Healing at the Cell Level Part 2

Restoring the "Dry" State

(Visualize the ground as tightly-held individual cells in the "dry" state with just enough fluid to fill the spaces between them and that is all.)

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We DEGENERATE and DIE.

Tissues can be damaged in two basic ways: (1) **mechanically** or (2) **chemically**. Either way it happens, either way the body is injured or traumatized, the tissues always respond consistently in the same manner.

In terms of chemical damage, which is induced by toxins, the toxins stem from three primary sources:

1.) Externally introduced poisons which include:

a. Plant poisons (e.g. poison ivy, stinging nettle, poison oak, etc.);
b. Animal venoms (bee stings, snake bites, spider bites, etc.); and
c. Chemical elements (heavy metals, drugs, fumes, solvents, pesticides, additives, preservatives, etc.).

2.) Metabolic waste by-products derived from our own cellular metabolism.

3.) Metabolic waste by-products released by microorganisms and parasites (including fungi, bacteria, flukes, worms, etc.).

In terms of mechanical damage, we're speaking of negative physical stress caused from any kind of physical injury.

When cells are damaged, it causes a rupture in their membrane allowing intracellular chemicals to be released into the extracellular fluids surrounding the cells. When the bradykinin, histamines and serotonin are released, these chemicals initiate the process of inflammation by causing the blood capillary pores to dilate. The plasma proteins rush out with the water and sodium, the resulting lack of oxygen generates pain and the excess water alters the dry state to cause the characteristic swelling.

To instigate or accelerate the healing process and enable proper immune cell responses, the cellular environment must be restored close enough to the negative subatmospheric pressure condition - the dry state - where there is no excess fluid or excess sodium (Na+), only just enough fluid to fill the crevices around the cells. In this condition (1) the lymphatic system vacuum-packs the cells close to the blood capillaries so that they are within range (~50 micrometers) of irrigation to receive continually sufficient amounts of oxygen and dissolved nutrients from the blood capillaries whereby ATP, the universal energy currency for cells, can be made. The bloodstream acts as the cell environment in this condition.

"Few cells [in the dry state] are located more than 50 micrometers from a capillary, which ensures diffusion of almost any substance from the capillary to the cell within a few seconds." ~ Dr. Arthur C. Guyton, M.D., Text of Medical Physiology[pdf], 11th ed., p. 4

And (2) since there is no excess sodium to upset the delicate mineral balance, the conditions for optimal sodium-potassium pump performance are fulfilled, cellular voltage is normalized, electrical potential restored and the electric fields are reestablished. Once the pumps are running unimpeded, nutrients are brought into the cell creating and enabling the helicase enzymes to split the cell DNA for cellular reproduction (mitosis). Several hundred million new cells are produced per minute to replace irreparable or dead cells, and rapid tissue regeneration follows. Each cell functions as a battery unit contributing subtle amounts of energy to the tissue-group that it is a part of. The greater the number of cells that are shutting off electrically or dying within that group, the more the overall tissue-group begins to fail. Therefore,
without cellular reproduction of healthy cells, our tissues degenerate and it's then only a question of where in our body this process takes place and what normal physiologic processes begin to decline and fail as a result.

"Every minute 300 million cells in your body die and are replaced immediately by the division of living cells, so that the number of cells in your body remains constant throughout adult life." ~ Prevention's Giant Book of Health Facts, p. 347

For the dry state condition - the healthy cell environment - to be restored, plasma proteins must be prevented from getting trapped around the cells and the already trapped plasma proteins must be dissipated and retrieved by the lymphatic capillaries, while the lymphatic system as a whole must be continually activated to pull out from the tissue spaces plasma proteins, excess fluid, excess sodium, dead or irreparably damaged cells, cellular metabolic waste by-products and other waste material. If symptoms improve but you stop working on the problem-area(s) or stop activating lymphatics while there are still trapped proteins or poisons in the tissue spaces, these substances will reproduce the problem by drawing fluid and sodium to them (the proteins) or damaging cells and keeping the capillary pores dilated (the poisons).

