutic purposes, especially for suspensions that would cause subcutaneous local reactions because of the stronger active substances contained in them. For the intramuscular injection those locations are to be chosen where the strength of the musculature guarantees a fast absorption. One chooses for this the upper external quadrant of the glutea, and injects deeply intramuscular with 50 or 60 mm needles.

INTRACUTANEOUS INJECTION (not available in the USA)

The intracutaneous application is less used for stimulation therapy because it is too painful. However, because the skin is generally considered to be an important carrier of immunity, an intracutaneous administration of the suspension can in many cases be of excellent usefulness, particularly when the skin itself is the seat of disease (furunculosis, acne, etc.). Naturally, one can use only smaller dosages of 0.2 - 0.5 ml (6X) maximally for the intracutaneous injection, due to the size of the wheal formation and the accompanying parallel painfulness. The stretching side of the left upper or lower arm is suitable for this type of application.

PERCUTANEOUS RUBBING

Percutaneous rubbing has proven itself well in every case that involves organ stress or nervous irritation and where segmental therapy is appropriate.

THE ACID-BASE EQUILIBRIUM

As already mentioned, fluctuations of the blood pH value in the alkaline area—which is generally preceded by a massive acidification of the tissue—give support for the upward development of the symbionts toward parasitic germination, the cause or support for diseases.

It is nowadays beyond argumentation that most of civilization's diseases are conditioned by our poor nutritional habits. The unhealthy lifestyle of human beings through inappropriate nutrition with excessive ingestion of proteins makes one acidified in the actual sense of the word. The accompanying manifestations today's civilization diseases are always a mesenchymal acidosis with a simultaneously excessively raised

alkaline blood pH value, a pathological acidity quotient, according to Sander, along with an extremely low defensive factor. These are sure criteria for a metabolic derailment, with the danger of an acute or chronic disease.

Merely by changing one's nutrition, healthy human beings can expect a balanced acid-base maintenance by choosing a lacto-vegetarian diet. As a supportive measure for the restoration of the acid-base equilibrium, Pleo™Alkala is the perfect treatment. For excessive acidification of the gastro-intestinal tract with its consequences, such as heartburn and gas. It is important to note that all products are calibrated to be in balance with one another.

Pleo™Citro brings regulatory action into cell respiration and acid-base management, by acting against the alkalosis of the blood.

 $Pleo^{TM}San$ is an additional preparation for regulating the pH value of the blood and tissue, with L (+) lactic acid as its active constituent. The specialty of $Pleo^{TM}San$ lies in the various potencies which are brought together within the preparation. The lower potencies serve the raising of cellular breathing, while the higher potencies serve the elimination of excessive lactic acid concentrations, especially of the nonphysiological D-(-) lactic acid.

ORGAN PREPARATIONS

Pleo[™]Thym activates the metabolism, stimulates the prestages of the T-lymphocytes to maturation and strengthens the immune system.

Pleo™Chrys, a human placenta hydrolysate, contains biogenic stimulators that enter actively into the metabolism by raising the cellular respiration.

Pleo™Reb, an organ extract of Peyer's Patches (taken from US calves under controlled conditions and veterinary supervision) that stimulates the B- and T-lymphocytes, thus strengthening the humoral defenses, and supporting the body in the maintenance or establishment of an intact immune system.

PLANT EXTRACTS

Plant extracts are an ideal and necessary support therapy, especially since this entire homeopathic/isopathic product line (fungal, mineral & trace elements, bacterial, herbal, organ, etc.) is calibrated to be in perfect balance with one another to achieve best results.

Pleo™Cerivi promotes blood flow through the mucous membranes; it has, additionally, a regulatory influence on pathogens in the gastro-intestinal area.

Pleo™Ginkgo is based on the active constituent complex of the leaves of the Ginkgo tree. this is well known from Asian folk medicine.

In PleoTMRelivora Complex, the active substance concentrations of *Drosera, Echinacea angustifolia* and *Juglans* are ideally combined for best efficacy. Diseases of the respiratory tract, frequent general infections and diseases of the skin are a broad field for application for the PleoTMRelivora Complex.

