
How Illness Happens: An Introduction to the Biological Terrain

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The Biological Terrain



1. Parenchymal (organ tissue) cells
2. Cellular basement membrane, linking the cells with the matrix/ground substance
3. Matrix/ground substance, or the “molecular sieve,” linked to the endocrine (glandular) system via capillaries and to the central nervous system (CNS) via the nerve axons. The nerve axons end blindly in the matrix. The endocrine system and CNS meet in the brain, in the hypothalamus.
4. Nerve axon, sending information away from the cell
5. Collagen
6. Mast cell, which responds to injury or inflammation in the tissue cells
7. Capillary
8. Lymphocyte (white blood cell)
9. Elastin (similar to collagen)
10. Fibroblast, the metabolically active center, reacting to all information input with appropriate ground substance synthesis

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MOST OF US are used to thinking that symptoms and illness are the same thing. The fever and aches *are* the flu. The tumor *is* the cancer. When the symptoms go away, we consider the illness “cured.”

But symptoms are not, in fact, the illness. And suppressing them usually makes matters worse in the long run, leading to more complex and detrimental conditions. This is because symptoms are more than signs of illness. They are also signs that your body is trying as hard as it can to heal.

Your body was designed with an amazing ability to perpetually renew and regenerate, or **regulate**, itself. It is a **self-regulating system**. To suppress symptoms, then, is to sabotage your body’s ability to regulate. In fact, treating symptoms while ignoring their underlying causes is to forever be taking two steps back for every one step you take forward.

True healing involves supporting your body’s self-regulating mechanisms. This is something that begins and ends with what’s known as the **biological terrain, ground system, matrix** or **milieu**.

The Milieu: Your Body’s Internal Environment

IN SIMPLEST TERMS, the biological terrain is your body’s internal environment. It consists mostly of the sea of intracellular fluid that surrounds each cell of your body. Nerve

endings jut into it here and there like little peninsulas. Lymph vessels extend through it like floating pipelines. Connective tissue cells like buoys dot the surface. And just as oceans teem with fish, algae and other life forms, this intracellular fluid teems with enzymes, amino acids, bacteria and other living substances.

Keep this picture in your mind's eye for a moment and see how the peninsulas, buoys, fish and such are all in contact with the water. Consider how the water joins them all together in a singular landscape. Everything is connected.

The biological terrain connects all the parts of your body in a similar way, all the way down to the cellular level. The totality is what's called the **Basic Regulative System**, in which all elements can and do affect each other.

Every day, we see examples of the fact that all actions, no matter how small, can have large and wide-ranging effects. Think about the hole in the ozone layer that continues to widen above the South Pole. It wasn't formed by causes directly below it but by toxins emitted from distant regions around the globe. Likewise, weather events such as hurricanes have grown much more severe due to the effects of global warming. Again, pollutants from distant points around the world are seen to have brutal local effects. That our world is best understood as a single, living, self-regulating organism is called the **Gaia Theory**. According to the theory, a butterfly fluttering its wings in Australia can affect the weather in the Caribbean.

We can see the Gaia Theory at work in our own bodies, as well, via the Basic Regulative System, mapped out in the diagram below. The illustration shows the major body systems that affect—and are affected by—the state of your terrain: the ground, circulatory, lymphatic and endocrine systems, and the vegetative nerves, extracellular fluid and parenchymal cells. These, in turn, are joined along, regulated and assisted by the

three key cybernetic “poles” shown at the top of the diagram. (“Cybernetic” describes their ability to communicate and control biological functions.) Each pole guides your body’s biological processes via specific physiological components:

Hormonal Pole

circulatory system; adrenal, thyroid and pituitary glands

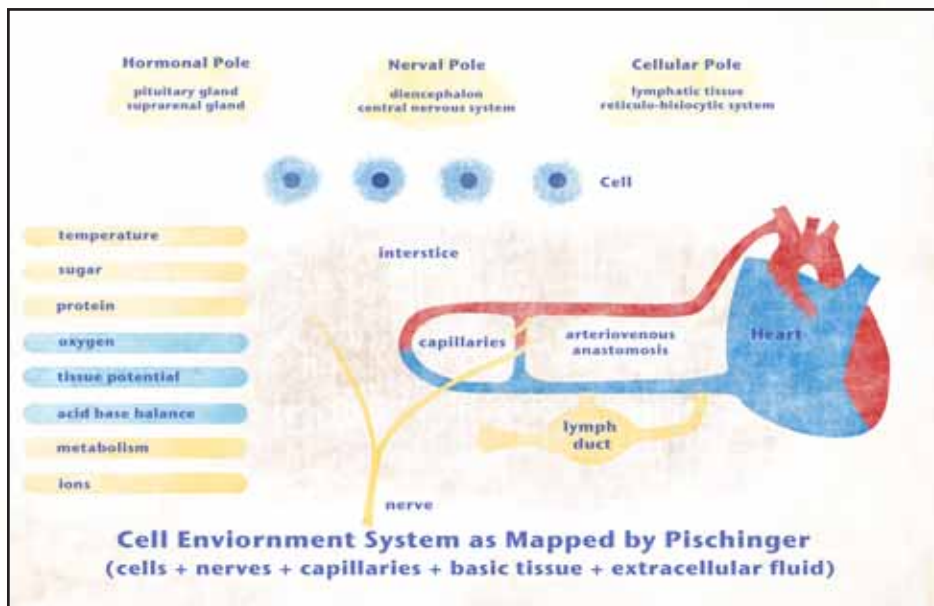
Neural Pole

central nervous system; the autonomic mesh of vegetative nerves; hypothalamus

Cellular Pole

lymphatic system, including the lymph nodes and other tissues associated with the reticuloendothelial system (the system of cells that remove waste and other toxins from your body), fibrocytes (cells that give rise to connective tissue) and white blood cells

The biological processes listed on the left of the diagram all affect and are affected by these elements.



From a dental perspective, if you have an infection, root canal teeth, implants, mercury or other heavy metal accumulations from dental restorations or other disturbances, the effects will be felt all through your body. The disruption of energy in your mouth has both a local effect—an interference field—and a systemic effect, just as a rock thrown into a lake sends ripples far beyond what the eye can see, all the way to the most distant shore.

Because the ground system pervades the extracellular space, “messages” about the disturbance will reach every cell and react the same way throughout the body. It’s like every cell has the address, phone number, e-mail and fax number of every other cell in the body.

When all is well, all these elements communicate clearly and efficiently with each other. Their interactions help maintain balance and a steady state of health. This balance is called **homeostasis**—literally, the condition of remaining the same.

Illness results from a lack of balance in the terrain. It begins when toxins that affect the human organism are introduced to a healthy milieu. These **homotoxins** can come from external, or **exogenous**, sources such as pollution, drugs or chemical additives, or they may come from within, as byproducts of cellular metabolism. The latter, **endogenous** homotoxins may also result when digested foods are not broken down completely or absorbed efficiently. **Toxication** can also result from a leaky lining of the large intestine, which allows some undigested food back into one’s circulation. This food then acts as an **antigen**—a substance that causes an immune response, as well as what is popularly known as an allergy.

The intracellular fluid and other components work together as a filter or molecular sieve to remove toxins and metabolic waste. When the pollution becomes too great, we experience

illness. The symptoms—fever and aches, for instance—are signs that the body is working overtime to remove the toxins and clean up the terrain.

But as with any filter, if too much is dumped in too fast, for too long, its openings get clogged with what is being filtered out. Because toxication causes the matrix to become more electronegative, the pores become smaller. As the matrix becomes less porous, it becomes less effective as a filter. Since residual homotoxins can no longer be excreted in a timely fashion, they are retained in a process called **stacking**. The more the matrix is blocked in this way, the greater the blockage. And the longer the homotoxins reside and accumulate in the terrain, the more defined their footprints become.

The genes in your cells are living beings. They “talk” and “listen” to each other. Their language is living and creating. They don’t recognize simplistic mechanical models of replacing worn-out materials with spare parts. Rather, genes read their milieu and adapt. Humans need a living milieu to flourish. Hence, an optimal biological terrain is needed for our optimal functioning.

Illness Is Not a Condition but a Process

WHEN TERRAIN CONDITIONS deteriorate and homotoxins build up, symptoms may worsen or change. For illness is never a static condition but a process. Specifically, illness progresses across the six stages defined by the German researcher and father of homotoxicology, Hans Reckeweg, as shown on the chart on the next page.

