

INTRODUCTION TO: **Homotoxicology**



SERIES ONE

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Silverwind Health



Energy Healing Centre

***Think
before
you talk!***



Homotoxicology Training: Drainage and Detoxification

***PROGRAM: THEORY**

- Homotoxins exposure in environment**
- Organs of Detoxification**
- Biochemical & Physical Detoxification Techniques**

***PROGRAM: SYSTEM REVIEW**

- Organ specific detoxification and Homotoxicological treatment options: Liver, Kidneys, Skin, Mucus Membranes, the extracellular space and the Lymphatic System.**
- Detox Questionnaire**
- Introduction to the Detox Kit**
- Appendix A – Therapeutic Fast Diet**
- Appendix B – Homotoxin Reference Chart**
- Appendix C – Matrix & Matrix Regulation**
- Course Evaluation Assignment**

WHAT IS HOMOTOXICOLOGY?

HOMO – TOXICO - LOGY



Human

Toxin

Study

The study of the influence of toxins on the human organism

The 3 Pillars of Homotoxicological treatment are:

- 1. Drainage and Detoxification**
- 2. Immunomodulation**
- 3. Cell and Organ Support**

Homotoxicological Definition of Illness

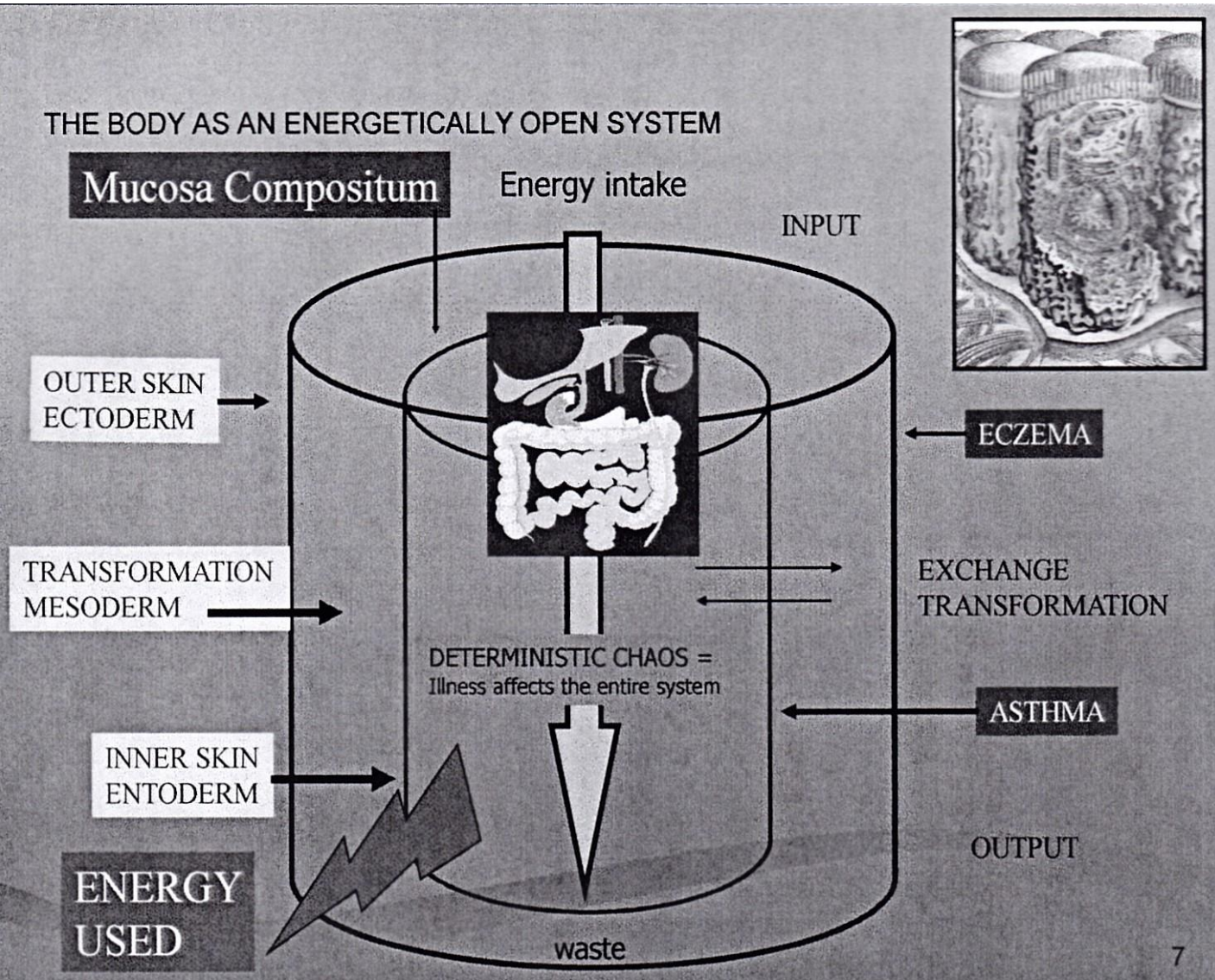
Diseases are the expression of biologically purposeful defence mechanisms against endogenic and exogenic homotoxins, or the expression of the organisms effort to compensate for toxic damages it may have sustained.

Ground Regulation Explained

- **Energetically open system, energy supplied (food), uncontrolled energy.**
- **Reactions happen at low temperatures and are facilitated by enzyme systems & catalysts.**
- **The dynamic structure of the extracellular space and its regulation is known as *ground regulation*.**
- ***State and health of intra and extracellular space determines catalysts & energy cycles.***
- ***Capillary system permeates matrix with endocrine messengers (thyroid, pituitary, suprarenal)***
- ***Auto-immune nervous system have fibres ending blindly in matrix.***

Diagram of Ground Regulation:

The Body shown as an energetically open system:



Disease Evolution Table (DET)

The DET is a vital tool in Homotoxicology as it illustrates chronological order of various diseases within the framework of ground regulation. Single phases are transient into each other which are subdivided into three phases namely, Humoral, Matrix & Cellular.

- **HUMORAL PHASE: Intracellular systems are not disturbed, defence system is intact and can excrete the homotoxins via various paths.**
- **MATRIX PHASE: Homotoxins are deposited in mesh of extracellular matrix, further course alters structural components and functions.**
- **CELLULAR PHASE: Cell systems are increasingly destroyed, defence system no longer able to excrete the toxins out of the cells or out of the matrix. Typical for these phases is regulation rigidity.**

Next: Introduction to the DET and How to use it effectively....

DISEASE EVOLUTION TABLE (DET)

HEALTH

Status of Regulation / Deregulation

DISEASE

Organ System/Tissue	Humoral Phases		Matrix Phases		Cellular Phases		
	Secretion Phase	Activation Phase	Deposition Phase	Integration Phase	Degeneration Phase	Reorganization Phase	
ECTODERMAL	1. Epithelium	Increased signaling, growth, self-renewal	Secretion of signaling factors, growth factors, stem cells	Hyperplasia, cellular senescence, tumor, fibrosis (skin, hair)	High density, chronic, acute, traumatic, autoimmune, infection	Injury, oxidative stress, metabolic, inflammatory, proinflammatory	Injury, oxidative stress, metabolic, autoimmune, infection
	2. Dermis	Epigenetic, epigenetic	Stem cells, progenitor cells, signaling factors, growth factors, self-renewal, self-renewal	Self-renewal, cellular senescence, tumor, fibrosis (skin, hair)	High density, chronic, acute, traumatic, autoimmune, infection	Stem cell, oxidative stress, metabolic, inflammatory, proinflammatory	Stem cell, oxidative stress, metabolic, autoimmune, infection
	3. Hypodermis	Increased secretion of secretory factors	Secretion of signaling factors, growth factors, self-renewal, self-renewal	Secretion, cellular senescence, tumor, fibrosis (skin, hair)	High density, chronic, acute, traumatic, autoimmune, infection	Stem cell, oxidative stress, metabolic, inflammatory, proinflammatory	Stem cell, oxidative stress, metabolic, autoimmune, infection
	4. Hair	Increased secretion of secretory factors	Secretion of signaling factors, growth factors, self-renewal, self-renewal	Secretion, cellular senescence, tumor, fibrosis (skin, hair)	High density, chronic, acute, traumatic, autoimmune, infection	Stem cell, oxidative stress, metabolic, inflammatory, proinflammatory	Stem cell, oxidative stress, metabolic, autoimmune, infection
	5. Nail	Increased secretion of secretory factors	Secretion of signaling factors, growth factors, self-renewal, self-renewal	Secretion, cellular senescence, tumor, fibrosis (skin, hair)	High density, chronic, acute, traumatic, autoimmune, infection	Stem cell, oxidative stress, metabolic, inflammatory, proinflammatory	Stem cell, oxidative stress, metabolic, autoimmune, infection
ENDODERMAL	1. Epithelium	Secretion	Secretion of signaling factors, growth factors, self-renewal, self-renewal	Secretion, cellular senescence, tumor, fibrosis (skin, hair)	High density, chronic, acute, traumatic, autoimmune, infection	Stem cell, oxidative stress, metabolic, inflammatory, proinflammatory	Stem cell, oxidative stress, metabolic, autoimmune, infection
	2. Epithelium	Increased secretion of secretory factors	Secretion of signaling factors, growth factors, self-renewal, self-renewal	Secretion, cellular senescence, tumor, fibrosis (skin, hair)	High density, chronic, acute, traumatic, autoimmune, infection	Stem cell, oxidative stress, metabolic, inflammatory, proinflammatory	Stem cell, oxidative stress, metabolic, autoimmune, infection
	3. Epithelium	Increased secretion of secretory factors	Secretion of signaling factors, growth factors, self-renewal, self-renewal	Secretion, cellular senescence, tumor, fibrosis (skin, hair)	High density, chronic, acute, traumatic, autoimmune, infection	Stem cell, oxidative stress, metabolic, inflammatory, proinflammatory	Stem cell, oxidative stress, metabolic, autoimmune, infection
	4. Epithelium	Increased secretion of secretory factors	Secretion of signaling factors, growth factors, self-renewal, self-renewal	Secretion, cellular senescence, tumor, fibrosis (skin, hair)	High density, chronic, acute, traumatic, autoimmune, infection	Stem cell, oxidative stress, metabolic, inflammatory, proinflammatory	Stem cell, oxidative stress, metabolic, autoimmune, infection
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MESODERMAL	1. Epithelium	Increased secretion of secretory factors	Secretion of signaling factors, growth factors, self-renewal, self-renewal	Secretion, cellular senescence, tumor, fibrosis (skin, hair)	High density, chronic, acute, traumatic, autoimmune, infection	Stem cell, oxidative stress, metabolic, inflammatory, proinflammatory	Stem cell, oxidative stress, metabolic, autoimmune, infection
	2. Epithelium	Increased secretion of secretory factors	Secretion of signaling factors, growth factors, self-renewal, self-renewal	Secretion, cellular senescence, tumor, fibrosis (skin, hair)	High density, chronic, acute, traumatic, autoimmune, infection	Stem cell, oxidative stress, metabolic, inflammatory, proinflammatory	Stem cell, oxidative stress, metabolic, autoimmune, infection
	3. Epithelium	Increased secretion of secretory factors	Secretion of signaling factors, growth factors, self-renewal, self-renewal	Secretion, cellular senescence, tumor, fibrosis (skin, hair)	High density, chronic, acute, traumatic, autoimmune, infection	Stem cell, oxidative stress, metabolic, inflammatory, proinflammatory	Stem cell, oxidative stress, metabolic, autoimmune, infection
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Self-regulation, Self-healing effects, Favourable Progression.