Therefore, the key to healing is to keep working at it while it still feels good and to continue at it for some time after symptoms have fully subsided to effectuate complete healing.

Prevention and healing efforts go hand-in-hand. Appropriate dietary and lifestyle changes must be made; a full-spectrum health model should be integrated and followed to the best of one's ability, and any significant "body-burdens" or poisoning factors must be addressed as soon as possible.

Factors to consider include emotional encumbrances and unresolved past traumas; being immersed in very stressful situations daily; highly polluted air; heavy metal exposure (notably occupational or dental amalgam fillings); pharmaceutical or other drug usage; indoor mold exposure; parasites; harmful electromagnetic frequencies; significant radiation exposure (notably from frequent high-altitude flight travels); consuming unfit drinking water; inhaling toxic fumes (from off-gassing material, chemical perfumes and deodorants, fumes from cooking with chemical ingredients, etc.), and so forth.

Excess fluid accumulation occurs through two general pathways:

"Extracellular fluid edema occurs when there is excess fluid accumulation in the extracellular spaces. There are two general causes of extracellular edema: (1) abnormal leakage of fluid from the plasma to the interstitial spaces across the capillaries, and (2) failure of the lymphatics to return fluid from the interstitium back into the blood. The
most common clinical cause of interstitial fluid accumulation is excessive capillary fluid filtration [from dilated capillary pores].” ~ Dr. Arthur C. Guyton, M.D., Textbook of Medical Physiology [PDF], 11th ed., p. 302

Each person has unique to them a set of challenges, circumstances, genetic strengths and weaknesses, and behavioral patterns to accommodate and work with and these multifactorial variables determine the difficulty and complexity of the individual’s situation. We’re all at different levels of progression and are all here to learn the “hows and whys.” We may have relationships to configure, habits to reprogram, addictions to transition out of, emotional baggage to lift off our shoulders and forgiveness to carry out. We should never judge or criticize others for what may appear as [their] shortcomings, as it in reality may be the very thing that serves as a life-changing wake-up call for that individual, opening up doors to the fruition of tremendous accomplishments. It is the unseen potential we all have that makes each of us great.

Many have went on to become established, successful students and practitioners of the healing arts helping many hundreds or thousands of others to heal, and they were led down this path only as a result of they themselves once having struggled and suffered from health or other personal challenges. They recognized their newfound knowledge and experience as a gift they could and wanted to share with others and that's what they decided to do.

The Lymphatic System

"About 60 per cent of the adult human body is fluid, mainly a water solution of ions and other substances. Although most of this fluid is inside the cells and is called intracellular fluid, about one third is in the spaces outside the cells and is called extracellular fluid. This extracellular fluid is in constant motion throughout the body. It is transported rapidly in the circulating blood and then mixed between the blood and the tissue fluids by diffusion through the capillary walls.

In the extracellular fluid are the ions and nutrients needed by the cells to maintain cell life. Thus, all cells live in essentially the same environment – the extra-cellular fluid. For this reason, the extracellular fluid is also called the internal environment of the body, or the milieu intérieur, a term introduced more than 100 years ago by the great 19th-century French physiologist Claude Bernard.

Cells are capable of living, growing, and performing their special functions as long as the proper concentrations of oxygen, glucose, different ions, amino acids, fatty substances, and other constituents are available in this internal environment.” ~ Dr. Arthur C. Guyton, M.D., Text of Medical Physiology [PDF], 11th ed., p. 3-4
According to 'Clinical Chemistry Made Easy' (p. 269), of all the fluid in our body, which constitutes 60% of our total body weight, 62.5% of this fluid is situated inside our cells, a mere 7.5% comprises our bloodstream as opposed to the whopping 30% that is our interstitial/lymph fluid. That's four times as much lymph fluid than we have blood in our bloodstream.

