

## SECTION II

Nature cure focuses on supporting the body's healthy ecology.



Nature Cure  
focuses on supporting  
the body's healthy ecology ...

... rather than on  
confronting disease.

TOPIC 1: The Central Tenets of Nature Cure and their Relationship to Naturopathic Medicine

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## Section II Overview

### The Evolution of Nature Cure:

### Why do naturopathic physicians work with nature to restore health?

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EVOLUTION OF THE HEALING ARTS has followed a similar pattern around the world — a pattern rooted in mankind's proximity to the natural environment. Early practitioners of healing traditions recognized that the essential components for life are grounded in that which nature provides — air, water, sunlight, plants, and minerals. To relieve suffering and to improve health, these components of nature became the tools of healing.

Likewise, application of the natural environment and its resources to benefit health evolved with many similarities in different global communities. Some communities have developed their practice more rapidly than others, but all of them rely on the observation of nature as a basic model for healing and health. This empirical knowledge formed the basis for naturopathy — the use of nature's resources in a therapeutic context. Importantly, this was not merely a random development. The early initial concepts evolved into a rational philosophy and clinical theory now articulated as the Process of Healing and as the Naturopathic Medicine Therapeutic Order™.

In this section, we summarize this evolution of nature cure practices and examine how they have become the foundation for a system of health creation now formalized as naturopathic medicine.



## TOPIC1

# The Central Tenets of Nature Cure and their Relationship to Naturopathic Medicine

Letitia Dick-Kronenberg, ND; Cathy Rogers, ND;  
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**N**ature Cure is founded on the premise that living things have the capability to heal themselves. Nature cure philosophy, the heart of naturopathic medicine, is grounded in the *vis medicatrix naturae*, the inherent self-healing power of body, mind, and spirit to restore health and to foster the growth of a unique human being connected to all living things. Today, modern naturopathic practices are still guided by this philosophy and its four central tenets.

**Tenet: a principle on which a belief or theory is based<sup>1</sup> and that is generally held to be true within a group or organization.<sup>2</sup>**

## The Four Central Tenets of Nature Cure

1. Acute illness is an expression of the body's, highly organized, and intelligent reaction to assaults on normal function. The body's efforts to restore health and balance create *symptoms* — the detectable result of myriad physiological and biochemical processes. In the nature cure paradigm, illness is *not* considered to be primarily the result of foreign invasion of a healthy body that must be

defeated or suppressed. Rather, it is recognized that germs flourish in *already damaged* tissues (i.e., toxemia). The body's terrain becomes vulnerable when disturbed by poor hygiene, poor digestion, contaminated food and water supply, social isolation, lack of connection with others, or unremitting stress. These factors create a favorable environment for disease to flourish.

### **What is Toxemia?**

Among the three primary causes of disease theorized by Henry Lindlahr, the third is, "The accumulation of morbid matter and poisons." The usual and most common source of such morbid matter and poison is endogenous generation through the processes of maldigestion.<sup>1</sup> This has been acknowledged in the medical literature for many years. The Hippocratic Corpus contains such references,<sup>3</sup> as do other ancient Greek texts.<sup>4</sup> There also are contemporary references that demonstrate the degradation of poorly digested food into toxins by dysbiosis in the gut, which enters the blood and becomes a source of pathologic reactions in the body.<sup>5,6,7,8,9,10</sup>

Historically, this concept is rarely addressed by conventional medical practice. However, it is — and always has been — a fundamental concept in naturopathic practice and remains significant in the vitalist tradition of naturopathy.

Toxicity in the blood (i.e., toxemia), is responsible for much of chronic disturbance in the body that results in disease. It is a primary cause of chronic inflammation that underlies much chronic disease, as well as susceptibility to acute illness. Today, the concepts of dysbiosis, endotoxemia, and the microbiome can be found in the scientific literature with numerous articles describing the relationship between

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<sup>1</sup> In some cases, accumulations may be exogenous in origin, and may therefore be considered a primary cause of disease.

maldigestion, toxemia, dysbiosis, endotoxemia, systemic inflammatory conditions and the microbiome. These concepts and research extend early discussions of toxemia and endotoxemia. Its implications in multiple morbidities and dysfunctions support Lindlahr's<sup>11</sup> and Kune's<sup>12</sup> unity of disease theories, particularly regarding dysfunctions accompanied by chronic inflammation (the root of most modern chronic diseases).

As we consider what disturbs health and what causes disease, we must consider toxemia as a primary cause, and one that must be addressed by naturopathic physicians. This is accomplished through improvements in dietary choices and efforts to improve digestive efficiency, through homeopathic and botanical medicine, hydrotherapy, digestive aids, and other means.

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2. Healing is brought about by applying the 'constructive principle' in nature,<sup>3</sup> which is achieved by supporting or stimulating a patient's innate healing potential. This is achieved through teaching and applying the preventive, hygienic practices of cleansing, fasting, and rebuilding health with dietary reform, exercise, moderate exposure to sunlight, time spent outdoors in nature, mental and physical rest, hydrotherapy, and manual therapies. As adjuncts to these core modalities, many practitioners may use herbs, homeopathy, acupuncture, and other approaches to restore health.

**Naturopathic medicine is based on universal principles that are true and hold true for all time. We don't have to change what we are doing for the 21<sup>st</sup> century, because the same rules and laws that apply to nature and to the natural process of healing are immutable.** James Sensenig, ND

3. The healing reaction is a potentially curative process of inflammation and discharge that can be stimulated by natural therapies applied over time and in a particular therapeutic order. Using toxic drugs to suppress acute healing reactions may weaken the body's capacity to mount a sufficient reaction. This allows disturbing factors and toxins to further accumulate and cause tissue damage, thus increasing the risk for developing a chronic illness.

4. The physician's duty is to understand the patient as a whole, and to individualize preventive practices and natural treatments that optimize health through physical, mental, and spiritual balance. In clinical interactions, it is the intention of the nature cure doctor to remain present with the patient; to hear the narrative of the patient's illness and glimpse its essence; and to understand the patient's vision of health. Then, using his or her unique nature; individual knowledge; eclectic skills (touch, water, plants, mental healing); and self-knowing awareness and empathy; the physician acts as a guide and ally in that person's search for health.

## The Role of the *Vis Medicatrix Naturae* in Nature Cure

Naturopathic doctors rely on the fundamental law of healing: the body seeks to achieve balance and will do everything in its power to do so. Although the approaches used in nature cure are based on empirical healing methods that now are beginning to be supported by scientific research (via the Scientific Method) it still is clear that patients' healing comes from within.<sup>13,14,15,16,17,18,19,20,21,22</sup> This vitalist healing energy (the *vis medicatrix naturae*) is innate and is always working toward optimum health. Naturopathic doctors believe this vitalist energy strives to be in balance *with the external environment*, as well as *within the body*. The doctor's role is to support and empower patients within this healing journey.

In *The Natural Way to Health*,<sup>23</sup> Victor H. Lindlahr (Henry Lindlahr's son) illustrates this point when describing his father's life and practice at the Lindlahr Sanatorium. In one chapter, Victor describes a case in which the patient wants only to be rid of his symptoms, but is not interested in prevention:

... in our philosophy, prevention of disease and getting rid of a symptom are synonymous ... . There is ... (a) great principal involved in this (case); namely that disease, like health, is natural. Disease is the natural and inevitable consequence of certain causes. Simple as it sounds, this is an all-important concept, for most men and practically all doctors and healers regard disease as unnatural. Thus, disease is feared, and this very fear makes an intelligent consideration of it impossible ... . Mankind forgot what Hippocrates had taught — that it is the physician within who heals. All a physician

can do is to give counsel and guidance, seek the causes of disease, and help man to avoid them. Even today, among the vast majority of men, the belief remains that disease is something that just happens. So we haven't come very far, in reality. (pp. 8-9)

Louis Khune expressed a similar idea in *The New Science of Healing*<sup>12</sup> "...the 'new method' has proved so effective, that I can with certainty affirm that every disease, whatever name it may bear, is positively curable. I say, every *disease*, not every *patient* [editors' emphasis]. For when the constitution is too far undermined, and in particular when the system is permeated with poison ..., my method can, indeed, alleviate the pain, but not always save, or completely cure the sufferer" (p. 6). Although the development of contemporary, standard medicine also has relied on the basic healing principles of the body, the *vis medicatrix naturae* often is discounted in contemporary practice<sup>24</sup> and may be considered irrelevant, given the scientific advances that manipulate and control body systems in order to achieve rapid results.