Compensation, Tendency to aggression, Dysfetal Progression.

Disease Evolution Table (DET)

Manual

(Brief guide on how to use the DET)

1. Introduction

The Disease Evolution Table (or DET) is a 2-dimension graphic representation of the progression, or regression, of illnesses in 6-Phases in response to how the body's defense system reacts to the presence of homotoxins (exogenous and/or endogenous):

- On the horizontal axis, the phases of diseases in order of severity
- On the vertical axis, the different tissues/organs according to their embryological origin

Theoretically, each presenting clinical condition or disease state can be classified within this 6-Phase DET.

In consulting the DET it is important to bear in mind that in the presence of homotoxins, the body will activate its natural defense mechanisms at 3 major pathophysiological levels or phases (*Humoral, Matrix, Cellular*) in attempts to inactivate/detoxify and eliminate the toxins at each level. Each of these major pathophysiological phases is further sub-divided into 2 other phases. If not successful at the first stage, it will attempt again in the next phase, etc. The illnesses will become more serious and the attempts to treat them increasingly difficult as the phases progress toward the last phases on the right.

2. How to Use the Disease Evolution Table (DET)?

The Disease Evolution Table (DET) is a very useful conceptual and practical means for clinically evaluating and following the natural tendency or evolution of the biological disease processes in the patient. To be able to classify the current status or stage of a patient in such a table, and to be able to follow the patient's clinical history, it is necessary to become familiar in the interpretation of each axis in the DET. Depending upon the location on the DET in which the patient is found, specific antihomotoxic therapeutic strategies will need to be enacted in order to induce positive curative changes.

Therefore, not only does the table indicate the stage and severity of pathological processes, it becomes also the basis for determining or planning what therapeutic approach(es) is/are best needed to accomplish an amelioration of the patient's health status.

2.1 Locating the Patient on the DET: Merging Between Phase and Tissue

Simply finding the point of intersection of the vertical axis (tissues/organs involved) with the horizontal axis (phase of evo-

lution of the pathological process) will immediately indicate the physio-pathological status of the patient at that stage of his disease process evolution. We could also say that in the DET, the horizontal axis represents the ontogenetic way with which the body has learned to deal with homotoxins. On the other hand, the vertical axis would represent the phylogenetic (embryological) classification of a tissue/organ in which homotoxins may have reached. The DET could represent the environmental imprint and indicates the patient's ability to regulate in view of this imprint. More precisely, the first 3 phases (*Excretion, Inflammation, Deposition*) relate to how the body reacts to intoxications and how it could initially deal with them. The 3 last phases (*Impregnation, Degeneration, Dedifferentiation*) relate more to what the intoxication could induce the organism to do.

2.1.1 The Six Phases

The six phases on the Disease Evolution Table are the *Excretion, Inflammation, Deposition, Impregnation, Degeneration* and *Dedifferentiation* phases.

Excretion Phase

The excretion phase covers all the hyper-secretions (endocrine) and hyper-excretions of the body in different organs and tissues. As those secretions and excretions are increased in comparison to the normal standards in the population, they should perhaps be seen as a first stage of disease. Of course the presence of homotoxins is a dormant danger, and elimination and detoxification is needed, but in normal conditions detoxifying organs and excretion systems will eliminate them without any significant clinical signs and symptoms manifesting, as this is merely an amplification of a physiological process.

In this case, although there is a certain charge of intoxication, by the normal way of living, the body almost passively deals with it without really causing any clinical manifestations typical of defensive reactions. Thus, the elimination of toxins goes over as a normal increased excretion process, and the patient has no other clinical complaints at all.

Inflammation Phase

Once homotoxins manage to reach extra-cellular and/or intra-cellular levels, the body will begin to mount some form of a local defence reaction to counter the 'intoxication' status. The appearance of this local 'inflammatory' reaction is the reason for which in acute inflammations the patient is considered to be in an '*inflammation phase*'. Thus, obviously all acute inflammations are classified within this phase.

Important is the fact that we must see this first inflammatory reaction as a welcomed, natural and physiological attempt of the organism to try to do away with the toxins. Furthermore, the activation of phagocytes and phagocytosis should be seen as the first reactive step of detoxification.

All of the classical characteristics of inflammation might be present: *swelling, redness, pain, temperature increase, and loss of function* in the affected tissue.

Inflammation could be seen as a 'cleaning' process of the matrix. The cell is not involved yet, although the inflammatory processes can passively damage the cell (e.g. free radicals released by "frustrated or over-zealous" neutrophils).

Deposition Phase

This phase is an expression of the body's incapacity to eliminate (excrete) homotoxins and in which predominate events within the extra-cellular matrix and regulation disorders. It is reached when the body has to temporarily store (deposit) toxins. This may occur for a number of reasons:

- The inflammatory process (previous phase) was not adequately activated or was blocked/suppressed (e.g. by anti-inflammatory drugs).
- The excretion mechanisms are either hypo-functional or the toxic load excessive.

Therefore, if inflammation pathways are blocked or the amount of homotoxins get out of hand, the organism will choose a process of (temporary) storage or deposition of the homotoxins. Clinically, this phase is a relatively silent process with very few clinical signs and symptoms, but a quite dangerous process. It is only a question of time before the homotoxins will impregnate into the cell or from outside the cell interfere with and have many effects on normal cellular functions.

Impregnation Phase

Once the homotoxins begin to "impregnate" in the ECM or within the cells or have intracellular effects, diseases of the impregnation phases appear. Homotoxins practically become part of the structural components of the connective tissue and the matrix. Some toxins (e.g. viruses) may also directly penetrate cells within the connective tissues and/or cells of the parenchyma. Toxins that will reach this stage will begin to induce functional changes in both the matrix and in cells, such as blocking enzymes, metabolic pathways, compromising mitochondrial respiratory chain, etc. We see less efficient functioning of the cell and the reactions of the organism towards the homotoxins are often not purposeful anymore, and a minimal load of a specific homotoxin produces an overreaction of the organism's defence mechanisms (asthma, hay fever, migraine, gastric ulcer,...). Histologically, some changes in structural components begin to become evident. Clinically, the appearance of signs and symptoms are indicative of cellular damages.

Impregnation phases can be reached in a very short time span. It depends on the characteristics of the homotoxins.

Most viruses will try to get into a host cell and proliferate rapidly, and although the organism will try to develop a specific defence (Immunoglobulins) and eliminate the infected cells (T-cell activity and NK-cell induced elimination), the acute situation is an impregnation phase due to the intra-cellular presence of the homotoxins (viruses). Even if afterwards there is a full restoration of the tissue and the lost cells are replaced, the viral condition remains an impregnation phase for the time the virus is present; if the virus gets incorporated into the genetic material of the cell host. In post viral syndromes this situation might last for a long time, even for years.

Degeneration Phase

The natural defence system is no longer able to eliminate or excrete toxins from the cells and/or the matrix. Intracellular structures, including genetic components, cellular membranes, groups and systems of cells become increasingly and seriously damaged. In this phase predominate cellular damages. The progressing intoxication causes complete functional loss of the affected cells, till they die. In the long term we see tissue loss and a limited function of the whole affected tissue. By definition, degeneration phases accommodate chronic degenerative diseases, most of them irreversible in time.

Dedifferentiation Phase

The dedifferentiation phases accommodate all diseases in which abnormal cell proliferation (tissue growth) is the main characteristic. Cells lose their specificity and dedifferentiate to omnipotent cells (inversed embryological specificity) that can easily also lose their restraint control and begin to migrate to other locations in the body (metastases). In this phase of complete degeneration, the body becomes also increasingly influenced by endogenous homotoxins, that is from toxins generated within the body through cellular destructions. All malignant tumours, cancers, are classified here.

2.1.2 Evolutions or Phase Changes on the Table

The patient's disease position on the DET is subject to migrate or shift from one phase to another and from one embryological tissue to another. The possible directions are four, but with two predictable outcomes:

- **Progressive** – from Left to Right and/or from Top to Bottom (Disease Evolution)
- **Regressive** – from Right to Left and/or from Bottom to Top (Health Recovery)

2.1.2.1 Disease Evolution

The patient's pathological status progresses (evolves) on the DET towards more serious conditions, too often for iatrogenic reasons.

Progression in the patient's signs and symptoms from the left to the right on the table or from the top to the bottom or even a combination of both is a condition of worsening, and is called a "Disease Evolution". The inhibition or suppression of natural biological defence mechanisms (e.g. the indiscriminate use of anti-inflammatory drugs) is frequently responsible for

the progressive involvement of the body in other pathologies.