Our lymphatic system has been called by different names all of which are reflective of its characteristic functions or features. It's been recognized as:

- The tree of life
- Our purification system
- The immune system
- The sewer system of the body
- Dr. Samuel West, D.N., N.D. (1932-2004), during his presentation, 'Foundations of Health & Healing', referred to it as "the guardian angel of the body" and “the foundation of health”
- In December 1964, the American Medical Association referred to it as "Your Other Circulatory System" and the "great river of mystery"
- In January 1965, Reader's Digest called it "Our Amazing 'White Bloodstream'"

Everywhere in our body where there are blood vessels, there are a separate set of lymphatic vessels going side by side and parallel to the blood vessels (with cells situated between them). The reason for this is that blood capillaries, which permeate every solid tissue structure, constantly leak plasma proteins, fluids, sodium and dissolved minerals and other nutrients due to the natural, plasma protein-maintained osmotic (positive) pressure in the bloodstream. The plasma proteins, fluid, sodium and other collected detritus waste material must continually be removed by the lymphatic vessels to maintain the dry, healthy state.

"If blood capillaries did indeed leak plasma, together with its proteins and other large molecules, then Drinker was correct. If the proteins entered the interstitial fluid, they would stay there, since Starling's measurements and Drinker's findings made it clear that large molecules could not get back into the blood capillaries-unless they were picked up by the lymphatic system. If they leaked from the blood vessels and were in fact returned by the lymphatic vessels, the evolutionary reason for the development of the lymphatic system would be established beyond question." ~ Dr. Hymen S. Mayerson, M.D., The Lymphatic System[pdf], p. 83

We have more lymphatic vessels (an estimated 240,000 miles) than we have blood vessels (an estimated more than 90,000 miles) and only the lymph capillaries branch out between the cells.
Appearance-wise, Dr. West, during another presentation called 'Introduction to Lymphology', described this internal purification system of ours as follows:

“The lymph system in the body is like a tree [...]. As I tell about what the lymph system looks like, then I’d like you to repeat it, as I give it to you, and you’ll never forget it again.

The lymph system we will [simply] describe like this – let’s repeat – the branches go up in the head, the roots go down in the feet, and the tree trunk is in the chest; and it’s called the thoracic duct.”
The lymphatic system is extensive, with either capillaries, tributary vessels or minute interstitial channels (called prelymphatics) situated everywhere in our body functioning as a vacuum collecting and circulating waste material that is to be neutralized and filtered out of the lymph fluid via our 600-700 lymph nodes. The now purified fluid is then returned with the plasma proteins to the venous system to yet again become part of the bloodstream so that blood volume can be maintained. Dr.
West referred to the compromised lymphatic circulation as "interstitial lymphatic obstruction," very similar to Robert Morse, N.D., who coined it "interstitial lymphatic constipation" or "systemic lymphatic stagnation."

Unlike the rapid flow of the bloodstream, the lymphatics is a slow-moving system circulating only 0-1.7 milliliters per minute (roughly 100 ml per hour according to 'Orban's Oral Histology and Embryology,' p. 326) at rest and up to 20-50 milliliters during varying intensities of physical activity once deep breathing is induced, and potentially faster yet with specific lymphatic activation techniques and sequences.

Instead of an actual pump to drive fluid propulsion, as is the role of the heart for blood circulation, the lymphatic vessels are lined with millions of small one-way check valves that act like pumps when compressed and massaged; these valves maintain one-way circulation preventing lymph from flowing backward.

Counter to what is still very commonly taught today, the central propulsion of lymph flow, as was revealed by lymphologist, Dr. Jack W. Shields, M.D., at the 7th International Congress of Lymphology in Florence, Italy, is a vacuum-like suction effect generated through deep diaphragmatic breathing and NOT EXERCISE or MUSCULAR ACTIVITY, hence we may realize (1) the inefficiency of exercise (without deep
breathing) for health maintenance and healing, as well as (2) the destructive nature of constant shallow breathing.

To reestablish and maintain the dry state and speed up the healing process through (1) dynamically activating the lymphatic system throughout the entire body and in localized areas if needed, and (2) to keep the blood plasma proteins constantly circulating, Dr. West brought to life a new science called 'The Art of Lymphasizing'.