#### What is the *Vis Medicatrix Naturae*?

In Latin, the word for 'life' is *vita* and from this the term, 'vitality,' is derived. In his book, *Nature Cure*, Henry Lindlahr lists as the first of his three primary causes of disease, "lowered vitality." The concept of vitality includes the capacity of a material living body to respond to stresses, and in that to change in some way that allows for adaptation to the stress. Vitality, therefore, includes the capacity to respond. Nature cure and today's naturopathic medicine is an expression of the vitalist tradition in medicine. Vitalism is based in the belief that life is not simply the outcome of random, material processes but that life originates as a vital principle, distinct from chemical and other material

forces. It is the principle that there is a force operating in the living organism that cannot be reduced to — or elucidated by — physical or chemical factors. It is the belief in the existence of some operating principle which is not found in inorganic nature and that distinguishes a living organism from simply a physical-chemical reality.<sup>25</sup>

Otis Carroll, ND, the eminent naturopathic physician from the mid-20th century, developed a method to measure vitality that he used to determine whether a patient could likely respond to stimulating treatments. If the patient's vitality was insufficient, he would not treat them. This was somewhat controversial at the time. In his book, *Healing Is Voltage*, Jerry Tennant, MD, noted that living cells operate at -25 millivolts, and if disturbed, increase their voltage to -50 mv in a healing process. This process is an aspect of inflammation. If the living cell cannot attain this voltage level, then chronic inflammation will ensue, in which the voltage level is only -30 to -40 mv. Dr. Tennant developed a device to measure this cellular voltage level, and thereby measure cellular vitality.<sup>26</sup>

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1) paraphrased from "Vitalism—A Worldview Revisited: A Critique Of Vitalism And Its Implications For Naturopathic Medicine"; Ian Coulter, PhD; Pamela Snider, ND; Amy Neil, MS, MAP), March, 2022

(2) Tennant, Jerry, ND; *Healing is Voltage*, 3rd ed., June, 2010. The Continuing Relevance of the Nature Cure Practice Model

## Why 'Nature' in Nature Cure?

What does 'nature cure' really mean? For those not accustomed to this term, it may seem somewhat strange – and they'd be forgiven for interpreting it as referring to a medical system that uses only 'natural' elements – or elements from nature. Yet, that's only partially the case. Today, the practice of employing therapies or modalities only because they're considered 'natural,' is known as

‘green allopathy.’ But nature cure is not about green allopathy. Rather, it is a practice of medicine based on the premise that living organisms are self-healing entities in nature. It’s a practice that has evolved over several millennia of observation: humans have observed certain regularities (constants) about the natural world around them, and some of these have been explicated as ‘laws’ of nature. Some, such as the law of gravity, have been further defined as immutable laws.

It is these unchanging aspects of nature that have held the ‘clues’ to models of humans as organisms in nature – still subject to the same laws as all other living organisms. Understanding these regularities in nature enables naturopaths to apply these same concepts to the human organism, along the continuum of illness and health.

**Nature cure is based on nature’s rules – the actions of nature that heal. These are not universal laws. We have no idea if they pertain to the entire universe or solar system, but they are certainly earthly based.**

Letitia Dick-Kronenberg, ND

In naturopathy, some of nature’s observed regularities have been codified as ‘axioms’ — statements or propositions regarded as being established, accepted, or self-evidently true. In 2021, 11 such axioms were articulated by James Sensenig, ND, and Letitia Dick-Kronenberg, ND, at the Naturopathic Medicine Institute (NMI) (Box 1). These axioms remain debated and may evolve over time, with

further thought and discussion within the profession. Yet, articulating (codifying) these concepts provides a general framework for understanding ‘how’ nature works. Within the care of a patient, therefore, when a physician asks, “Why is this happening?” – the naturopathic model gives some guidance to providing a therapeutic response.

Box 1 11 Axioms of Nature<sup>27</sup>

<i>Vis Medicatrix Naturae</i>	Dual Effect
Health as Balance	Law of Conservation of Energy
Suppression	Periodicity
Individuality	Wholism
Doctrine of Signatures	Intention
Minimum Dose	The Tenets of Nature

**How Are Nature Cure Therapies Applied?**

The chapters in this volume describe ways in which nature doctors of the past and those of today are continuing to guide and support the *vis medicatrix naturae*. Many of the modalities have been tried and tested in naturopathic clinical practice for more than 100 years. Diet and nutrition, for example, have been a part of healing from the time of Hippocrates. While not exhaustive, the topics here cover the most significant therapeutic practices in use today. Much of this knowledge in has been passed down empirically through nature doctors.

As we advance our knowledge of *what* we do, and *why* we do it, both clinical experience *and* scientific investigation will converge.<sup>[2]</sup> Often, the simplest and most basic healing

modalities achieve the strongest results. For instance, if we give a septic patient food and fill his stomach, the patient will become *more* septic. The fever will increase and the patient's infection will persist. If we fast this patient on water to give the digestive system a rest, the immune system will then be empowered to overcome the infection and the patient will improve.<sup>28,29</sup> This is known and supported by the experience of naturopathic practice. Father Sebastian Kneipp observed this phenomenon when providing his early water cure treatment:<sup>30</sup> "For 30 years, I have tried every single application upon myself,,," he said, "... and found myself induced to change my system, to loosen the strings, to descend from strictness to softness, from great to still greater softness. According to my present conviction ... he who knows how to apply the water in the plainest, easiest, and most simple way, will produce the most ...results." (p. 80)

## **The Clinical Rationale for Nature Cure Therapeutic Methods**

At the very heart of traditional nature cure practice is the objective to remove obstacles to healthy function — a process known as detoxification (the basis for the modern science of emunctorology). Toxemia theories are based on the concept that the waste products of metabolism, together with chemical toxins from food, drugs, and xenobiotic compounds, accumulate in tissues and cause cellular damage. Lindlahr described the accumulation of these 'morbid materials' as one of the primary causes of

disease.<sup>11</sup> The pioneers of nature cure emphasized the need to ensure good elimination through skin, lungs, bowels, and kidneys using therapies to stimulate the action of these systems and dietary modifications to enable the self-regulatory functions to operate.

The more recent elucidation of the physiologic mechanisms for detoxification via the liver and gastrointestinal mucosa<sup>31</sup> has corroborated many of the beliefs of the early nature cure advocates. The complex system of enzymes that constitutes the two phases of liver detoxification, as well as the third-phase transformations to take place in the gut, further elucidate the rationale for naturopathic dietary management of chronic and acute diseases.<sup>32,33</sup> Among the more effective means for allowing the body's own detoxification functions to 'catch up,' is the practice of fasting (assuming patients have the adequate vitality to undertake such a procedure)<sup>34,35,36</sup> Other nature cure detoxification modalities include various approaches to natural hygiene and to drainage (detoxifying the body using homeopathic complexes).

**At the very heart of traditional nature cure practice is the objective to remove obstacles to healthy function. The pioneers of nature cure emphasized the need to ensure good elimination through skin, lungs, bowels, and kidneys in order to stimulate the body's own detoxification systems**

Throughout the mid-20<sup>th</sup> century, naturopathic physicians in North America, Europe, and Australia created new

academic and regulatory institutions to rekindle and consolidate the naturopathic profession. Part of this process included reaffirmation of the guiding principles of naturopathy in order to: i) distinguish it from conventional biomedicine; ii) establish its foundation in the natural sciences; and iii) foster its integration into the larger biomedical culture. Building upon its historical lineage, it is increasingly apparent that nature cure philosophy and practice have never been more relevant than in the 21st century. Consider, for example, these observations:

- the most common causes of death in the US are related to modifiable behaviors<sup>32,33</sup>
- 70% - 90% of visits to primary care physicians in the US are related to the somatic effects of stress, which generally are more responsive to mind-body therapies<sup>33</sup>
- the leading risk factors affecting disability-adjusted life years (DALYS) were dietary habits, smoking, elevated body-mass index, elevated blood pressure and blood glucose, physical inactivity and alcohol use<sup>37</sup>
- the largest reductions in chronic disease prevalence are expected when individuals adopt and maintain lifestyles that include a healthy diet and regular physical activity<sup>22</sup>
- with more than 100 million people in the US coping with chronic disease, there is much evidence that current forms of conventional medical practice and organization of healthcare delivery are inadequate to

address the needs of these patients, while health expenditures soar and health outcomes decline<sup>38</sup>

- patient satisfaction with care in the US is the lowest among industrialized countries<sup>38</sup>

Although broad scientific consideration is given to the biological, psychological, social, and behavioral factors in understanding the pathogenesis of disease and improvement of human health, standard medicine has been slow to incorporate these into daily clinical interactions with patients. Indeed, at the beginning of the 21st century, biomedicine continues to move further into high-tech, costly diagnostic and therapeutic procedures to address the end-stages of chronic health problems (e.g., cardiovascular disease, cancer, diabetes) that are better prevented or managed through lifestyle changes.<sup>38</sup>

**Biomedicine has progressed to high-tech, costly diagnostic and therapeutic procedures to address the end-stages of chronic health problems that are better prevented or managed through lifestyle changes. Although today's health problems have increased and seem more complex, the answer for preventing and/or treating them remains the same.**

Today, it is widely accepted that diet and lifestyle underlie numerous chronic illnesses<sup>39,40,41</sup> — an understanding the doctors and founders of the naturopathic profession knew to be true after years of clinical observations. But the human condition hasn't changed much. The imbalances

are more extreme today, it seems. People live riskier lives. There is more drug use (legal and illegal), more alcohol use, more teenage pregnancy, more sexually transmitted diseases, more exposure to toxic chemicals and exogenous hormones, and an increasing number of infectious diseases unresponsive to medication. Food is devitalized even more now than in the early 20th century when Lindlahr and Kellogg wrote about the detrimental impact of white flour and sugar on human health. Perhaps some illnesses have become more prevalent, but nature cure physicians still are faced with the same challenges: to empower patients' innate healing capacity, and to assist them in incorporating constructive principles of thinking and lifestyle. Today's problems may be more difficult, but the answer is still the same.

Yet, while focusing on a patient's healing potential and recognizing the body's intelligent and ordered healing process, naturopathic physicians, by contrast, are able to successfully meet many of today's health challenges using uncomplicated nature cure methods that work *in concert with the body* to restore its homeodynamic health.