When toxins are inhibited from being excreted, they will not only impregnate locally, but will easily also be transferred to other tissues, even to great distances far from the original focal point:

- In a linear progression, i.e. to other tissues of similar embryological origin.
 - E.g. Angina (lymphodermal) → Polyarthritits (cavodermal) → Nephritis (nephrodermal).
- In a disordered progression, skipping phases and entering tissues of different embryological origins locally and/or at a distance.

Here, the disease tends to evolve negatively in the ontogenetic and phylogenetic sense.

2.1.2.2 Health Recovery

A regression in the patient's pathology with the relative signs and symptoms (and actually with the re-appearance of old signs and symptoms) from the right to the left on the table, or from the bottom to the top or even a combination of both is an indication of an ameliorating process, and is called "Health Recovery".

In these cases, the disease tends to evolve positively in the ontogenetic and phylogenetic sense.

2.1.2.3 Regulation/Compensation Division

Between the 3rd (*Deposition*) and 4th (*Impregnation*) phase there is the so called **Regulation/Compensation Division**. It is an artificial dividing line between the two phases that refers to the demarcation point that separates the pure accumulation of toxins and the actual event of their integration or bindings with the structural components of the matrix (proteoglycans, glycoproteins glycosaminoglycans). This boundary is very important physiologically, pathologically, and clinically, and thus therapeutically, because it is the separating line **between the phases in which simple excretion of toxins is still possible, from the Impregnation phase in which simple excretion becomes no longer achievable, at least spontaneously.**

This line also refers to the differences in the body's reactions to the intoxication by the homotoxins. At the **left side** of this line, the body will show **regulation** abilities. At the **right side**, the regulation abilities are progressively lost and we see **compensation** as the main strategy of the body in dealing with the homotoxins.

We could state that the **Regulation/Compensation Division** may represent a dangerous point of no return, as on the right side of this line cell damages begin to occur. We will start to see degenerative processes of tissues. Degenerations eventually become irreversible and cell death inevitable, the reason for which we must adapt completely **different therapeutic strategies** in order to try to limit the progressive damages. Different therapeutic approaches are necessary to deal with deregulations at the left side of the division, where the prognosis is more favourable.

DISEASE EVOLUTION TABLE (DET)

HEALTH ← States of Regulation / Deregulation → DISEASE

Organ System/Tissue	Humoral Phases		Matrix Phases		Cellular Phases	
	1. Circulation Phase	2. Impregnation Phase	3. Deposition Phase	4. Impregnation Phase	5. Impregnation Phase	6. Impregnation Phase
ECTODERMAL
ENDODERMAL
MESODERMAL

REGULATION DIVISION

Self-regulation, self-healing effects, favourable prognosis. Compensation, tendency to aggravation, unfavourable prognosis.

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REGULATION DIVISION

Self-regulation, self-healing effects, favourable prognosis. Compensation, tendency to aggravation, unfavourable prognosis.

DISEASE EVOLUTION TABLE (DET)

HEALTH ← State of Regulation ← → DISEASE

Organ System/Tissue	Humoral Phases		Cellular Phases	
	Location/Phase	Characteristics/Phase	Location/Phase	Characteristics/Phase
ECTOCYTOBIOLOGICAL	Excretion Phase	Deposition Phase	Impregnation Phase	Degeneration Phase
EMBOCYTOBIOLOGICAL	Excretion Phase	Deposition Phase	Impregnation Phase	Degeneration Phase
MEIOCYTOBIOLOGICAL	Excretion Phase	Deposition Phase	Impregnation Phase	Degeneration Phase

Left: Regulation, Self-healing effects, favorable prognosis. Right: Unconstrained, tendency to aggression, doubtful prognosis.

into the cells, and/or are negatively influencing the cellular functions from the ECM. Now obviously cells, tissues and organs require external support in order to better deal with the toxins. Homotoxicologically, this is achieved through the addition of the third pillar of the therapeutic regimen:

- 3rd – Organ & Cell Support

Additional Phase Considerations:

By phase, we can state that the following pillars in homotoxicological treatments are to be considered seriously:

- **Excretion phase:** Drainage and Detoxification can accelerate the physiological processes, and reduce the likelihood of recurrences.
- **Inflammation phase:** Immunomodulation is needed. In mild and acute conditions, drainage and detoxification may be optional, but becomes mandatory if recurrences occur.
- **Deposition phase:** Drainage and Detoxification are mandatory. If the Health Recovery process induces a pronounced inflammatory response, than Immunomodulation should ideally be added.
- **Impregnation, Degeneration and Dedifferentiation phases:** These phases require all of our efforts with the 3 pillars of homotoxicological treatments in order to prevent as much as possible further cellular damages, and hopefully stimulate those still active natural healing processes directed to re-establishing physiological functions and relative health, if the intra-cellular damages have not become completely irreversible.

2.2 Therapeutic Considerations/Consequences

The DET phase location of the patient's pathological state or clinical diagnosis is, in Homotoxicology, the most important consideration for establishing a correct therapeutic approach. In addition, homotoxicological treatments are based fundamentally on 3 pillars:

- 1st – Drainage & Detoxification
- 2nd – Immunomodulation (Regulation Therapy)
- 3rd – Organ & Cell Support

Thus, the utilization of the 1st or the 1st & 2nd or all 3 pillars will depend essentially upon the DET phase in which the patient's disease is situated.

Now, if we focus our attention on the **Left side** of the DET division, we will realise that the homotoxins are basically still in the extra-cellular compartments, site from which they can exhibit their effects. This means that the homotoxicological intervention at this point may require only the use of the first 2 pillars of treatment, that is:

- 1st – Drainage & Detoxification
- 2nd – Immunomodulation (Regulation Therapy)

Pathological processes that have passed the DET Division and are thus located on the **Right**, have homotoxins that are affecting the cells themselves, either because they have penetrated

3. Conclusion

The Disease Evolution Table (DET), especially in its latest version, will represent the most practical and useful tool not only in research projects but also in any Homotoxicological Medical Practice, independently of the scope or the speciality.

Uses and applications are numerous, such as:

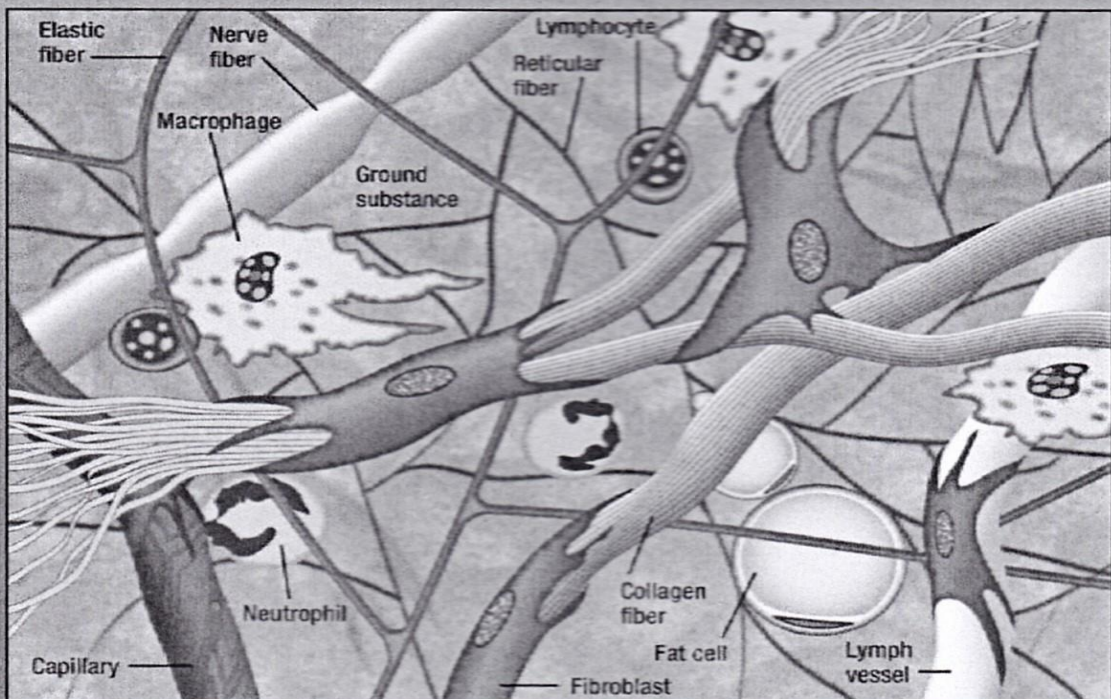
- Rapid phase identification of patient's pathology
- Identifying the patient's regulation capabilities
- Immediate insights on prognosis
- Guide in formulating therapeutic strategies or protocols
- Assessing the treatment outcomes
- Follow the patient's progress and therapeutic adjustments accordingly. For example, if a patient is being treated, a movement (evolution) is expected from the right lower part of the table to the upper left, or from the phases on the right to those on the left. If the evolution is in a different direction, or there is no evolution (movement) at all, then the treatment must be adjusted.

Rightly so, we dare to state that the DET will become a most appreciated and valuable instrument in your daily medical practice. It will inspire you to interpret therapeutic results in a completely different light and direct you into a more complete biological approach to your patients.