**Prevention is mental, nutritional and physical; mind, body and spirit. Everything else is treatment.**

"If you choose one or two modalities, or even six or seven, you're limited within each modality you chose. The greatest thing this science has to offer is to clearly show you what the pure laws and principles are that ALL healing arts and ALL personal empowerment programs use [which they do] without really understanding it." ~ Stephen E. West, DL, PMD, founder and president of [Clarity University](https://www.clarityuniversity.com)

This science reveals the mental, nutritional and physical pure laws and principles of health and peace that we must obey to keep the blood proteins efficiently circulating, and involves a series of habitually integrated or otherwise frequently applied dynamic lymphatic-activation and self-help speed healing techniques and sequences, the foundation of which are:

- Deep breathing (yawning included);
- Bouncing (such as proper rebounding on a quality trampoline; alternatively a yoga ball or the edge of one’s bed);
- Muscular movement (not sufficient by itself to keep you alive and healthy in the long run, as opposed to expanding the lungs through deep breathing);
- Tissue-manipulating techniques (massage; neurolymphatic reflex massage; stroking; compression of tissue (isometrics); stretching; percussion; vibratory techniques; contraction and relaxation; suction cupping; etc.);
- Energy

**Energy moves lymphatics.**
Any appropriate source of bioelectric energy, whether inside or outside, internally or externally, can be used to dissipate and unlock plasma proteins that have clustered and become locked around the cells.

Energy embodies raw foods (primarily fruits and chlorophyll-rich, astringent greens and sprouts), herbs, homeopathic remedies, light/color therapy, gemstone essences, negative electromagnetic polarity (such as from utilizing bioelectromagnetic therapy or magnetic beds), healing with the subtle bioelectric energy generated by our cells (using the hands and fingertips; ‘the laying on of hands’), magnifying the thought-waves to mentally direct energy where needed, electricity generated from a light-fast-stroke technique or skin brushing, applied or implanted electrodes, polarity therapy, reiki, reflexology, tai chi, acupuncture needles, chi machines, and any other healing modality or product/device/machine that deals with energy.

Energy medicine and vibrational medicine are emerging modalities and systems of healing receiving ever-increasing recognition, and these promising arts and sciences are projected to play an instrumental role in medicine and general health care of the future.

There are many, many ways to accomplish what needs to done to enable cellular regeneration, and while some products and therapeutic modalities do work more effectively than others, they all have their time and place for different people on different levels.

Through application of a spinal cord stimulation system utilizing electrodes surgically implanted up and down the spinal column, Dr. Joseph M. Waltz, M.D., surgeon and past director of the department of neurologic surgery at the Saint Barnabas Hospital in New York, has, for over three decades, helped child and adult patients achieve partial, substantial or complete recovery from in some cases a multidecade history of neurodegenerative conditions including cerebral palsy (incl. spastic quadriaparesis and spastic diplegia), multiple sclerosis, primary cerebellar degeneration, Friedreich's ataxia, epilepsy, spasmodic torticollis, and dystonia amongst other conditions. Some of his wheelchair-bound patients were able to get up and walk following their very first treatment session. (Video: Spinal Cord Stimulation in the Treatment of…)

In a similar fashion Swedish radiologist, Dr. Björn E. W. Nordenström, M.D. (1920-2006), utilized direct current-to-needle electrodes on tumor-patients to dissolve their tumors. His work was featured on the Discovery Channel as well as in an article published in the April 1986 issue of Discover magazine (Vol. 7).
Through the course of the past three decades biophysics researcher, Peter A. Kulish, has devised a vast array of highly successful, cost-effective and easy-to-apply-at-home biomagnetic therapy protocols that have supported the healing of a broad range of health issues from chronic back pain to brain tumor, multiple sclerosis, seizures, cysts (my personal success experience using the magnets), fractured and broken bones, pancreatitis, carpal tunnel syndrome, neuropathy, all sorts of pain conditions and much more.