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## TOPIC 2

# The Fundamental Principles Underlying Nature Cure Methodology: Evolving ancient wisdom to a modern science

Jared Zeff, ND, LAc

**T**he original practices and theories of nature doctors and nature cure practitioners have evolved into the clinical theory of contemporary naturopathic medicine. Here, we look at the underlying ideas about nature and healing formed by these original doctors, and the articulation of these ideas in contemporary naturopathic clinical theory.

## An Abbreviated History of Nature Cure

According to Herodotus, the ancient Greek historian, the Egyptians were among the healthiest people in the ancient world because, “. . . they purge themselves every month, three days in succession, seeking to preserve health...for they suppose that all diseases to which men are subject proceed from the food they use.”<sup>1</sup> Even a cursory examination of ancient medical systems<sup>i</sup> reveals an emphasis on diet, digestion, and lifestyle as the *fundamental preservers* of health. Botanicals, hydrotherapy, prayer, and other techniques such as acupuncture, also were mainstays of therapeutic intervention. Upon analysis,

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<sup>i</sup> Ancient medical systems included classic Chinese medicine, Ayurvedic medicine, Native American medicine, Tibetan medicine, the medicine of Persia and Greece, and the monastic medicine of medieval Europe.

we can see a common understanding of the causes of illness and the restoration of health. This understanding developed from the observation of nature, and observing the natural process of illness and recovery.<sup>2</sup>

Throughout the histories of world medical systems, we see a common understanding of the causes of illness and the restoration of health that developed from observing nature, and the ordered processes of illness and recovery. The evolution from a supernatural view of disease to a naturalistic model contributed to the evolution in thinking about the role of nature in health and disease that eventually formed the foundation of the Nature Cure movement. <sup>2</sup> Nature cure evolved not so much as a challenge to orthodox practice, but simply in search of an alternative approach to healing that was truly health-giving.

The Nature Cure movement evolved mainly in 19<sup>th</sup>-century Europe, partly in response to a changing worldview that greatly influenced science and medicine. This collective shift in thinking throughout the Enlightenment period (≈1685-1815), was influenced by many thinkers of the time and reflected the ongoing debate about the relationship between man and nature, and ideas about nature's role that were called into question with the development of 'mechanistic' sciences (such as chemistry and physics) and natural philosophy.<sup>3</sup> At that time, the formal system of medicine in Europe was dominated by the misinterpretation of Hippocratic and Galenic medicine of nearly two millennia earlier, that advocated bleeding, purging, and diuresis (usually induced through the use of poisons, such as arsenic and mercury) for the natural

elimination of disease-causing toxins. In reaction to this, a medical movement began, not so much as a challenge to orthodox practice, but simply in search of an alternative approach to healing that was truly health-giving. This came to be called 'nature cure.'

## **The Fundamental Principles of Nature Cure**

The foundation of nature cure is based on the observation that it is the nature of living things to heal themselves. We can see this in a piece of land that has been disturbed by earthquake, fire, or human intervention. On a hillside, for example, after a disturbance disrupts the ground, thistles are among the first plants to grow. Not only do these initiate the process of re-establishing a stabilizing root system, but also their thorns create a barrier to further soil erosion. As the thistles grow for a few years and lay down an organic mat, they begin to be replaced by other plants, until the stable ecosystem that was once there is re-established.<sup>4</sup>

So it is with humans: when a disturbing factor (or several factors) disrupts the stable ecology of the body, illness occurs as an adaptive response. This occurs in a more-or-less predictable process, the intention of which is to re-establish the homeodynamic status of the organism. If the disturbing factors persist and overwhelm the organisms' adaptive response, the body will enter into a state of chronic reaction, or what we observe as chronic disease.

When a disturbing factor (or several factors) disrupts the stable ecology of the body, illness occurs as an adaptive response. In chronic disease, the chronic reaction (an overwhelmed adaptive response) continues the body's attempt to resist the disturbance, to restore homeostasis, and to repair the body, though with limited effect.

When confronted with illness, nature cure physicians (now known as naturopathic physicians) look for the factors that are disturbing normal health and seek to remove or to moderate them. In the example given previously, the thistles exemplify the **adaptive response** of the soil — in response to a disturbance, they act to restore soil health if the conditions for soil health are present. Similarly, for naturopathic physicians, the solution to illness is not simply to remove the 'thistles,' but first to understand *what caused* this adaptive response. If the thistles are removed prior to changing the conditions that stimulated their presence, we would expect them to recur until those conditions change. Likewise, as per the naturopathic Principles of Practice (*primum non nocere* and *tolle causam*),<sup>5</sup> any interventions employed by the naturopathic physician must not add further disturbance to the environment, but should be based on that which is capable of *re-establishing* the healthy ecology (terrain).

To do this effectively, physicians must understand the nature of health, including that which establishes it, as well

as that which disturbs it.<sup>ii</sup> This simple understanding creates a set of ‘instructions’ for nature cure physicians — it is a system of medicine we can characterize as ‘treating disease through the *restoration of health*’ by following a set of simple principles. Underlying these principles is a set of assumptions based on the observation of nature, and particularly, observing the disease and healing processes. The basic assumption is that nature is benign, ordered, intelligent, and wise. Nature can be trusted.

**The basic tenet held by nature cure physicians is that nature is benign, ordered, intelligent, and wise. Nature can be trusted.**

## **Fundamental Assumptions of Standard Medicine**

The Nature Cure approach to practice can be contrasted with the standard medical approach that operates via a different set of fundamental assumptions.<sup>6</sup> Standard medicine is not based on the study of health, but primarily on the study of disease.<sup>iii</sup> This involves determining the specific nature and name of the disease process that ails the patient and using various tools science and experience have provided to eliminate the disease symptoms. The fundamental assumptions of this approach may be expressed as follows:

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<sup>ii</sup> As originally articulated by [Louis Kuhne](#) in *The New Science of Healing* (1901) and by Henry Lindlahr in [Nature Cure: Philosophy & Practice Based on the Unity of Disease & Cure](#) (1913). In contemporary naturopathic clinical theory, these supporting and disturbing factors are referred to as the [Naturopathic Determinants of Health](#).

<sup>iii</sup> In 21st-century medical practice, some aspects of prevention are addressed by the specialties of Public and Community Health and Preventive Medicine.

- There are distinct disease entities that exist separately from the individuality of the patient. These disease entities can be studied. A pathologic mechanism is thereby established and can be studied and understood without reference to the specific person. Prognosis is based on the results of these studies.
- Disease entities can be identified, thereby explaining the cause of a person's suffering.
- Disease entities can be removed (or moderated or ameliorated) from the ill person through treatment, thereby restoring the patient to a state of health or relative health.
- Effective treatment is accomplished through evidence-based use of drugs, surgery, or another form of treatment to manage and reduce disease symptoms.

These assumptions generally are unquestioned and are not explicitly expressed or subjected to critical appraisal in the medical literature. Applied within the context of modern analytical science, these implicit assumptions form an elegant paradigm that has proven quite effective in easing suffering and prolonging life throughout the 20th and 21st centuries. However, in the latter part of this period, this paradigm also has revealed a significant weakness — its failure to effectively understand and to heal chronic disease as easily as it once eliminated, for example, certain serious infections with the introduction of antibiotics.<sup>7,8,9</sup> As we consider the paradigm of nature cure, we may understand the basis for this failure.

If nature cure is based on the restoration of health, then standard medicine is based primarily on the diagnosis and treatment of disease.

## **The Relationship between Nature Cure and Contemporary Naturopathic Clinical Theory**

The Nature Cure paradigm is based on restoring health, rather than on treating disease. Acute illness follows the sequence shown in Figure 1.<sup>iv</sup> Nature cure physicians do not battle the disease entity, but rely, instead, upon the healing wisdom, vital energies, and innate intelligence of the organism to restore homeodynamic balance and healthy function.

If we begin with the assumption of a state of normal health, we can see that disturbing factors (e.g., inborn, behavioral, socioeconomic, cultural, environmental, spiritual) may occur which can disrupt normal function, causing the body to react in an attempt to return itself to a state of normal health. One of the assumptions of nature cure is that health is the *normal* state of the body, given that the elements for healthy existence are present. The body is constantly striving to maintain itself in a normal state of healthy function, and what we call ‘disease’ occurs when various factors disturb this state. Disease is the body’s reaction to the disturbing factors. The work of the nature cure physician is to help patients create the conditions for health to exist within them and around them (where they can

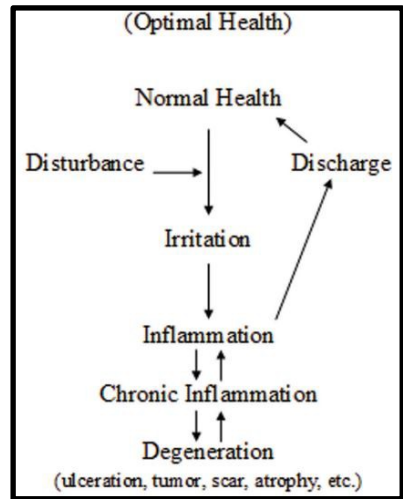
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<sup>iv</sup> In contemporary naturopathic clinical theory, this is referred to the [Process of Healing theory](#) (by Zeff, Snider & Myers, 2019).

affect the patients' environment) and if necessary, to stimulate, support, or enhance the mind, body, and spirit's restorative, self-healing mechanisms through a system of therapeutic interventions that are rationally applied in the appropriate order.<sup>10</sup>

One of the axioms of nature cure is that health is the normal state of the body, given that the elements for healthy existence are present. The nature cure paradigm is based on *restoring* health, rather than on treating disease.