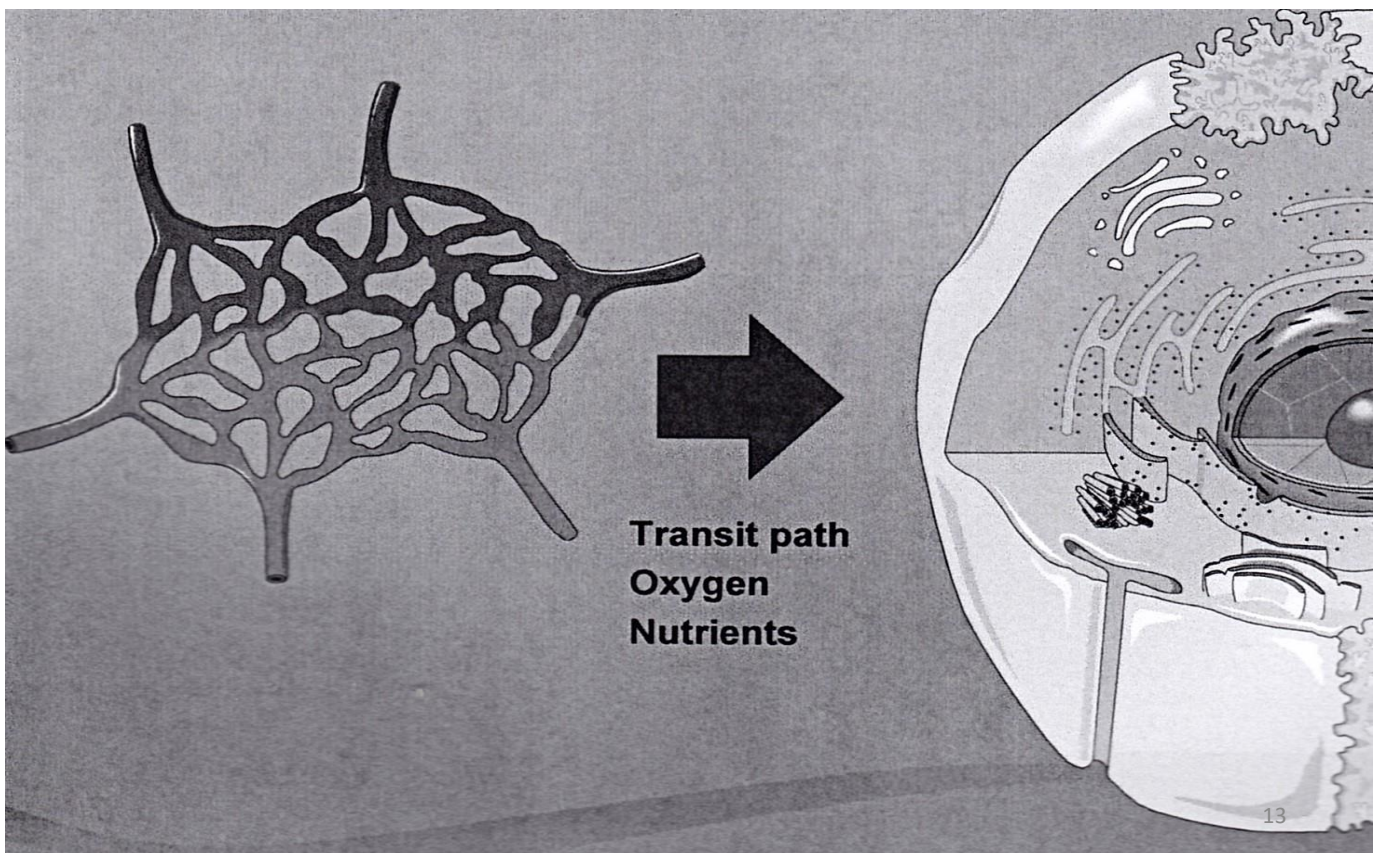
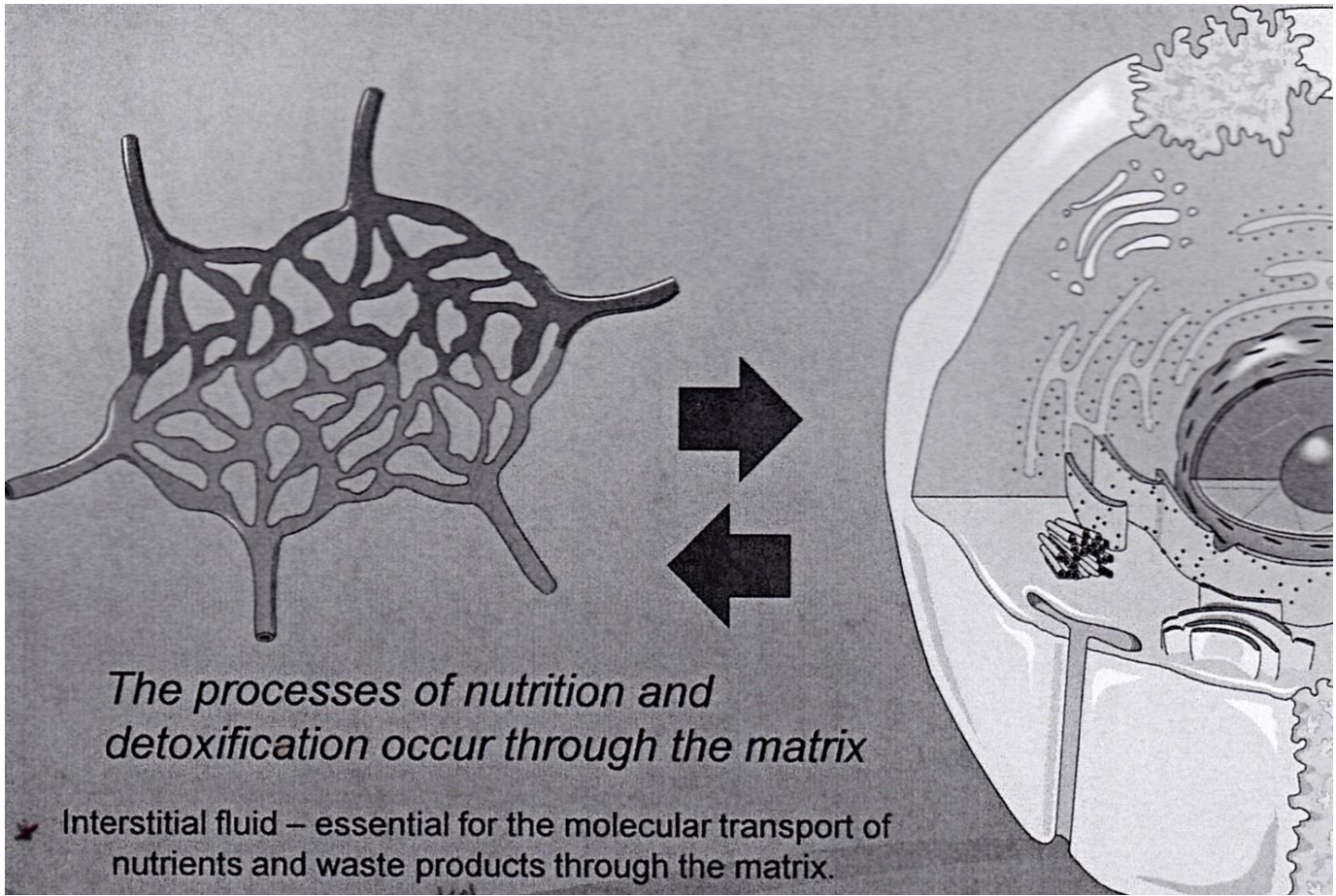
THE EXTRACELLULAR MATRIX

- **Matrix space accounts for 40% of Body Mass**
- **Primary Dumping ground for toxins consumed**
- **Cells in body can only react as they have been instructed by Extracellular Space**
- **Matrix intoxication eventually leads to increasing stress and damage to the intracellular structures**
- **Dynamic space of the Extracellular space and its regulation (Ground Regulation) have a major impact on extra and Intracellular catalysts.**