Pleo™Oku and Pleo™Usnea are herbal homeopathic remedies. Pleo™Usnea, made from the lichen *Usnea barbata*, is predominantly used for illnesses in the head area (headaches), while Pleo™Oku, from the tree bark of *Okoubaka aubrevillei*, finds its application in detoxifying the gastro-intestinal tract, in cases of food intolerance or, prophylactically, for changes in climate and nutrition. Besides, there are many areas of

application for patients who are stressed through pesticides, insecticides, environmental disturbances. These are excellent preparations for detoxification of the entire system—especially effective in the early stages of colds & flu.

MINERAL AND TRACE ELEMENT PREPARATIONS

An important factor for the maintenance of our health lies in providing the body with necessary mineral and trace elements. Regulatory processes in the organism, which are the precondition for a regulated metabolic process, cannot take their course without a stable electrolyte equilibrium of ions, such as Sodium, Potassium, Calcium and Magnesium.

The trace elements, which according to their name are needed by the body in only very small amounts, enter catalytically into the metabolic processes. Without the presence of these "Bio- catalysts"—including Iron, Zinc, Maganese, Copper, Cobalt, Iodine and Fluor—many processes that are essential for life cannot take their course, such as the action of the heart.

These mineral and trace element preparations are offered for a broad application spectrum: Pleo[™]Alkala (Na, K), Mapurit (Mg), Pleo[™]Zinc (Zn), and Pleo[™]Cup (Cu), and, of course, they are calibrated to a perfectly balanced total therapy with all the aforementioned products.

SCHEME FOR A BASIC THERAPY

	SIPS	ORAL	PERCUTANEOUS
WEEK 1	day 1: 1 ml Pleo™Ut "S" 1 ml Pleo™Muc 2 ml Pleo™Sanuvis		
	day 2:	2 tablets Pleo™Muc 5X	
	day 3:		5-10 drops Pleo™Sancom 5X (rub into bend of elbow)
	day 4: eliminate, detoxify		
	day 5:		5-10 drops Pleo™Sancom 5X (rub into bend of elbow)
	day 6:	2 tablets Pleo™Muc 5X	
	day 7:		5-10 drops Pleo™Sancom 5X (rub into bend of elbow)
WEEK 2	day 1: 1 ml Pleo™Muc		
	day 2:	2 tablets Pleo™Muc 5X	
	day 3:		5-10 drops Pleo™Sancom 5X (rub into bend of elbow)
	day 4: eliminate, detoxify		
	day 5:		5-10 drops Pleo™Sancom 5X (rub into bend of elbow)
	day 6:	2 tablets Pleo™Muc 5X	
	day 7:	5-10 drops Pleo™Sancom 5X (rub into bend of elbow)	

	SIPS	ORAL	PERCUTANEOUS
WEEK 3	day 1: 1 ml Pleo™Nig		
	day 2:	2 tablets Pleo™Muc 5X	
	day 3:		5-10 drops Pleo™Sancom 5X (rub into bend of elbow)
	day 4: eliminate, detoxify		
	day 5:		5-10 drops Pleo™Sancom 5X (rub into bend of elbow)
	day 6:	1 capsule Pleo™Ut "S"	
	day 7:		5-10 drops Pleo™Sancom 5X (rub into bend of elbow)
WEEK 4	day 1: break		
	day 2:	2 tablets Pleo™Not 5X	
	day 3:		5-10 drops Pleo™Sancom 5X (rub into bend of elbow)
>	day 4: break		
	day 5: 1 ml Pleo™Not		

INSTRUCTION FOR A BASIC THERAPY WITHOUT A CLEAR DIAGNOSIS AND FOR REGENERATION OF THE GENERAL SYSTEM

THERAPY CYCLE	ORAL
day 1:	1 capsule Pleo™Ut "S" 4X
day 3:	2 tablets Pleo™Muc 5X
day 5:	1 capsule Pleo™Lat 4X
day 7:	2 tablets Pleo™Not 5X
day 9:	1 capsule Pleo™Rec
day 11:	2 tablets Pleo™Nig 5X
Daily:	1 tablespoon Pleo™San
Repeat the therapy cycle according to need.	