When normal function is sufficiently disturbed, the body reacts in ways to set itself right (the adaptive response). Inflammation, for example, is the most basic of these reaction-states. Four observable aspects characterize inflammation: redness, heat, pain, and swelling. When tissues are injured or irritated, the cells secrete chemicals, such as histamine, prostaglandins, reactive oxygen species (ROS), nitric oxide (NO), various cytokines, and kinins,<sup>12</sup> and other components of inflammation. These stimulate,



**Figure 1** The Naturopathic Model of Healing.[vi] When confronted with acute illness, the body follows a healing process in order to restore health and to re-establish conditions that support health. In contemporary naturopathic clinical theory, this is referred to as the Process of Healing theory.<sup>11</sup>

Source: Zeff J, Snider P, Myers S. Naturopathic Model of Healing-The Process of Healing Revisited. Integr Med (Encinitas). 2019;18(4):26-30.

among other responses, local blood vessel dilation and increased blood flow to the disturbed area. They also cause blood vessels to become more permeable, so that nutrient-rich blood, fluids, oxygen, white blood cells, and other immune factors move into the disturbed area. The dilated blood vessels cause increased redness and the increased blood flow brings more heat. Movement of fluids into the area causes swelling. Some of these chemicals irritate the local nerves, alerting the consciousness to the presence of the disturbance. Because these phenomena are specifically manifested to restore health to disturbed tissues, then the body's normal response to inflammation is not the *problem*, but is its *solution* to the problem. Thus, using an anti-inflammatory medication to suppress the inflammatory process contravenes the body's attempt to heal. If the inflammation is suppressed over time without an effective attempt to remove the causative factors, then those factors remain. This continues to disrupt the body's physiologic and energetic systems, eventually exhausting its attempt to remove or reduce the disturbance via the adaptive inflammatory response.

### **Fever as an adaptive response**

Fever is a more generalized reactive state which recruits the entire organism's capacities for self-defence and restoration.<sup>12</sup> In a state of fever of higher-than-normal temperature, many of the body's cellular and physiologic mechanisms operate at a faster rate. White blood cells are more active, the rate of blood flow increases, and many of

the body's enzymatic activities accelerate. This is, again, the body's attempt to activate healing. There are occasions when fever is excessive or damaging, but these are rare and there are ways, if necessary, to reduce fever in these instances. But under normal circumstances, to disrupt fever with suppressive measures will weaken the body's ability to heal and to restore itself. Generally, these restorative measures (fever, inflammation) are followed by a period of discharge (e.g., diarrhea, perspiration, rash, vomiting, intense emotional expression, vaginal and urinary discharge, etc.) that resolves the disturbance and removes the products of the reactive processes from the body.

As Henry Lindlahr (one of the pre-eminent practitioners of nature cure) observed, this does not imply that nature cure physicians do not treat acute illness. They seek to treat the acute illness in such a way that the treatment *supports* the body's wisdom, using methods that facilitate balance or that stimulate self-healing processes (e.g., hydrotherapy, homeopathy, or non-suppressive botanicals). Certainly, there are times when inflammation presents a significant and immediate problem, and definitive intervention is required (such as in the inflammation of meningitis). Yet, even in these instances, nature cure physicians seek to treat the problem in such a way that avoids suppressing the physiologic healing effort while prioritizing the patient's safety. Although these types of problems usually can be treated without pharmaceuticals or surgery, nature cure treatments in these acute emergency situations generally

are restricted to times or places in which antibiotics or surgery are not available and in which the physician knows the patient's vital reserve may be able to overcome what Lindlahr called the 'forces of disease.'<sup>13</sup>, p. 80 The best example of this process of acute illness is the common cold.

**"By none of the statements made in this book do I mean to deny the necessity of combative methods under certain circumstances. What I wish to emphasize is that the regular school of medicine is spending too much of its effort along combative lines and not enough along preventive." Lindlahr, H., 1913. Nature Cure, p. 6.**

### ***Example: The common cold***

From a healthy state, several factors develop that disturb the body economy (including a possible viral factor). The person begins to perceive some degree of disturbed function: initially not feeling 'right,' or feeling tired or irritable. Then, a sore throat or other symptoms of inflammation develop, followed by a runny nose or a cough, and mucous which eventually is expelled from the nose and/or the lungs. The usual process takes 7-10 days, and then the body returns to a state of normalcy. This is why there is no cure for the common cold — the 'cold' is the cure.

Suppressing the physiologic process we call a 'cold' merely makes it more difficult for the body to process and remove that which is disturbing it. Nature cure physicians treat colds, and any acute disturbance, not by suppressing the

body's adaptive reaction to the disturbance, but by enhancing the its self-healing mechanisms using methods to enhance immune activity and support lymphatic drainage (e.g., via constitutional hydrotherapy and thoracic pump techniques),<sup>14, 15, 16, 17, 18, 19, 20</sup> and enhance the removal of toxins (e.g., via botanicals, such as yarrow and elder)<sup>21, 22</sup>, *lomatium*<sup>23</sup> or *echinacea*,<sup>24, 25</sup> and via short-term fasting or fruit and raw-food diets.

Importantly, the natural history of a cold does not begin with a viral exposure. If this were true, then most people would become ill when exposed to the new virus. But clinical experience indicates that this does not happen. The virus must enter a system in which the body's economy is *already disturbed*, usually by factors such as fatigue, accumulated toxins (from inappropriate diet or disturbed digestion), or the effects of emotional stress or trauma.

Viral exposure alone does *not* cause disease. The virus must enter a system in which the body's terrain is already disturbed — usually by factors, such as fatigue, accumulated toxins (from inappropriate diet or disturbed digestion), or the effects of emotional stress or trauma.

## Factors that Disturb Health

Let us examine the factors that disturb health (see Box 1).<sup>v</sup> At the top of this list would be inappropriate diet, weakened digestion, and lack of sufficient rest (factors that

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<sup>v</sup> In contemporary naturopathic clinical theory, factors that support and/or disturb health are referred to as the [Naturopathic Determinants of Health](#).

correspond to Lindlahr’s abnormal composition of blood, accumulation of toxins, and lowered vitality).

Box 1. Factors that disturb health & factors that support health

Mechanisms of Disturbed Function

- Stress
- Trauma (ACES, adverse childhood experiences)
- Toxic Exposure
- Loneliness
- Diet — excess sugar or other stressors
- Lack of exposure to nature
- Economic disparity

Mechanisms of Health-creating Function

- Positive environment
- Peaceful, loving childhood
- Belonging
- Exposure to nature
- Appropriate and sufficient diet
- Appropriate rest and exercise

Inappropriate diet or disturbed digestion results in increased generation of metabolic toxins in the gut. These toxins are absorbed into the bloodstream and may become a basis for chronic irritation and disturbance of function throughout the body. Added to this is a plethora of ingested toxins from a variety of environmental contaminants, making our bodies increasingly offended by toxic accumulations. This is compounded by an excess of devitalizing nourishment (such as coffee, alcohol), and by various drugs (including prescription, over-the-counter, and illegal and recreational substances), the presence of chronic diseases, medical interventions (either current or historical), lack of sufficient and appropriate exercise, psycho-emotional problems, and the difficulties of survival

in stressful modern times (including, chronic stress and lack of connection with others).<sup>vi</sup>

Given that these factors are found in most human beings, our bodies are bathed in a constant soup of stress-moderating chemicals, such as cortisol and adrenaline, that negatively affect digestion and other body processes. By understanding these disturbing factors, and the mechanisms by which these factors disturb physiologic and psycho-emotional function, nature cure physicians understand the factors required to encourage better health and so apply them.

Its life-saving advances notwithstanding, the basis of the standard medical approach to acute episodes is suppression. Medications suppress and control the body's reactions, which are commonly interpreted as the disease. Fever and inflammation are treated with suppressive medication, as if these states were the *problem* rather than an indication of its *natural solution*. The suppression of acute symptoms not only weakens the body's capacity to mount such reactions, but by doing so allows the toxic compounds to further accumulate until a state we call 'chronic disease' prevails. More potent suppressive medication may then be prescribed which further burdens the body's systems. Although these treatments may preserve life or ease suffering in the short-term, this

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<sup>vi</sup> These factors also correspond with Henry Lindlahr's primary and secondary causes of disease.

amounts only to *managing* the chronic disease, rather than curing it.

## ***Stimulating the healing process***

The work of the nature cure physician is to help patients create the conditions for health to exist within them and around them. For nature cure physicians, this involves implementing the following three basic steps.<sup>vii</sup>

**1. Establish the basis for health: identify and address underlying cause(s).** To accomplish healing, one must first identify the origins of the disturbance. This usually is achieved most dramatically through addressing the diet. This does not require absolute or perfect dietary improvements — incremental improvements can be effective by focusing upon three actions:

- ensuring dietary adequacy by providing all the necessary nutrients for health and healing, including the support of digestion, if needed
- ensuring a more healthful balance of food so that there is neither too much nor too little of particular nutrients
- identifying and removing reactive foods, if these are present, since these tend to increase the presence of toxicity

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<sup>vii</sup> In contemporary naturopathic clinical theory, these three steps have evolved to form the basis for the Naturopathic Medicine Therapeutic Order.™ Levels 1-3 of this algorithm stipulate general strategies that include many nature cure therapies to strengthen the terrain and prevent or rectify illness. These methods are a primary, low-force means of removing toxins from the body and establishing conditions to support a healthy terrain.