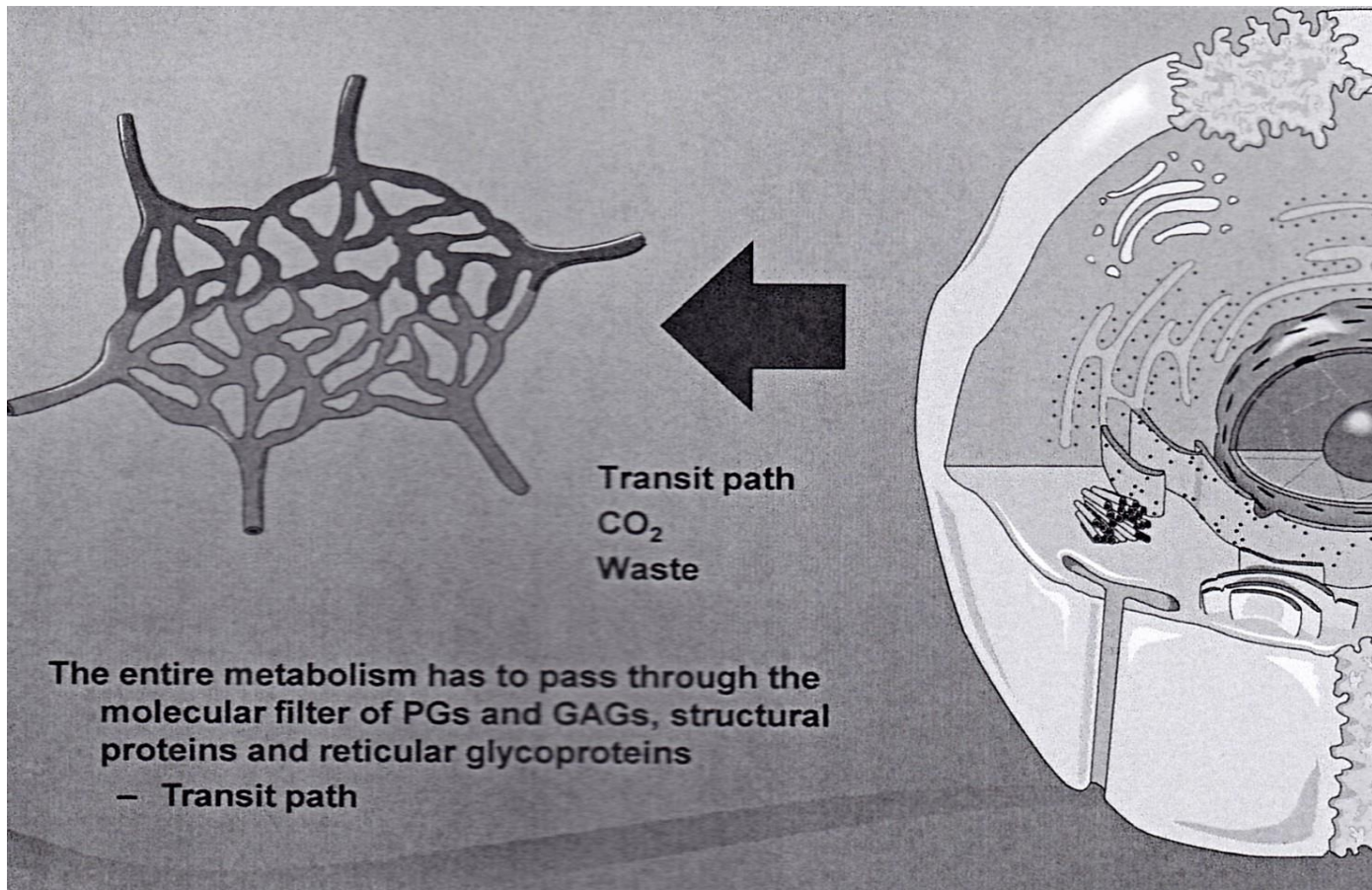
The Extra Cellular Matrix



Examples of processes that occur through the Extracellular Matrix

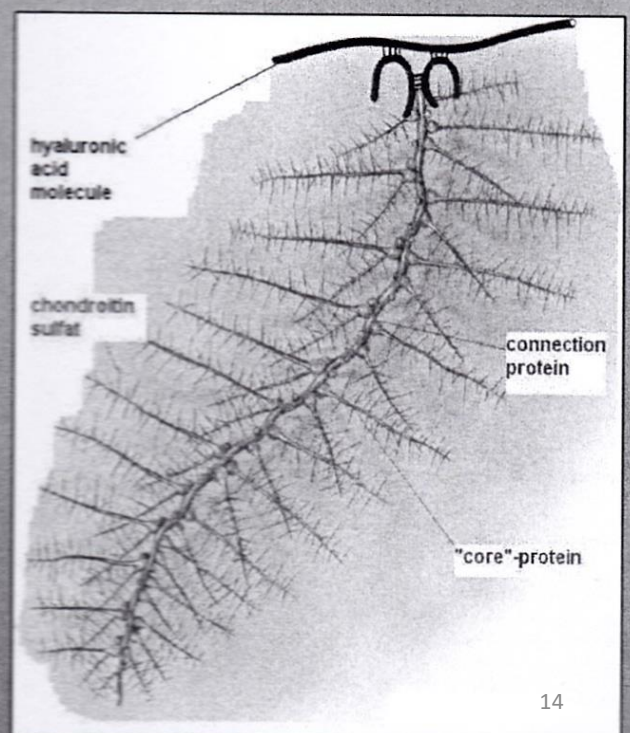


Examples of processes that occur through the Extracellular Matrix (2)



Proteoglycans

- Carrier protein with transverse intersections of glycosaminoglycans fitted on a hyaluronic acid molecule
- Because of the glycosaminoglycans it is very hydrophilic.



EXTRACELLULAR MATRIX - GLYCOSAMINOGLYCANS

- **Hydrated gel of big polysaccharides**
- **Shrinking of the proteoglycans structure by strong negative charge, hydrophilic characteristics & spatial structure**
- **Diffusion of the substances through the extra cellular matrix**
- **The synthesis of the PG/GAG occurs in only 1 to 2 minutes (Lozzo 1985, Heine 1997).**
- **Their Average lifespan is between 2 and 120 days.**

PGs AND DEPOSITION

Proteoglycans (PGs) have the capacity to store all nutritional substances. Examples:

- **Carbohydrates as glucose & galactose**
- **Proteins as NH Groups**
- **Fats as Amino Acids**
- **Water as the dominant element.**

(Ref: Wendt L, Warning 1986)

DEPOSITIONS AND MATRIX

Deposits of carboxyhaemoglobin in the basement membrane of smokers can lead to:

- **Intermittent claudication**
- **Endarteritis Obliterans**
- **Coronary arteritis**

(Ref: Wendt, Warning 1985)

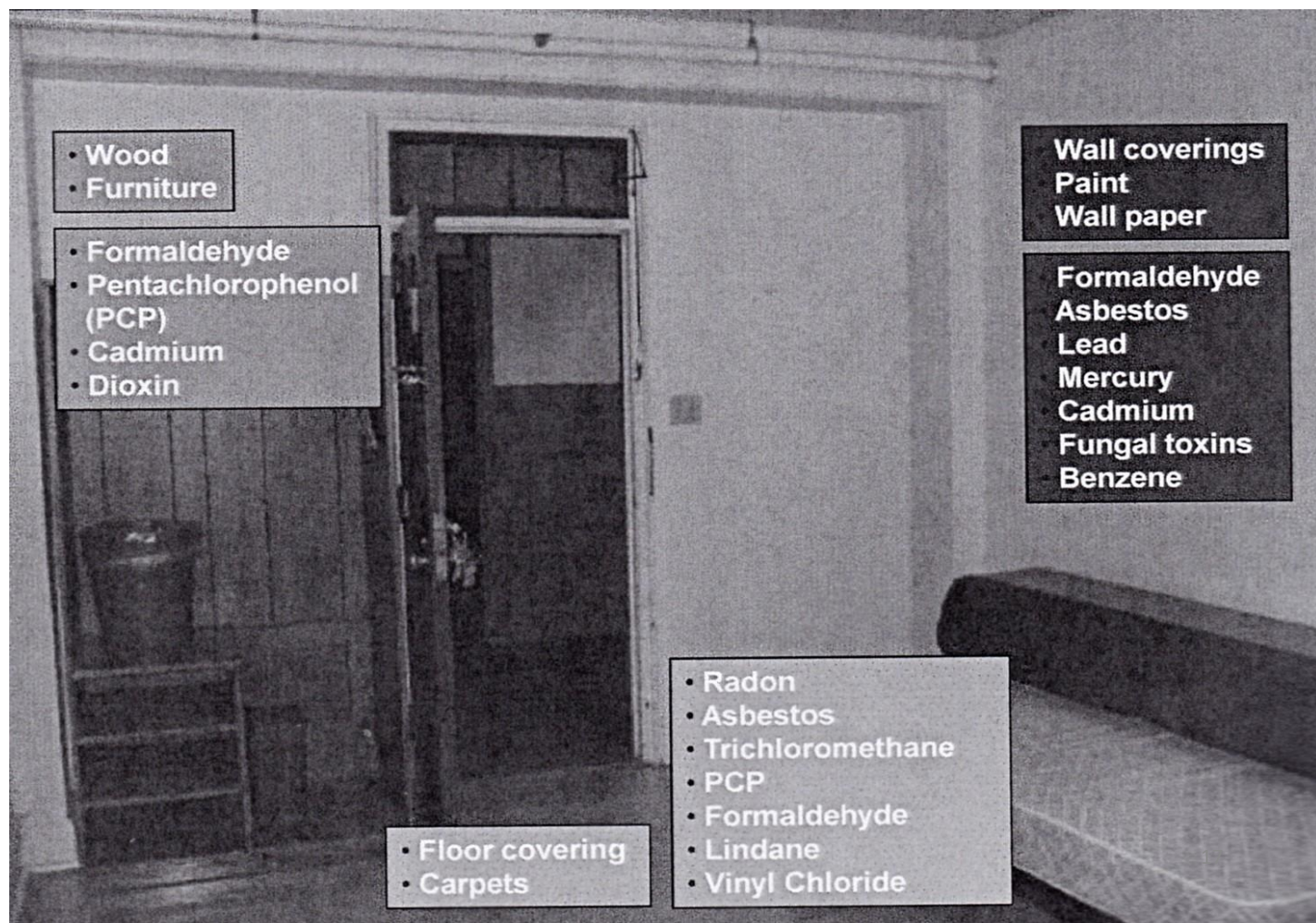
The matrix can act as a reservoir, not only for nutrients and basic substances, but also for homotoxic elements.

DEFINITION OF HOMOTOXIN

- **A Homotoxin is any substance that is toxic to the human organism,**
- **It doesn't matter if the toxicity is already there before it enters the body (exogenous Homotoxin) or becomes toxic as an intermediate or end product of metabolic processes in the body (endogenous Homotoxin)**
- **Antihomotoxic remedies modulate the matrix abnormalities while giving rise to changes in the local cytokine network.**

HOMOTOXINS

EXOGENOUS	ENDOGENOUS
Mercury, Lead, other heavy metals	CO ₂
Tobacco	Lactic Acid
Coffee	Urea
Gases from Industry & Traffic	Calcium oxalate
Food Colouring, Refined Sugar, Aromatics	Ammoniac
Toxic Materials in the home: carpet glue, paint, spot removers, cleaning products	Hormone Imbalance



ATMOSPHERE - POLLUTION

- **Pollutants are carried from one place to another over great distances by the winds.**
- **The processes of heavy pollution are strongly influenced by the circulation of air masses.**
- **A given place will be polluted to a greater or lesser extent depending on how good is the circulation of air in the geographical region in which it lies.**
- ***Carbon Dioxide is the gas that has shown the largest increase in the atmosphere.***
- ***Emission is increasing at the rate of 5% every 10 years. In the last 200 years it has increased by around 25%.***

Classification of metals according to the Environmental Protection Agency (EPA):

Hazardous Metals:

- **Mercury (Heavy trace element)**
- **Beryllium (Light trace element)**

Mild exposure can harm human health

Potentially Hazardous Metals:

- **Barium, Manganese**
- **Cadmium, Nickel**
- **Copper, Zinc**
- **Lead, Vanadium**
- **Tin**

Toxicity of metals according to dose level and time of exposure:

In cases of prolonged exposure through drinking water, the air or contact with contaminated soil.

- **Symptoms Include:**
- **Development of various types of cancer hyperkeratosis.**
- ***Hyper and Hypopigmentation of the skin, particularly in the case of Arsenic.***
- ***Chronic Inflammation of the airways.***
- ***Renal Failure***

Build-up of Homotoxins

- **Increase in permeability,**
- **Invasion of endotoxins,**
- **Deposition into the matrix**

Fact: The Lymph system gets its supplies from the sea of extracellular fluid.