| Organ System | Humoral Phases | | | Matrix Phases | | | Cellular Phases | |
|--------------------------------|---|---|---|--|---|------------------------------|-----------------|--|
| | Excretion | Inflammation | Deposition | Impregnation | Degeneration | Dedifferentiation | | |
| Skin | Sweating episodes | Acne | Naevi | Allergy | Scleroderma | Melanoma | | |
| Nervous system | Difficulty concentrating | Meningitis | Cerebro sclerosis | Migraine | Alzheimer's | Glioma | | |
| Sensory system | Tears, otorrhea | Conjunctivitis, otitis media | Chalazion, cholesteatoma | Infectious, tinnitus | Macular degeneration, anisometropia | Amnesia, malignant tumor | | |
| Locomotor system | Joint pains | Epididymitis | Exostosis | Chronic rheumatoid arthritis | Spondylosis | Sarcoma, chondroma | | |
| Respiratory tract | Cough, expectoration | Acute bronchitis | Silicosis, smoker's lung | Chronic bronchitis | Bronchiectasia, emphysema | Bronchial carcinoma | | |
| Cardiovascular system | Functional heart complaint | Endocarditis, pericarditis, myocarditis | Coronary heart disease | Heart failure | Myocardial infarction | Endothelioma | | |
| Gastrointestinal system | Heartburn | Gastroenteritis, gastritis | Hyperplastic gastritis | Chronic gastritis, malabsorption | Atrophic gastritis, cirrhosis of the liver | Stomach cancer, colon cancer | | |
| Urogenital system | Polyuria | Urinary tract infection | Bladder stones, kidney stones | Chronic urinary tract infection | Renal atrophy | Cancer | | |
| Blood | Relicucytosis | Leucocytosis, suppuration | Polycythaemia, thrombocytosis | Aggregation disturbance | Anemia, thrombocytopenia | Leukemia | | |
| Lymph system | Lymphedema | Lymphangitis, tonsillitis, lymphadenitis | Lymph node swelling | Insufficiency of lymph system | Fibrosis | Lymphoma, Hodgkin's lymphoma | | |
| Metabolism | Electrolyte shift | Lipid metabolism disturbance | Gout, obesity | Metabolic syndrome | Diabetes mellitus | Slow reactions | | |
| Hormone system | Globus sensation | Thyroiditis | Goiter, adenoma | Hyperthyroidism, glucose intolerance | Menopausal symptoms | Thyroid cancer | | |
| Immune system | Susceptibility to infection | Weak immune system, acute infection | Weak reactions | Autoimmune disease, immunodeficiency, chronic infections | AIDS | Slow reactions | | |
| Psychologic Phases | Alteration | Reaction | Fixation | Chronic Forms | Deficits | Decoupling | | |
| Psyche | Functional psychological disturbance, nervousness | Reactive depressive syndrome, hyperkinetic syndrome | Psychosomatic manifestation, neuroses, phobias, neurotic depression | Endogenous depression, psychosis, anxiety neurosis, organic psychosyndrome | Schizophrenic defective states, mental deficiency | Mania, catatonia | | |

The black bar dividing the chart is known as the "Biological Division." Once illness has progressed beyond this division, cellular damage occurs.

The six-phase table is a field matrix reflecting medical experience based on careful observation and empirical learning. It is a phase-by-phase arrangement of disorders with no direct relationship between them. No causal pathogenic link between disorders can be inferred. The structure of the table makes it suitable for developing a prediction system giving a better assessment of the possibilities for a vicariation effect.

According to Reckeweg, every illness—regardless of the organs or tissues, both hard and soft, involved—progresses across these six stages unless the body’s efforts to self-regulate are supported. In the early stages of illness, the terrain protects the cells’ membranes and, thus, their genetic code—the DNA and RNA. But as illness develops—in what Reckeweg called **progressive vicariation**—the terrain becomes more and more stressed. It becomes less able to protect the cells. If the body’s efforts to self-regulate are not supported, cellular damage results. It is in those final stages of the disease process that conditions like cancer develop, where the cells and their genetic code are completely vulnerable.

It is crucial to note that each of us is completely responsible for his or her milieu. By maintaining it well, we keep the genes from having their genetic code altered. In turn, this enhances the Basic Regulative System’s flexibility.

Your Health Changes When the Milieu Changes

CHRONIC ILLNESSES are the result of a radically changed milieu. Because of this, microorganisms such as bacteria that are normally beneficial to us are transformed into more pathogenic, destructive forms—what microbiologists called **higher-valenced** forms.

Although marketers of our antibacterial world would have us think there’s something inherently bad about microorganisms, the truth is, to be human is to have a body teeming with them. These microbes work with enzymes, amino acids and other elements to perpetually clean and clear our system of all the toxins with which we are daily assaulted. They are the good guys. However, when the milieu changes, they can undergo a startling transformation.

If you were to leave out a glass of milk at room temperature, you would find the milk sour and curdled before too long. This is not because some “germ” got into the milk and made it “sick.” It’s because the elements of the milk itself changed in response to the environment.

Thus, in response to changed conditions in the milieu, bacteria may turn into viruses, fungi and other parasitical forms. This transformation is known as **pleomorphism**, which means “many forms.”

When the terrain changes, elements within it are likewise changed.

To understand this change and its impact on health, think of a beautiful landscape, with rolling green hills surrounding a little valley. A stream of clear, cold water cuts through the middle. Flowers bloom in mild, yellow sunlight. The countryside is dotted with trees heavy with fruit and row after row of nutrient-rich vegetables. There’s certainly more than enough here to feed the happy, peaceful inhabitants of this land. They work together, tending the land and caring for the animals they share the earth with. All live in harmony.