Then, the physician can identify stressful elements in the person's life (including the suppressive effects of drugs and other medical interventions, toxic and traumatic exposures, unhealthy relationships, and any other potentially disturbing factors) and provide counsel, while acting to reduce the effects of stress upon the body.

**2. Stimulate self-healing processes** using measures that are not suppressive or weakening. Initially, this may include applying general stimulation via constitutional hydrotherapy, because it is non-suppressive, counteracts the effects of stress on the digestive system, is believed to aid detoxification by increasing bloodflow through the liver and kidneys (as well as the stomach and intestines), and, simultaneously, is relaxing and tonifying.<sup>14, 15, 16, 26, 27, 17, 18, 28, 19, 29, 20, 30</sup> It is a profoundly healing treatment and may be used in the treatment of several acute and chronic diseases, ranging from infections to degenerative disorders. It can be applied to infants and older people, alike, with suitable precautions.

In most cases, therapeutic dietary changes — coupled with a simple herbal stomach tonic and constitutional hydrotherapy — may generate improvement. In many cases, this alone may achieve a positive response. To facilitate recovery of a particular case, however, specific stimulation of the healing potential also may be required. Whereas constitutional hydrotherapy provides general stimulation and is performed the same way in most cases, homeopathy and acupuncture also may be individualized

to each case to stimulate the healing potential or capacity of the individual. All of these therapies stimulate the individual's innate healing potential — they do not add anything of a toxic nature to a patient's physiologic systems.

**3. Evaluate the functional status of various systems and organs,** and, if necessary, support their specific recovery. This is the area in which botanicals may be most widely used. There are botanical medicines that will improve function in most systems of the body and many can be selected in various combinations to effect specific changes in body systems.<sup>31, 32, 33,34</sup>

### **The Importance of a Structured Order for Implementing Therapy**

A key concept of nature cure is the *order* in which the doctor's intervention is applied.<sup>viii</sup> A common mistake when applying an order to therapeutic interventions is to intervene initially at a level of higher force, principally by using botanicals or nutritional factors to treat specific tissues or lesions without attention to the first-, second-, and third-order tasks of removing causes, stimulating the self-healing mechanisms, and supporting organs or functions that may need it. If these first steps are not undertaken, clinical experience indicates that improvement is usually incomplete or transitory. **Giving due attention to**

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<sup>viii</sup> This essential order is now articulated as the [Naturopathic Medicine Therapeutic Order™](#) and is correlated with the six [Naturopathic Medicine Principles of Practice](#).

**the order of this process is a fundamental and imperative step to facilitate healing and recovery in patients.**

The topic of a therapeutic order (i.e., beginning with treatment of underlying cause) is the precise issue that confounds attempts by standard research methodology to validate many natural treatments. For instance, application of single botanicals or nutrients in double-blinded studies targeting pathology, without the comprehensive approach described above, often fail to demonstrate the effectiveness of these measures. That is, if you give the stomach tonics without first correcting the dietary errors that are the causative problems, you will not see profound or permanent improvement. Similarly, if you apply hydrotherapy or other stimulating treatments into a system that has not been prepared by removing causative factors, you will see a heightened reaction to the disturbing elements without the possibility of a resolution. An illustrative clinical example is the treatment of ear infections with antibiotics. The ear infections tend to recur as long as the body's susceptibility to the infection remains the same. Similarly, treatment of the ear infection with botanicals or homeopathic remedies may resolve the acute infection, arguably in a safer way, but the infections will recur unless the underlying dietary causes also are eliminated.

The topic of a therapeutic order (i.e., beginning with treatment of underlying cause) is the precise issue that confounds attempts by standard research methodology to validate many natural treatments.

### **The Link between Nature Cure and the Naturopathic Medicine Therapeutic Order™**

The Naturopathic Medicine Therapeutic Order™ is a multilevel framework that sets out the physician's priorities for treating any patient. The first level of the framework aims to establish conditions for the patient's health by supporting metabolism and helping remove obstacles to healthy function. The main nature cure therapeutic approach (introducing a healthier regimen) is addressed by appropriate diet, exercise, rest, and lifestyle guidance. The core therapeutic tools of nature cure – sunlight, air, water, exercise, rest, and fasting or dietary adjustments – comprise this first level.

The second level of the Therapeutic Order has the primary objective of stimulating the *vis medicatrix naturae* (the body's innate healing processes) for the individual needs of patients, based on their personal health history as well as constitution, blood type, genetic endowment, and other means of evaluation, such as food and environmental intolerances.

The third level of therapeutic measures is to provide physiological and energetic support using non-toxic resources, such as botanic or homeopathic medicines selected according to the criteria given above.

A comprehensive explanation of the Therapeutic Order is described by Finnell, et al.<sup>35</sup>

## ***The healing reaction***

When a patient is in a chronic or weakened state, and this methodology is followed, improvement almost always ensues. Removing or moderating disturbing factors, stimulating the self-healing mechanisms, and tonifying or supporting the body's normal functions, can lead to improvement. Yet, as vitality improves, suppressed reactions may reappear. When re-emergence of previous illness occurs, these recurrences also should be treated with non-suppressive methods.

As the body becomes stronger, the patient may re-enter an acute reactive state characterized by fever and a discharge. The arrival of an acute febrile state indicates that the body is mounting a curative reaction, referred to as a 'healing crisis' or 'healing reaction.' As this reaction progresses, healing is completed, usually with a discharge, and ultimate cure is attained. Patients (and their families) must be forewarned of these possibilities, or they may assume the treatment is not working or things are getting worse, and may then return to suppressive medication which defeats the possibility of healing. Nature Cure physicians are advised and trained to advise patients during such times, as should any primary care physician. Many palliative or non-suppressive treatments can be applied, if needed, to modulate the discomfort of a healing reaction.



**Figure 2.** The Seven-Level Naturopathic Therapeutic Order.<sup>[a]</sup>

Note: the level(s) of entry in the Therapeutic Order for individual patient care are selected to prioritize delivery of safe and effective care, the prevention of suffering and further degeneration, respect for patient preferences and values, and the preservation of life. © Zeff, J. L., Snider, P., & Myers, S. (2006); © Zeff, J. L., Snider, P., Myers, S., & DeGrandpre, Z. (2013); © Design by Finnell, J.S. (2019).

## From Ancient Wisdom to Modern Practice

Although there is no perfect system of healing, nature cure provides a protocol based on the observation of how healing occurs in nature. Following the principles of nature cure methodology can result in rapid, gentle, and permanent restoration of health. Today, its contemporary clinical application in naturopathic medical practice is supported by a framework of models and theories that reinforce the ideas of early nature cure practitioners. This has created a system of medicine compatible with (or in harmony with) the body's physiology that uses the simple remedies presented by nature. It is a comprehensive

system of medicine that relies mainly on non-suppressive treatments and, in doing so, honors the wisdom of the body.

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### TOPIC 3

## Terrain: The foundation in which optimal health is established

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**F**rom its earliest documented definition in 1766 (a piece of land), to its use in 19<sup>th</sup>-century medicine, ‘terrain’ is a term that has evolved in naturopathic medicine as a metaphor illustrating a holistic approach to human physiology. A clear understanding of this concept provides a link between the philosophy of nature cure and the rationale behind current nature cure therapeutics.

### The Philosophical Origins of ‘Terrain’ and Its Link to Nature Cure

As 19<sup>th</sup>-century nature cure practice evolved progressively into a formal community of practice,<sup>i</sup> it became clear that the nature cure approach to treatment coalesced around three therapeutic approaches — detoxification, depuration, and drainage — to achieve the goal of restoring and optimizing health. Practitioners of the time (i.e., supporters of the Hygiene movement, naturopaths, and regular physicians who favored ‘drugless healing’) advised patients and the public to modify lifestyle habits (diet, exercise, sleep, relaxation) in order to clear their physiology of the ‘morbid accumulations’<sup>1</sup> that led to health deterioration.

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<sup>i</sup> **Community of practice:** individuals who share a common expertise, concern or passion, trade or craft, and who participate in collective, interactive learning about it. (Smith, 2003, 2009).

It was within this transitional milieu of debate between the exact sciences and natural sciences that the term ‘terrain’ became increasingly prevalent in medicine. Today, the term illustrates a comprehensive, non-reductionist approach to the human body that remains fundamental to clinical theory for naturopathic physicians, who are advised that their interventions, “... must not add further disturbance to the environment, but should be based on that which is capable of re-establishing the healthy ecology (terrain).”<sup>2</sup> In contrast to the mechanistic, reductionist, and dualistic model largely present in biomedicine, optimizing health requires a more comprehensive approach to patients that includes accounting for all internal and external factors that affect the entire organism. Nature cure modalities — and their purpose for depuration, detoxification, and drainage — reflect this encompassing approach to the patient’s terrain.