TOXICOKINETICS:

In Principle four (five) steps are necessary for this, namely:

- 1. Absorption**
- 2. Transport**
- 3. Metabolism**
- 4. Distribution and Storage**
- 5. Elimination**

ABSORPTION:

- **Skin, mucous membranes including the gastrointestinal tract**
- **Mucosal absorption is the fastest, skin the slowest.**

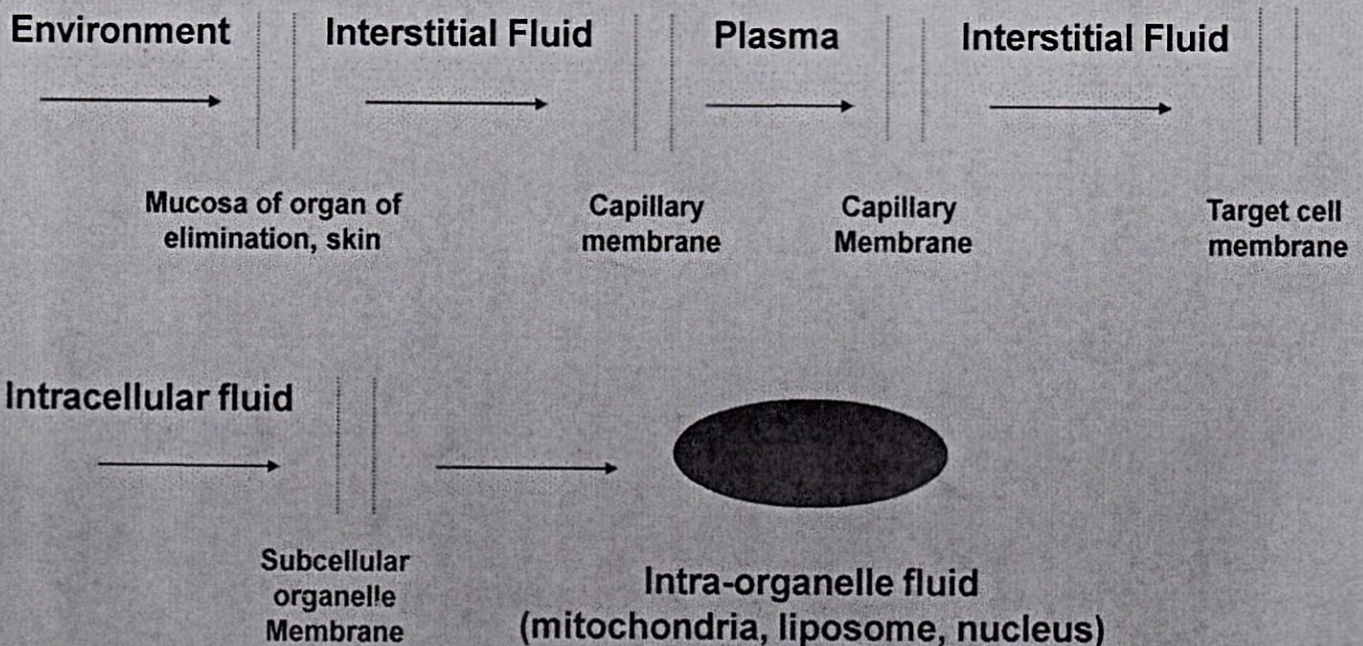
MUCOSAL SURFACES HAVE BARRIERS:

- **Mucus Layer covering membrane**
- **The tight junction**
- **Symbiotic bacteria which covers the mucus membrane**
- **Electrolyte secretion which will osmotically draw water to wash the toxin away.**

TRANSPORT:

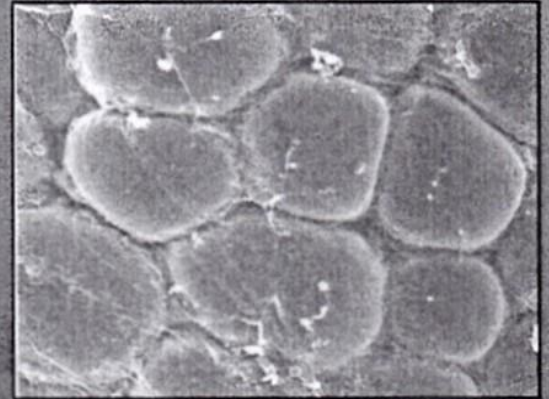
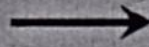
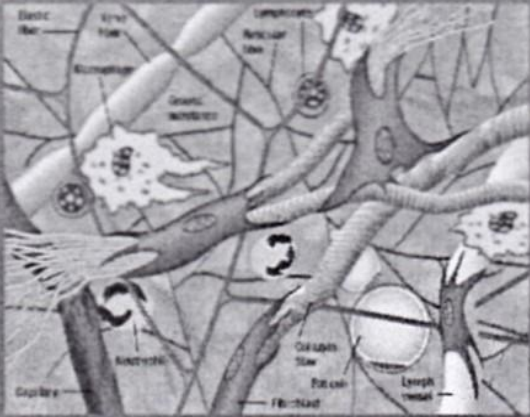
- **Toxins are transported either by:**
 - **Bulk transfer in the blood**
 - **Over short distances through diffusion**
- **Many fat soluble toxins require a carrier protein in the blood:**
 - **These include the lipoproteins, albumin as well as globulins**
- **Toxins need to move over several membranes to reach the target tissue.**

Toxicokinetics: Movement of toxins from the environment to the storage compartments



STORAGE OF TOXINS:

- Storage takes place in several tissues and organs
- If the affinity for an organ is large the toxin will accumulate or form a depot for years
- Lipid insoluble toxins stay in the plasma & interstitial fluid
- Lipid soluble contaminants reach all compartments and may accumulate fat



PRACTICAL IMPLICATIONS:

- Rapid exchange compartment will detoxify readily and be the first to also give up toxins to the organs of elimination
- Slow exchange compartment will need stimulation and longer drainage.
Detoxification and drainage should continue so long till the slow exchange compartment has been cleared.

METABOLISM OF TOXINS:

- **Most of the toxins entering the body is lipophilic**
- **Need to become water soluble for excretion in the Kidney & the Bile**
- **Most of the metabolism takes place in the Liver**
 - **P450 system the most important Phase I together with Phase II reactions**

PHASE I REACTION:

- **Consists of mainly CYP (P450) system**
- **Also the flavin mono oxidases (FMO)**
- **Fat soluble toxins are changed by way of oxidation, reduction & hydrolysis**
- **During Metabolism through P450, many free radicals are formed**
- **The organs especially the liver is then prone to damage during toxin overload.**

The aim is to make the toxins more water soluble for excretion in the kidney and the bile

PHASE I REACTIONS:

ENVIRONMENTAL TOXINS INCLUDE:

- **Pesticides**
- **Pollutants**
- **Food Additives**
- **Drugs**
- **Alcohol**

INDUCTION OF THE P450:

CYP SYSTEM:

- **Classified according to the gene, the subfamily and lastly the isoform**
- **CYP3A4 responsible for metabolism of many drugs as well as exogenous and endogenous toxins**

Can be influenced by many substances:

- **Induced Caffeine, many drugs, alcohol**
- **Can be inhibited by substances such as grape fruit juice.**

Bailey, D.G., Arnold, J.M.O., Spence, JD (1998), Grapefruit juice – drug interactions. British Journal of Clinical Pharmacology 46 (2), 101 - 110

PHASE II REACTIONS:

- **Conjugation pathway**
- **Rich in Sulfhydryl (SH) Groups:**
 - **Cysteine**
 - **Taurine**
 - **Glutathione (Glycine, Glutamine)**
- **These are also free radical scavengers & heavy metal chelators**
- **In conjugation function they are lost to the body forever, as excreted with the toxin.**

CO-FACTORS:

Phase I and II need co-factors, namely:

- **E.g. Vitamins**
- **Minerals**
- **NADH – derived from Niacin**
- **Selenium**
- **Glutathione**
- **Herbal Preparations**

Note: These need to be present in adequate quantities to ensure efficient detoxification.

BASIC CONSIDERATIONS IN DETOXIFICATION:

DANGER IF:

- **Stored toxins are released to rapidly all at once.**
- **The Liver, other metabolising & elimination organs are overloaded or not functioning properly.**
- **The released toxins will diffuse into the blood but cannot be excreted.**
- **Process of detoxification & drainage puts a burden on the body.**
- **Very Frail and sick patients it can put a further burden on the body**
- **In these patients detoxification is often done as a later event, when the patient has received other medications to support the body**

**Next we will discuss Popular
Detoxification techniques used**

POPULAR DETOXIFICATION:

- **Chelation therapy - heavy metal detox**
- **Detox Diets**
- **Body Cleansing**
- **Water Fasting**
- **Colon Cleansing**
- **Purification Rundown**
- **Master Cleanse**
- **Detoxification Foot Pads**
- **Aqua Detox treatments**
- **Gerson Therapy – Plant based diet that relies heavily on fruits, vegetables, grains. Entirely Organic Diet**

DID YOU KNOW:

In 1480 Blood Letting techniques were widely used in the belief of:

- **Decongesting, draining**
- **Reduces Hct – Anaemia**
- **Reduces aggregation**
- **Improves platelet deformability**
- **Reduces peripheral vascular resistance**

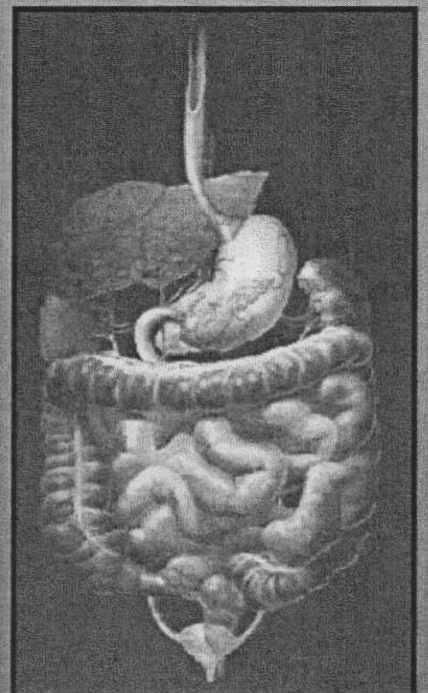
Diseases do not come upon us
out of the blue, they develop from
small daily sins against nature.