Robert Morse, N.D. specializes in using a predominantly raw, plant-based diet with strong emphasis on organic, fresh fruits, combined with herbology and has met phenomenal success helping many clients globally reverse conditions ranging from cancers to all levels of neurological conditions over the course of nearly four-and-a-half decades. Dr. Morse has vast experiential knowledge and wisdom to share with us and has devised a powerful healing system that with some time and effort is fairly easy to learn and integrate.
The above are just a few of many examples of great people devoting their remarkable expertise to help people alleviate and abolish suffering, on advanced levels, using energy, while in many cases not accurately understanding how what they’re doing actually works. However, if a treatment-based orientation isn’t reinforced through emphasis on diet and lifestyle changes, as was the case with Doctors Waltz and Nordenström's approach, many patients or clients will inevitably be met with a relapse and return of their problems.

Fruits, herbs, sprouts, homeopathic remedies and the like are concentrated with energy. From a physics standpoint it is known that everything resonates and it is this law of resonance that nature uses for healing by matching the electrical frequencies of plant-foods, herbs, homeopathic remedies, gemstone essences, nutrients and the like, with the corresponding electrical frequencies of our 11-12 body systems or specific tissues, which in the affected area(s) will help to unlock and dissipate plasma proteins, activate lymphatics, bring in oxygen, reestablish the delicate mineral balance (turning on the electrical generators and reversing the acid pH environment) and effectuate physiologic homeostasis.

**Every healing art on earth involves getting oxygen to cells and they all heal lymphatically.**

Through the science of Applied Lymphology and the Art of Lymphasizing, we're connecting and unifying all the healing arts, as it is not a replacement of, but lays the foundation for and enhances all of them. As an example, when cells are brought closer to the dry state, the efficacy of botanical products and other supplements is increased. And with this science we may also understand why these products alone, with or without diet changes, sometimes aren't sufficient enough to dissipate and circulate the trapped plasma proteins.

All the various products cannot be expected to replace regular deep breathing, most if not all of them cannot take the place of correct aerobic lymphasizing (physical movement or rebounding with deep breathing techniques), and they cannot replace a clean diet and/or necessary lifestyle changes. As a matter of fact, in many cases, the inverse is true and substantially so. Obeying the mental, nutritional and physical laws and integrating deep breathing, bouncing, stroking, stretching, compressing tissues, relaxation and flexing, and powerful electrical healing techniques all of which - once properly learned - cost nothing to actually apply, and should be engaged within the context of transition, can replace the need for any dependence on products. Where exceptions exist, the products and various modalities can be considered our extraordinary smorgasbord of tools to work with that serve a complementary function in aiding the detoxification, drainage and healing processes; we have many highly beneficial products and therapies to choose from.
As we expand our knowledge pertaining to the use of various botanical products (herbs, essential oils, flower essences, etc.), the homeopathic and naturopathic remedies, and various therapeutic services and practices, which does involve time and a learning curve, we're in a more capable position and better equipped to customize an approach for ourselves to meet our own needs, using wisdom. Until then it is always wise to have proper guidance from someone experienced should it prove necessary, particularly if very ill.

**Elimination is key.**

The process of depuration, that is, the elimination of waste material and toxins from our system through the elimination channels - emunctory organs if you will - is a critical key to the healing process.

Our principal emunctories are the colon (fecal matter and mucus), kidneys (urine and sediment filtration) skin (sweating), and lungs (deep diaphragmatic breathing).

The importance of proper bowel regularity and the colon being able to effectively drain mucus and discharge other waste material has been emphatically understood and taught by many in the healing arts. Dr. Bernard Jensen, D.C., N.D., Ph.D. (1908-2001) made outstanding contributions to this area of concern, especially in making correlations between colon health, or the lack thereof, and the resulting impact on other tissues of the body as shown through the irides. With decades of experience and having seen many thousands of patients (an estimated 300,000+ toward the end of his career), he came to conclude, as stated in the 1981 coauthored publication, *Tissue Cleansing through Bowel Management* (p. 11), "I must admit that I did not realize the importance of good bowel care until years of experience in the science of iridology proved to me, beyond the shadow of a doubt, that the condition of the bowel tissue is often the key to the state of health or disease of the individual. I am convinced and truly believe that our problems begin more in the bowel than any other part of the body. The body depends on a clean bowel. The cleanliness of any tissue, i.e., kidney, stomach, brain, depends upon what is found in the bowel."