### ***Evolution of the ‘terrain’ concept in naturopathic medicine***

As the philosophy of science (and consequent medical practice) continued toward a Cartesian, reductionist approach to nature and to living organisms, the concept of terrain provided an important *metaphor* by which nature cure physicians could model the human body as a much more comprehensive organism engaged in a *constant interchange* with its environment. In 1914, Henry Lindlahr introduced the model of the Upas tree (Fig. 1) that also illustrated the terrain concept.<sup>3</sup>



Constitution, on the other hand, has a broader definition in medicine, referring to, “the make–up or functional habit of the body.”<sup>5</sup> In 16<sup>th</sup>-century Europe, it referred largely to physical health and strength; however, by the 1580s, the definition expanded to include an individual’s temperament, mind, and character.<sup>6</sup> In the clinical theory of naturopathic medicine, ‘constitution’ is included as one of several determinants of health,<sup>7</sup> referring to both inborn and external factors that affect health.

Terrain, as a term used throughout Western languages, derived from the 12<sup>th</sup>-century Latin *terra* (earth) and *terrenum* (land or ground), evolving in the 18<sup>th</sup>-century to refer to a tract of land, including its physical features. The term was widely used by many early originators of naturopathic clinical theory as a metaphor for an individual’s physiologic makeup in combination with external environmental influences. Current naturopathic clinical theory uses this term in the Naturopathic Medicine Therapeutic Order™, Level 1: Establish the basis for a healthy terrain.<sup>8</sup>

## **Terrain Theory of Disease**

In Western medicine of the time, the term ‘terrain’ was associated with the idea that infectious disease results from changes to human health or to the ‘health of the land.’<sup>9</sup> In the 19<sup>th</sup>-century quest to identify a cause for infectious disease, this became known as the Terrain Theory (i.e., infectious disease results from the host’s weakened terrain,

including factors that increase the host's susceptibility to infection and degeneration).<sup>10</sup> This was opposed to the increasingly popular Germ Theory (infectious disease is caused by pathogenic microorganisms and is treated by targeting those microorganisms), supported by Louis Pasteur, among others.

Terrain theory generally was supported in Western medical practice until discoveries made possible by the microscope (allowing for visual identification of bacteria and other microbes) and a philosophical push in 19<sup>th</sup>-century Western medicine to more closely align medical practice with the physical sciences.<sup>11</sup> Terrain forms the central thesis of Henry Lindlahr's *Nature Cure* and supporters of terrain theory included many well-known scientists and naturopathic doctors. The debate between the Germ Theory and the Terrain Theory contributed to a longstanding schism in Western medicine that continues today.

The Terrain Theory/Germ Theory debate continues to divide medical practice. Libster summarizes the argument thus: "Béchamp, a contemporary of Pasteur, disagreed [with the Germ theory] and produced evidence of 'microzymas'—microbes that developed into pathogenic bacteria when exposed to fermentation within the body. Whereas Pasteur argued that healthy tissues were bacteriologically sterile, Béchamp showed that bacteria mutated (theory of pleomorphism) and could originate *within* the body, that is, the inner terrain."<sup>12</sup>

## **Terrain in current naturopathic practice**

### ***Components of terrain***

In current naturopathic clinical theory, ‘terrain’ is conceptualized comprehensively as a layered mosaic composed of many factors that affect health (Fig. 2) including:

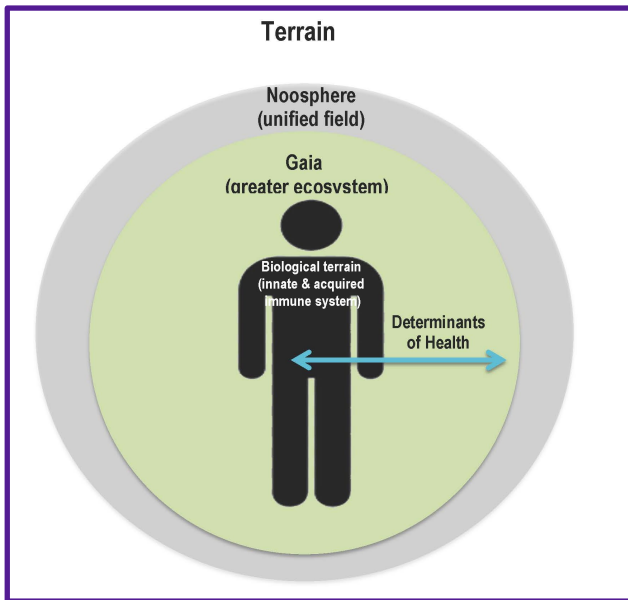
- the Naturopathic Medicine Determinants of Health,<sup>8</sup> which encompass the broader ecosystem (Gaia) and noosphere (the unified field), including all components that comprise an individual’s holistic presentation and that either increase susceptibility to disease (e.g., inborn and constitutional factors; physiology; external environment; diet/nutrition; habits of living; spiritual, psychological, and emotional health; noosphere; and unified field) or that support resilience to disease.
- biological terrain (or ‘bioterrain’) — a subset of terrain, that refers specifically to the human immune system (innate and acquired), and its component tissues, cells, molecular structure, and signaling pathways, including MALT (mucosa-associated lymphoid tissue), GALT (gut-associated lymphoid tissue), and other tissues and organs.

### ***Features of terrain***

Terrain is characterized by two main features:

- interdependent physiologic systems that communicate via a common pathway — this is a common concept in many traditional and indigenous systems of medicine, and is now also being elucidated in contemporary Western scientific research.<sup>13</sup>

- continuous interaction between an individual's internal and external environments: there exists a continuous, multidirectional influence physically, emotionally, psychologically, and spiritually between the determinants of health and the bioterrain that can either promote or disturb the homeostatic/allostatic balance of terrain and consequently either support health or increase one's susceptibility to illness.



**Figure 2:** In naturopathic clinical theory, 'terrain' is a multilayered concept composed of four **permeable, dynamic, and interacting** levels: the Naturopathic Medicine Determinants of Health, the biological terrain (the immune system), the larger ecosystem (Gaia), and the unified field (noosphere). Each layer influences and continuously interacts with the others. It is the balance among these components that determines the trajectory toward health or illness within individuals.

This interdependence among internal systems — and between these systems and the external environment — underlies the naturopathic clinical concept that treating the anatomical areas most amenable to therapeutic intervention [e.g., microbiome, gastrointestinal tract (GIT), and gut-associated lymphoid tissue (GALT)] may have widespread effects on many different pathologies.<sup>14,15</sup> In naturopathic clinical theory, disease occurs when terrain is weakened and/or imbalanced by:

- Autointoxication: the process Autointoxication is the process of poisoning by a substance that has been produced *within* the body (also known as ‘autotoxemia’ or ‘endogenous toxicosis’).<sup>16</sup> The link between autointoxication and disease has existed in medicine since the writings of Hippocrates. Today, autointoxication is considered a *disease state* caused by the, “... accrual of contaminants produced inside the living organism.”<sup>17</sup> Accrual of toxins results from disruption in the dynamic balance between an individual and the internal and external environments (referred to in Fig. 1), and can include self-poisoning by endogenous microorganisms; absorption of metabolic wastes; decomposed intestinal matter; or by accrual of environmental contaminants, such as heavy metals; persistent organic pollutants (POPs); insecticides, herbicides and fungicides; volatile organic compounds (VOCs) and endocrine-disrupting chemicals (EDCs) such as phthalates.

- **Toxemia:** the condition Toxemia is defined as, “the condition resulting from the spread of bacterial byproducts through the bloodstream; a condition resulting from metabolic disturbances (e.g., toxemia of pregnancy, alimentary toxemia, etc.); or a group of metabolic disturbances occurring in pregnant women, manifested by preeclampsia and eclampsia.”<sup>18</sup> ‘Alimentary toxemia’ refers to the bacterial degradation of substances passing through the intestine and absorbed into the bloodstream, primarily the byproducts of poorly digested food materials subjected to bacterial metabolism. Naturopathic clinical theory maintains that toxemia results from a disrupted balance between the individual and the internal and/or external environment. In this context, toxemia refers to the accumulation of normally excreted substances (including free radicals),<sup>19</sup> which leads to suboptimal function or outright dysfunction if not cleared effectively.<sup>20</sup> Toxemia increases the susceptibility of the terrain to the development of both acute and chronic disease.<sup>21</sup>

**Toxemia increases the susceptibility of the terrain to the development of both acute and chronic disease.**

## **What Is the Relationship among These Concepts and Nature Cure Therapeutics?**

Current naturopathic clinical theory is based on the Unity of Disease and Treatment<sup>22</sup> and the Process of Healing theories. These theories are operationalized in clinical practice using the Naturopathic Medicine Therapeutic Order™. The Therapeutic Order is a structured algorithm that serves as a conceptual ‘roadmap’ to approaches and interventions that support the patient’s terrain (thereby reducing the susceptibility for dysfunction) and provide a level of therapeutic strength that accommodates the patient’s individual presentation. Levels 1-3 of this algorithm stipulate general strategies to strengthen the terrain and to prevent or rectify illness. These strategies include the nature cure therapies that focus on the three fundamental requirements to restore the terrain to health: drainage, depuration, and detoxification. In contemporary naturopathic clinical practice, these approaches are the primary, ‘low-force’ means of removing toxins from the body and establishing conditions for health. For this reason, many nature cure methods focus on the emunctories. Table 1 provides a birds-eye summary of the relationship among these fundamental concepts and nature cure methodologies, illustrating nature cure’s direct relevance to contemporary naturopathic approaches to acute and chronic illness.