One day, a rival group arrives. True to their nature, the original inhabitants are generous with their resources. But the rivals are powerful and greedy. They take over as much space as they can. They trample the plants, pollute the stream and kill the animals. The original inhabitants do all they can to repair the damage, but it’s not enough to keep up with the onslaught. They work day and night to right the wrongs done to their land. Still, they can’t even keep up with the rate of destruction. They grow tired, resentful and angry. Their bodies hurt from their perpetual labor. Some give up and join the invaders. Some turn on each other. They are no longer the peaceful people they once were. They have changed. They, themselves, now participate in

the destruction of the very environment that once nurtured them so well. They changed right along with their environment.

Something like this happens when the human body is flooded with toxins. The normally beneficial bacteria, enzymes and other elements living in our systems are corrupted. Blockages occur. Waste products build up. The system toxicates itself over and again.

Reversing the Process

IN A WAY, this progressive vicariation is a process of decay. But while decaying organic material cannot regenerate itself (though it can contribute to new and different life), your body, as a self-regulating organism, can regenerate itself. In other words, the process of illness can be reversed—a process Reckeweg called regressive vicariation—and the elimination of symptoms will occur towards the left on the above chart.

Even more specifically, the body always heals in a particular sequence, as described by the father of American homeopathy Constantine Herring. According to **Herring's Laws** of natural healing, symptoms of a chronic disease will disappear from the affected body in reverse order. That is, the most recent symptom clears up first, followed by the next most recent and so on, until all conditions of illness are eliminated. Also, because disease affects external organs first and vital organs only under chronic conditions, healing will happen from the inside out. The organs most vital to sustaining life will heal first, and the process will gradually make its way to the outside. Symptoms likewise move from the top of the body down, since the most vital organs exist in the upper body. So the upper body will heal first and the lower, last.

In this way, the human body returns to full health. But the only way it can happen is by supporting the body in its efforts to self-regulate. And the only tried and true way of doing this is by improving the terrain.

Evaluating the Terrain

IN ORDER TO properly and accurately find and treat the root causes of illness, the biochemical and bioelectrical conditions of the terrain must be evaluated. This is normally done as one of several examinations and tests which, all together, can provide a practitioner with a comprehensive view of the nature and genesis of illness. This testing, known as Biological Terrain Analysis (BTA), measures certain factors in your urine and saliva that signal the state of the terrain. Through analysis of **pH**, **rH2**, **R** and other biochemical markers, a skilled practitioner can understand the health of the terrain—or lack of it.

The three factors mentioned above—pH, rH2 and R—tell us the most about the state of a person's terrain. The first, pH, is a measurement of the **acid/alkaline balance**. The human body is generally at its best when both urine and saliva are slightly acidic. Blood, of course, is always alkaline. Most Americans, however, tend to have terrains that are overly acidic due to the high amounts of protein and refined carbohydrate in the typical American diet. The more acidic the terrain, the more problems that can occur with mitochondrial function, hormone receptors and other essential physical functions.

The second factor, rH2, indicates the **oxidation-reduction potential** or electron potential of the matrix. This sign of oxidative stress shows the concentration of electrons and their movement through the body. A high number of available electrons indicates healthy and efficient cellular metabolism,

a comprehensive strategy for improving the terrain. Each person demands a unique strategy for healing and returning to homeostasis. Most often, however, protocols include the use of homeopathic medicines, homeopathic-spagyric medications and homeopathic isodes, nutritional supplements, herbs and dietary improvements. They may also involve the use of adjunct therapies such as massage/body work and acupuncture.

Healing Begins: Opening the Channels

THE FIRST PHASE of treatment is called **Opening the Channels of Elimination** and involves what the name suggests: removing the blockages and thus reconstituting the milieu. Opening the channels improves the ability of the terrain to filter out both exogenous and endogenous homotoxins. If true healing is to occur, it is absolutely crucial that this phase be followed through to completion and that the improved conditions be supported and nurtured through the next phase of healing.

The aim of Phase II therapy is to start draining the homotoxins from the terrain while simultaneously enlarging the pores of the molecular sieve. At this point, the individual can begin exploring other treatments and procedures to lessen the risk of repollution of the terrain—procedures that may include the replacement of toxic dental materials with biocompatible restorations, cavitational surgery or other improvements that may be needed.

Throughout the whole process, the individual should be carefully monitored and adjustments made as needed. Just as every ill person becomes ill in a unique way, each person also heals uniquely. And it does take time to heal. But it is definitely worth the time and effort put into supporting the body and making the necessary lifestyle changes so that health and well-being become “chronic conditions” where illness once flourished.

Lessening risks without improving and strengthening the terrain will never lead to complete healing. Taking anti-oxidants and other supplements while continuing to maintain and feed a corrupted terrain is like ordering a Diet Coke with a supersized Big Mac Meal: the latter really defeats the purpose of the former.

In other words, your body must be prepared to heal.

As Louis Pasteur, the father of the germ theory of disease, said on his deathbed, “The terrain is everything.”