Of similarly pivotal nature, yet sorely neglected, is that of sediment filtration conducted via the kidneys. Dr. Morse’s work has demonstrated the crucial importance of the kidneys being able to carry out their function as emunctory organs. This process requires well-functioning kidneys and adrenal glands.

Prof. Arnold Ehret (1866-1922) in his time also observed this phenomenon of kidney filtration and defined what he saw as mucus; he stated, "The coated tongue is evidence of a constitutional encumbrance throughout the entire system, which obstructs and congests the circulation by dissolved mucus, and this mucus even appears in the urine."
Sweating is another excretory process in which the body can eliminate undesired waste material. Body temperature is regulated principally by the hypothalamus and thyroid gland, with the pituitary gland serving an intermediary role in this process. If either of these tissues fail to properly contribute to this regulation, difficulty sweating can materialize. In such cases these weaknesses must be addressed and reversed while the burden on the skin can be relieved through skin brushing, guasha skin cleansing, cleansing herbal or salt baths and sauna-induced sweating (with - if permissible - or without essential oils). If having a difficult time producing a good sweating, at least one of the aforementioned activities should be done daily.

The lungs expel waste material with every exhale. As a result of cellular aerobic respiration (where ATP is made), a gas by-product called carbon dioxide (CO2) is generated and is the main toxin eliminated by the lungs. As you’ve learned by now, the lungs play an essential role in aiding our built-in purification system - the lymphatics - with every deep inhale, and efficiently eliminates carbon dioxide upon the following slow exhale. With due credit to Dr. Jack W. Shields, M.D. for his vital discovery, we may now understand that with any health program, especially any program that focuses on the lymphatic system, learning how to breathe properly should be emphasized and ideally be taught as one of the very first principles of health prior to anything else.

To move lymph is to BREATHE DEEPLY and LYMPHASIZE on a frequent basis.

You can flex-and-relax, compress, stroke or attempt to stimulate the lymphatics through diet, supplements or other means to pull out the interstitial fluid containing blood proteins and other waste matter away from around the cells and into the lymphatic vessels; consider this as drawing content into a syringe if you will. But that syringe must at some point be emptied elsewhere again so that more content can be drawn out and that's the essential effect of deep breathing. With every deep inhale, it effectively pumps the retrieved and purified lymph fluid - carrying leaked plasma proteins - out of the ducts ((1) thoracic duct and (2) smaller right lymphatic duct) and into the paired subclavian veins, one situated on either side of the body at the base of the neck.

The oxygen-enabled sodium-potassium pumps in every cell of your body are the key to life, death, health, sickness and whether or not you can heal. The dry state is the cellular Garden of Eden, while the lymphatic system is your principal return ticket back to this garden. Your task is to restore the healthy internal condition to ignite and keep the electric generators running. With our current knowledge we now know that this is accomplished on a mental, emotional, nutritional and physical level, with our spiritual self as the guiding essence.
"What if the research necessary to stop every degenerative disease known on this planet (including cancer) has already been done? Will researchers ever admit that?

Since the most basic, universal needs for life and optimal health or healing are known, and the most pertinent laws of nature are obvious, then, when the most important mechanisms working to sustain living tissues are finally properly recognized, the only scientific basis worth heeding is the process- and principle-based approach. Meanwhile, people, including most health professionals, will continue to ignore many well established facts, seeking to guarantee all present and future profitability in a corrupted system that lacks significant merit." ~ Prof. Karl J. West (president of the International Academy of Lymphology), Lymphological Self-Healing vs. Medical Manslaughter

No TPP = No EX FL or EX NA+ = EE = []

We REGENERATE and HEAL.

Theoretically, we should regard 100-150 years of age as insignificant, as the conditions for eternal longevity have been established making it conceivably possible for an individual born and raised in the healthy state, with lifelong purpose, to live forever but only under the conditions of a clean, non-toxic environment and where living according to the natural pure laws and principles of health and peace is an integrated and reinforced core attribute of the global governing social structure and system. In other words, a global system that is concerned with preserving the earthly biosphere, meeting human needs and maximizing human health potential as a principal priority.

The above described, being a world much different from the present.