**Table 1** The relationship among nature cure therapeutic goals and its applied modalities.<sup>ii</sup>

What are the primary causes of disease?		Accumulation of waste matter Abnormal composition of blood & lymph Lowered vitality
Where does dysfunction occur?	➔	Terrain
Why apply nature cure therapies — what is the goal?	➔	Support recovery of organs & systems Establish a basis for health Stimulate self-healing processes
What is the clinical rationale for applying nature cure modalities?	➔	Drainage Detoxification Depuration
What nature cure modalities are used to achieve this clinical rationale?	➔	<ul style="list-style-type: none"> <li>• Constitutional hydrotherapy</li> <li>• Movement (exercise, yoga, etc.)</li> <li>• Colonic hydrotherapy</li> <li>• Breathing therapy</li> <li>• Light therapy</li> <li>• Sauna</li> <li>• Manual therapies (e.g., lymphatic pump, visceral manipulation, myofascial release)</li> </ul> <ul style="list-style-type: none"> <li>• Nutrition &amp; diet</li> <li>• Botanicals</li> <li>• Pelotherapy</li> <li>• Halotherapy</li> <li>• Counseling / psychotherapy</li> <li>• Homeopathic drainage</li> </ul>

It is the comprehensive model and metaphor represented by the term ‘terrain’ that clarifies the clinical purpose(s) and goal(s) underlying nature cure modalities and approach to

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<sup>ii</sup> In 1914, Henry Lindlahr, MD, published *Nature Cure: Philosophy and practice based on the unity of disease and cure*, in which he identified these three elements as the primary causes of disease.

treatment. Importantly, the purpose of the main nature cure therapeutic approaches — detoxification, drainage, and depuration — is not limited only to ‘cleaning house,’ so to speak. According to Lindlahr, it also prioritizes *revitalizing* the terrain, to thereby strengthen its own ability to resist disease:

Nature Cure endeavors to in-vigorate the system, to build up blood and lymph on a normal basis and to purify the tissues of their morbid encumbrances in such a way as to establish natural immunity to destructive germ activity. Everything that tends to accomplish this without injuring the system by poisonous drugs or surgical operations is good

Nature Cure treatment.<sup>1</sup>, pp. 23-24

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## TOPIC 4

# Central Nature Cure Concepts: Depuration, detoxification, and drainage

Dickson Thom, DDS, ND

## Terminology and Definitions

In current terminology, the terms ‘depuration, detoxification, and drainage’ generally are used interchangeably to refer to similar processes with a common goal: to remove toxins from the body.<sup>1</sup>

Although ‘detoxification’ is the term most widely used to refer to all three processes, in naturopathic practice, ‘drainage’ (or biotherapeutic drainage) refers to, “the use of low-potency homeopathic medicines or combinations to stimulate specific cellular and tissue detoxification”<sup>2</sup> that “stimulates or enhances the process of detoxification.”<sup>1</sup> Following, are additional, in-depth descriptions of these three terms.

**Depuration:** like many terms used throughout the history of medicine, the term, ‘depuration,’ first appeared in the early 1600s<sup>3</sup> as an adaptation from the 19<sup>th</sup>-century French, *degorgeois*. Most sources define the term as referring to the act of cleansing, purifying, or cleansing from impurities.<sup>4,3</sup> Although it was widely used in medicine during the 18<sup>th</sup> and 19<sup>th</sup> centuries to refer to cleansing of impurities from the blood and other fluids of the human body,<sup>5</sup> it is more widely used in the 20<sup>th</sup> century as a process used to clean impurities from shellfish, particularly mollusks.<sup>6</sup>

**Detoxification:** a concept that has been utilized by physicians for centuries. Remedies that promoted violent purging via vomiting or diarrhea were used to ‘drive out the ill-humours,’ as they were thought to be. However, since naturopathic medicine follows the principle, ‘first do no harm’ (*primum non nocere*), it has abandoned types of therapies that would make a patient violently ill.

Nevertheless, it is common to practice techniques that permit internal cleansing and removal of toxic debris that has accumulated from aberrant physiologic reactions or (more commonly) from over-exposure to xenobiotic compounds the body has been ineffective in eliminating. Techniques commonly used today include diet changes, hydrotherapy (including colon hydrotherapy), herbal medicines, and saunas.

**Drainage:** in the late 1800s and early 1900s, a group of French, Swiss, and German physicians promoted the theories and therapies of *drainage*. The father of modern-day ‘drainage’ is credited to be Antoine Nebel, MD, (1870-1954), a French medical doctor and homeopath who practiced during the early 20th century. As described by Nebel and written by Bernoville in his text, *What We Must Not Do in Homeopathy*,<sup>7</sup> the theory of drainage is to free the organism from morbid energies. Drs. Nebel and Bernoville observed in practice that, in many patients, a single homeopathic remedy was unable to produce a cure. Bernoville described organisms as being composed of many spheres and believed a single remedy may not be

able to act on all spheres. He wrote that for each pathological case, there existed a *similimum* and many similia (or satellite) remedies. He observed that the similia remedies prepared the organism, so the *similimum* remedy could later be applied without aggravation and thus allowed to act more rapidly and deeply. This concept suggested that the *similimum* could be helped by an application of similia remedies.

**Bernoville's definition of drainage was:**

"The theory of drainage is, therefore, before all a theory of purification of the intoxicated organism that shows symptoms which may be classified according to the successive spheres of the organism and the disappearance of these symptoms cannot be caused in a complete and rapid manner but by the application, generally, of many remedies simultaneously or successively.

Thus the theory of drainage consists in preceding the principal indicated remedy by the application of one or more satellite remedies with the aim of facilitating the toxic elimination in a given morbid state, to prevent aggravation and to obtain more rapid and lasting results." <sup>7</sup>

As an example, Bernoville described a tuberculous patient, for whom *Pulsatilla* may be given as a drainage remedy before the *similimum* remedy, *Calcarea carbonicum*; or in a febrile condition, *Belladonna* may be the satellite remedy for *Calcarea carbonicum*.

Drainage is not just a theory, but has become an essential therapy in clinical practice. Simply stated, it is a process for detoxifying the body by opening the emunctories and then discharging the toxic accumulations. In reality, it is a

complex process that provides a support for natural progression and maturation throughout life. Drainage is concerned with the processing and integration of all the events, information, and substances we encounter, whether or physical or psychoemotional events. It also is concerned with maintaining a delicate balance within an individual. When this balance is not established, a disease condition develops, often with a presentation of physical signs and symptoms. When this balance is interrupted by the failure to discern self from non-self, to assimilate or properly integrate incoming information, substances, or events, patients develop signs and symptoms indicating an imbalance.

**Drainage is a complex and comprehensive process that has become an essential therapy in clinical practice. It is one approach that opens the emunctories to detoxify the body by integrating all physical and emotional events that may underlie the dysfunction.**

## **The Role of the Emunctories in Detoxification and Drainage**

An emunctory is any tissue or organ that is capable of allowing excretions to leave the body. If the emunctories are freely able to discharge the toxins, the patient will be less likely to experience an aggravation during the healing process. A severe healing crisis will be avoided, because the vital force will have a way to remove any released toxins — either physical, psychological, or emotional. If a patient does have an aggravation or a healing crisis, it often is

because the emunctories are not functioning normally. That is to say, the body has reached a state in which it is incapable of removing adequately all the metabolic endogenous wastes and any accumulated exogenous wastes. In addition, this state may occur because the process of detoxification is happening too quickly. Aggravation (the healing crisis) can be avoided if the pace of detoxification does not exceed the capacity of emunctories to excrete toxins from the body. In other words, it is of primary importance, before and during all other detoxification-depuration procedures, to open these pathways and keep them open throughout the healing process.

**If the pace of detoxification exceeds the capacity of the emunctories to excrete toxins, an aggravation (healing crisis) may occur; therefore, it is very important to open the emunctories before and during all other detoxification-depuration procedures.**

When the natural excretory system is blocked or inadequate for normal metabolic catabolism, patients develop a condition (an illness) — often an inflammatory condition. When the natural four primary emunctories — the skin, GI (intestines), lungs, urinary tract (kidneys and bladder) are inefficient, then using a remedy with affinity for one of these specific tissues can enhance the overall healing process by rendering another therapy more effective and helpful. While by definition, the liver, stomach, and pancreas are not tissues that permit removal of wastes

to the exterior of the body, they perform many essential functions in the maintenance and functioning of the other emunctory tissues.

### ***Primary vs. Secondary Emunctories***

Different organs and tissues are responsible for helping the body remove waste products and toxins. The key excretory tissues include blood and lymph. According to classical Chinese medicine, the kidneys have control over all the primary excretory organs: solid waste is eliminated through the intestines, liquid via the bladder, gases through the lungs, and sweat through the skin.

Within normal physiologic processes, the body's cells derive nutrition from metabolism and absorption of food in the small intestine. This process sends chyle and nutrients into the circulatory system (blood and lymph). All cells also produce waste that must be eliminated from the body. During the elimination process of cellular wastes, the bloodstream is the medium that transports the toxins. The blood then circulates through the liver which filtrates and detoxifies it. Once the liver has metabolized the wastes, they are circulated to the main excretory organs.