When those sins accumulate,
diseases seem to break forth all at once.

Hippocrates

Organs of excretion

- Kidneys and bladder
- Liver
- Gastrointestinal tract
- Respiratory tract
- Skin
- Lymphatic system



DETOXIFICATION VIA THE KIDNEYS:

- 1. Regulation of body's fluid volume, mineral composition and acidity**
- 2. Regulating excretion & re-absorption of water and electrolytes**
- 3. Excretion of water soluble homotoxins (organic waste products) and some chemicals, heavy metals over urine production, mostly small polar compounds which has been made water soluble in the Liver.**

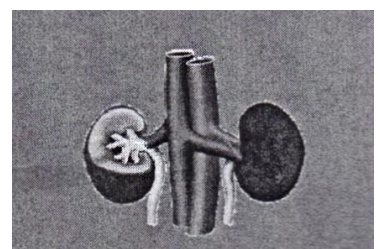
EXCRETION VIA THE KIDNEYS:

QUESTION:

How much is the right amount to drink?

ANSWER:

- ✓ Up to 70kg – 2 Litres daily**
- ✓ Up to 90kg – 3 Litres daily**
- ✓ Over 90kg – 4 Litres daily**

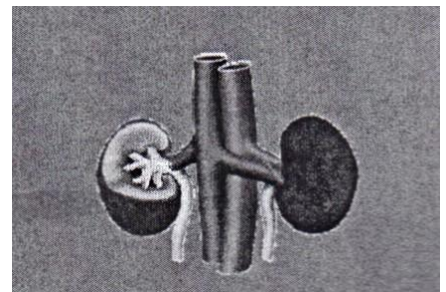


DETOXIFICATION VIA THE KIDNEYS – **EXAMPLES HOW TO:**

- ❖ **Maintain an adequate fluid intake (one to two litres neutral fluid per day), celery juice, Birch Elixir, Dandelion Juice, Horsetail tea.**

- ❖ **Alkaline Diet:**
 - **Green Vegetables**
 - **Potatoes**
 - **Unrefined Diet**
 - **Reduced Animal Protein**
 - **Reduced Salt**
 - **Reduced Sugar**
 - **Drink Correctly – Mineral Water**

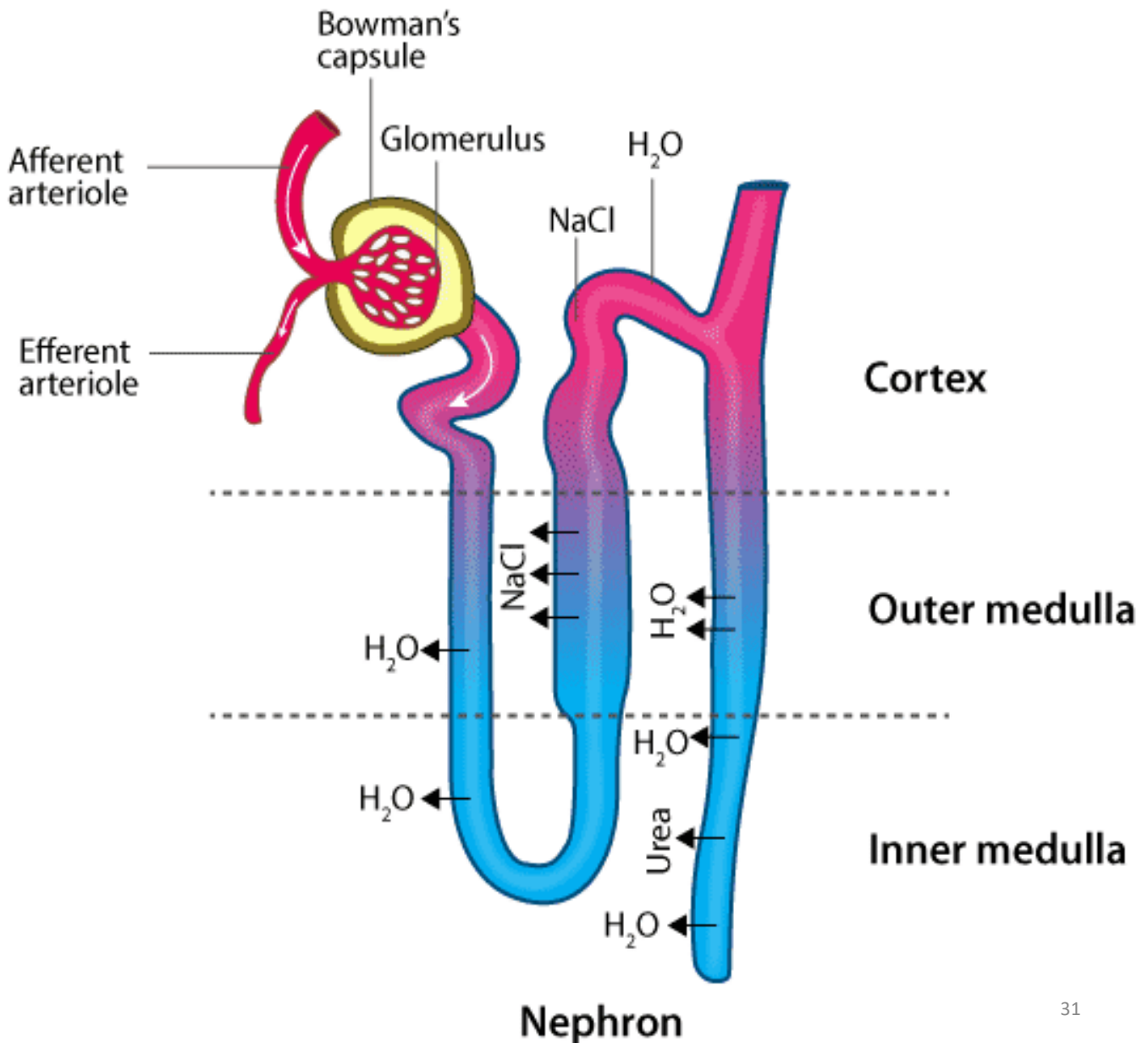
- ❖ **Herbal Diuretics:**
 - **Aromatic Oils**
 - **Juniper**
 - **Parsley**
 - **Celery**
 - **Lovage**
 - **Flavonoids and saponins**
 - **Birch Elixir**
 - **Uva Ursi (Bearberry)**
 - **Berberis (Barberry)**



THE RENAL TUBE / NEPHRON – KIDNEY:

DEFINITION OF THE NEPHRON:

"Nephron is the basic functional unit of kidneys that consists of a glomerulus and its associated tubules through which the glomerular filtrate passes before it emerges as urine"



Discussion - Structure of the Nephron:

The nephron is a long tube-like structure, its length varying from 35–55 mm long. At one end, the tube is closed, folded and expanded, into a double-walled, a cuplike structure called the Bowman's capsule or renal corpuscular capsule, which encloses a cluster of microscopic blood vessels called the glomerulus. This capsule and glomerulus together constitute the renal corpuscle.

Nephron comprises of 2 major portions:

1. Renal Tubule

2. Renal Corpuscle

Renal Tubule

The renal tubule is a long and convoluted structure that emerges from the glomerulus and can be divided into three parts based on function.

- The first part is called the proximal convoluted tubule (PCT) due to its proximity to the glomerulus; it stays in the renal cortex.**

- . The second part is called the loop of Henle, or nephritic loop because it forms a loop (with descending and ascending limbs) that goes through the renal medulla.**
- . The third part of the renal tubule is called the distal convoluted tubule (DCT) and this part is also restricted to the renal cortex.**
- . The capillaries of the glomerulus are enclosed by a cup-like structure called Bowman's capsule. This structure extends to form highly coiled tubules called PCT. PCT continues to form the loop of Henle which ascends to DCT, which in turn opens into the collecting duct. The major function of tubules is reabsorption and the process can either be through active transport or passive transport. In addition, secretions by tubules help in the urine formation without affecting the electrolyte balance of the body.**

• Proximal Convoluted Tubule (PCT):

The blood brought by the renal artery is filtered by the glomerulus and then passed to the PCT. Maximum reabsorption takes place in PCT of the nephron. PCT is the region of renal tubule where reabsorption of essential substances like glucose, proteins, amino acids, a major portion of electrolytes and water takes place. The surface area for reabsorption is facilitated by the lining of the simple cuboidal epithelium in them. Reabsorption takes place at the expense of energy, i.e., the process is active. PCT selectively secretes ions such as hydrogen, ammonia, and potassium into the filtrate and absorbs HCO_3^- from it. Thus, PCT maintains the electrolyte and acid-base balance of the body fluids.

• Henle's Loop:

Henle's loop has a descending and an ascending limb. Being parts of the same loop, both the descending and ascending limbs show different permeability. The descending limb is permeable to water but impermeable to an electrolyte, while the ascending limb is permeable to electrolytes but impermeable to water. Since the electrolytes get reabsorbed at the ascending loop of Henle, the filtrate gets diluted as it moves towards the ascending limb. But reabsorption is limited in this segment.

Distal Convoluted Tubule (DCT):

The DCT, which is the last part of the nephron, connects and empties its contents into collecting ducts that line the medullary pyramids. The collecting ducts amass contents from multiple nephrons and fuse together as they enter the papillae of the renal medulla.

Similar to PCT, DCT also secretes ions such as hydrogen, potassium, and NH_3 into the filtrate while reabsorbing the HCO_3^- from the filtrate. Conditional reabsorption of sodium ions and water takes place in DCT. Thus, it maintains the pH and sodium-potassium level in the blood cells.