Within a pathologic process (or, more appropriately, an *adaptive* physiologic process), insufficient elimination causes the concentration of various toxins and toxic metabolites to increase in the blood. When the primary excretory tissues operate ineffectively, the secondary excretory organs are called into action. These include

various mucous membranes (urinary, intestinal, bronchial, pulmonary, genital, and skin). If the removal of toxins through the secondary emunctories is suppressed by inappropriate care, it is possible that the normal physiology will never be able to return the organism to a state of health. With repeated suppression, it may be expected that toxins will continue to accumulate in the tissues and lead to more serious disease. Cystitis, diarrhea with blood and mucous, sputum, genital infections, and eczema are examples of pathology or abnormal physiology that may arise if the emunctories are unable to function optimally.

**Physiologic signs that may arise with suboptimal emunctory function: cystitis, diarrhea with blood or mucous, sputum, genital infections, and eczema.**

To begin the process of healing, it is always important to begin by ensuring that all the primary emunctories are able to discharge toxins to the outside of the body. For example, when treating skin conditions, always begin by first ensuring the primary emunctories are open and capable of discharging toxins. In other words, purification of the main excretory organs is critical to the success of any treatment using drainage. Once this has been established, you can treat the skin during the second phase of treatment.

## ***Types of toxins***

Dr. Gerard Guéniot (1946 – 2009), a French medical doctor, provided the following descriptions of toxins to help distinguish which remedies (therapies) may be the most effective in managing a patient's health.<sup>8</sup>

**Glue (mucous, fat-soluble substances)** These toxins are not water-soluble. They are biotransformed by the liver in Phase I and Phase II pathways and eliminated in the intestines or sebaceous glands and, if the emunctories are insufficient, by the bronchioles and uterus (creating a chronic or intermittent leucorrhea). Patients with glue toxins also will commonly have hormonal problems.

**Crystals** These toxins are water-soluble, and therefore bypass the liver pathways. The toxins are eliminated by the urinary tract (kidneys) and the skin via sweat glands and, if the glands are insufficient, by mucous membranes. Their origin may be from food: protein (excesses of meat, dairy, eggs, legumes); refined foods (sugar, candy, desserts); and acidic foods<sup>9</sup> (foods with a pH of 4.6 or lower, such as dairy products, seafood, processed snacks, carbonated beverages). Pain is the main symptom patients feel during the elimination of crystals (e.g., uric acid in gout). It is important to decide where the toxins are and which kind they are. For treatment, one would treat either the liver and sebaceous glands, or the kidney and the sweat glands.

## ***Location of toxins***

Toxins are either circulating or deposited and impregnated in the tissues, or deep into the connective tissues.

**Circulating toxins** always appear first in the blood and lymph. The liver, intestines, kidneys, and lungs are needed to eliminate toxins from the blood. Blood-borne toxins (as opposed to lymph toxins, which are deeper) are easier to eliminate than the impregnated toxins. It is always necessary to remove toxins from the blood first, thereby creating a space for organ/tissue toxins to move into. Toxins are deposited layer by layer. So, old toxins are deepest (impregnated toxins) and newer toxins are more superficial (circulating toxins).

**Impregnated toxins** cannot be eliminated until circulatory toxins are first removed. These toxins must be removed through the blood, once the blood has been cleared of circulating toxins. It takes a long time to eliminate these toxins, unless you can force them from the tissues with specific therapies, such as fasting, saunas, and hydrotherapy (hot and cold) that can help liberate the toxins from the deep tissues.

### **Therapies: Extracellular vs. Intracellular**

German physician and dentist, Helmut Schimmel, MD, DDS, created the VEGA (Vegetative Reflex Test or VRT) method in 1978<sup>10, 11,12,13</sup> This is a bioenergetic testing technique, postulating that certain medicinal products act at different levels in the extracellular space or in the intracellular space.

A return to health involves therapies that must address both these areas.

### ***Extracellular Matrix: Composition***

The extracellular matrix (ECM) is a complex structural entity surrounding and supporting cells in mammalian tissues.<sup>14,15</sup> The ECM often is referred to as 'connective tissue' and is composed of three major classes of biomolecules:

- structural proteins: collagen and elastin
- specialized proteins: e.g., fibrillin, fibronectin, laminin
- proteoglycans: these are composed of a protein core to which long chains of repeating disaccharide units [glycosaminoglycans, (GAGs)] are attached, forming extremely complex, high-molecular-weight components of the ECM

### ***Extracellular Matrix: Functions***

**Transport:** The sponge-like, viscous matrix acts as a transport medium to move materials into and out of cells. These include electrolytes, metabolites, dissolved gases, trace elements, vitamins, hormones, growth factors, enzymes, carbohydrates, fats, and proteins.

**Storage:** It serves as a storage medium for all materials transported by the matrix, especially growth factors and toxins. The ability to store toxins enables it to serve as a buffer. An acute toxic exposure may be stored temporarily and then released at a rate that permits the detoxification

organs to handle it. This reduces the immediate stress on the liver and kidneys, and all other tissues such as the thyroid gland, pancreas, and CNS. Abnormal concentrations of certain growth factors may contribute to cell proliferation and to oncogenesis.

**Intercellular communication:** Every cell has the ability to self-destruct by apoptosis, unless specifically instructed not to do so. The 'do or die' messages depend on the cell's contact with the extracellular matrix. This contact also allows the cell to receive information to regulate many of its metabolic functions, including appropriate cell proliferation, as well as activation and inhibition of the intracellular production of proteins, hormones, and numerous other metabolites.<sup>16</sup>

It is believed that cancer cells avoid to some extent the regulatory effect of contact with normal cells by separating themselves from full contact with the ECM. Cancer cells may in part avoid the 'do or die' messages via 'noise' generated by enhanced, self-generated cell signals.<sup>17,18,19</sup>

It also is postulated that the ECM is necessary for the propagation of 'living systems information' and is dependent on a healthy ECM. It is postulated that the effect of a homeopathic remedy or acupuncture needles is due to effects transduced through the matrix.<sup>20,21,22,23,24</sup>

## ***Extracellular Matrix: Damage***

Damage to the ECM can occur from exposure to free-radical oxidation, arising from various toxic compounds and from chronic inflammation.<sup>25,26,27</sup> When this occurs, the functions listed above become inefficient. Because many lifestyle choices result in increased free radical formation,<sup>28,29,30,31,32,33,34,35,36,37,38,39,40</sup> they also result in ECM damage. These include poor diet choices, insufficient sleep, sleep at the wrong time of day, stress, overwork, lack of exercise and movement, insufficient clean water, overwork, and inefficient stress management techniques. These factors can create stress and thereby create an increased potential for free-radical damage, potentially leading to chronic inflammation.

The everyday realities of contemporary life generate constant exposure to low-level toxins, including physical, mental, and electromagnetic toxins. It is hypothesized that poor lifestyle choices lead to reduced efficiency in excretion of these toxins from the ECM. Over time, the ECM may become saturated and damaged, which in turn leads to deterioration in the connective tissue. This results in chronic inflammation, fatigue, and insufficient tissue repair; all of which may lead to chronic degenerative diseases, including cancer, heart disease, and innumerable autoimmune conditions, to name but a few.

## ***Addressing Intracellular Imbalance***

Many commonly used therapies in naturopathic medicine are believed to be helpful for detoxification of the extracellular space, but may be less capable of addressing the intracellular space where the imbalances may originate. It is felt that the extracellular therapies will clear this space and reduce the concentrations of ROS (Reactive Oxygen Species) and RNS (Reactive Nitrogen Species), the presumptive deleterious agents. Toxins are then able to diffuse down the concentration gradient and into the extracellular space to be eventually removed from the body. Table 1 provides a partial list of some commonly used therapies and areas in which they are presumed to be effective.

## **Drainage therapies address toxic accumulations**

Drainage therapies are designed to support the body in processing toxic accumulations of various origins (physical, spiritual, and psychoemotional). Energy medicine is essential to restore patients to an optimal level of health. Thus, flower essences, homeopathy, acupuncture, cranio-sacral manipulation, and other therapies may be used to promote the restoration of health. Any other hands-on therapy that is capable of transmitting energy to the patient, such as massage, visceral manipulation or acupressure, may also be an essential part of practice to support patients. Naturopathic physicians commonly use a combination of these therapies. It is not a question that one is better than another; it usually is a matter of choice and

preference, because when utilized according to the principles of naturopathic medicine, they all have the capability of returning patients' physiology to homeodynamic equilibrium.

**Table 1** Nature cure therapies that may assist depuration, detoxification, and drainage

<b>Process</b>	<b>Principal modalities</b>	<b>Examples</b>
Detoxification (Extracellular):	Physical therapy: structural integration postural re- education	Osteopathic Chiropractic Feldenkrais Alexander Technique Myofascial release
	Lymphatic drainage	Contrast bathing Friction salt rubs Sitz baths
	Hydrotherapy	Constitutional hydrotherapy Sauna Steam bath
	Dietetic control	Constitutional hydrotherapy Sauna Steam bath
	Applied nutrition	Enzymes Vitamins Minerals Chelation
	Biochemical	Tissue salts Organotherapy Oligotherapy Gemmotherapy
Drainage (Intracellular):	Energetic	Therapeutic touch Homeopathy: single remedies, nosodes, complexes, flower essences Acupuncture
	Preliminary preparation of organs and tissues for more targeted stimulae	Brief cleansing diet programs 5/2 raw food programs, etc.

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