Collecting Duct:

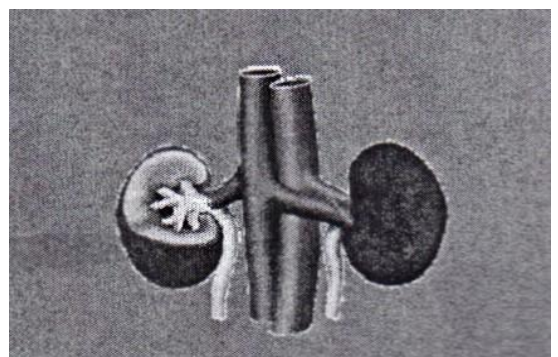
Collecting duct is a long, straight tube where H^+ and K^+ ions are secreted to maintain the electrolyte balance of the blood. This is also the region where the maximum reabsorption of water takes place to produce concentrated urine.

▪ Renal Corpuscle:

The renal corpuscle consists of a glomerulus surrounded by a Bowman's capsule. The glomerulus arises from an afferent arteriole and empties into an efferent arteriole. The smaller diameter of an efferent arteriole helps to maintain high blood pressure in the glomerulus.

The Bowman's capsule is divided into three layers:

- 1. Outer Parietal layer: It is made up of epithelial cells with minute pores of diameter 12nm.**
- 2. Middle Basement membrane: This layer is selectively permeable.**
- 3. Inner Visceral Layer: It consists of large nucleated cells called podocytes which bear finger-like projections called podocels.**



ORGANS OF DETOXIFICATION: **THE LIVER**

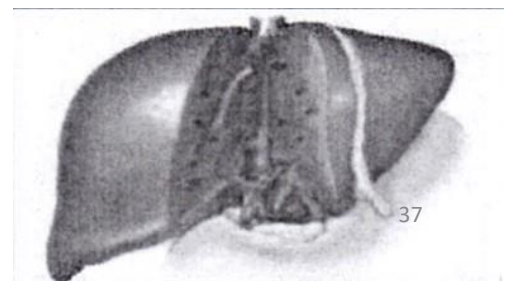
One of the most important detoxifying and elimination organs, Metabolically complex:

- Metabolism of toxins (Phase I and II)**
- Cholesterol Metabolism**
- Gluconeogenesis**
- Clotting Factors**
- Plasma Proteins**

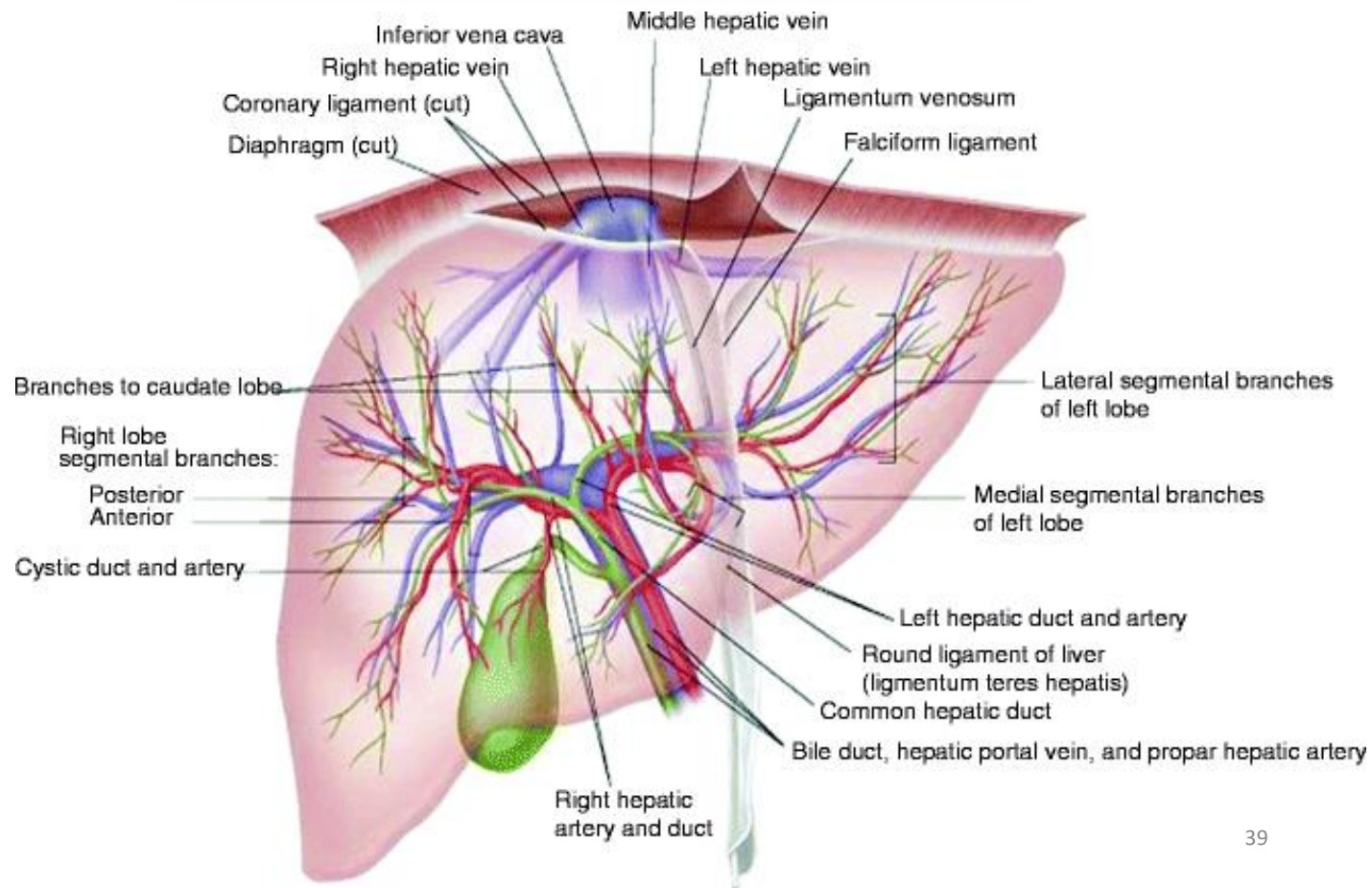
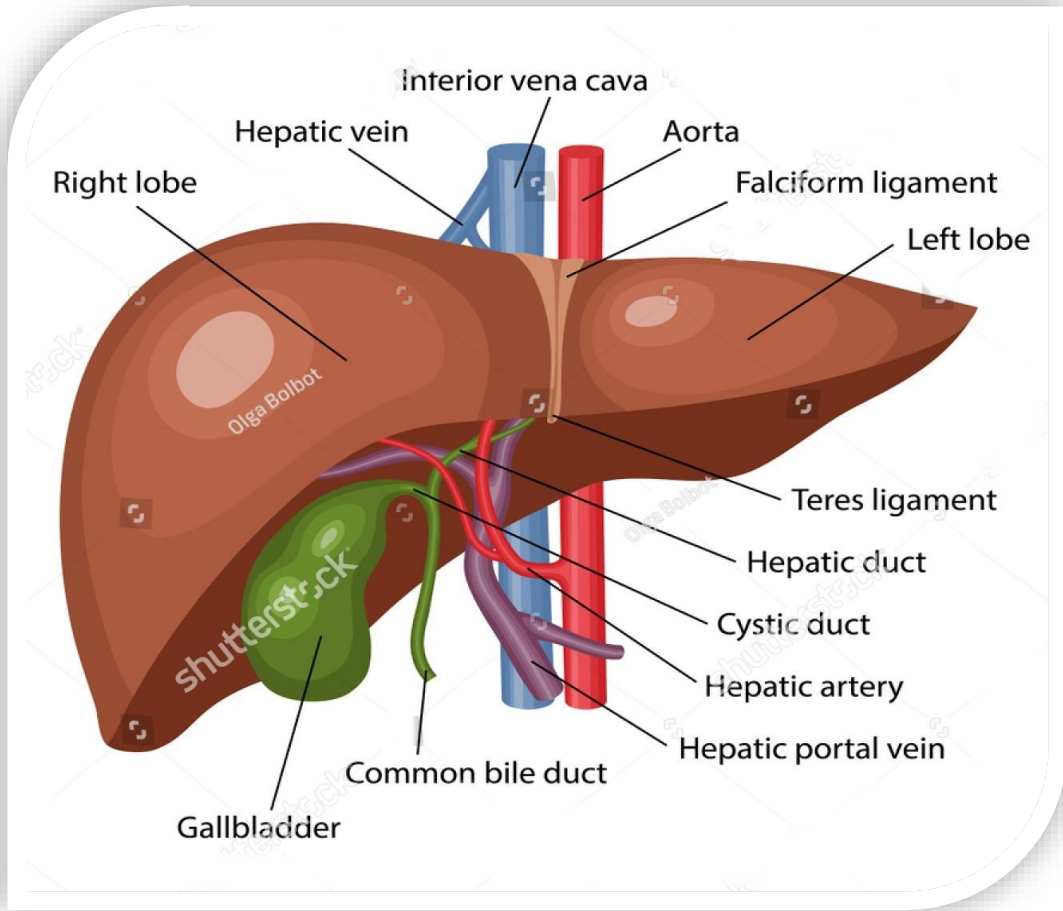
DETOXIFICATION THROUGH THE LIVER:

- 1. Making fat soluble homotoxins water soluble to excrete via the kidneys and the bile**
- 2. Metabolization of homotoxins via sulfhydryl containing substances to non – toxic rest products.**

The next diagram illustrates how the detoxification process takes place....



EXTRA INFO – ANATOMY OF THE LIVER



THE BOWEL – THE MOST POWERFUL IMMUNOLOGICAL ORGAN

Lymphatic tissue of the small intestine

- **109 Lymphocytes in Peyer's plaques, mesenteric lymph nodes and the mucosal lamina propria**
- **Cells with type 1 T-cell receptor:**
 - **Weak response to antigens**
 - **Little cytotoxic defensive reaction**
 - **Pronounced suppressive properties**
- **Task performed:**
 - **To suppress lymphocyte reactions to food allergens**

LAMINA PROPRIA LYMPHOCYTES:

- **Layer beneath the mucosal epithelium**
- **Predominantly CD4+ (Helper T Cells)**
 - **TH 1 cells: Cell mediated responses to intracellular pathogens**
 - **TH 2 cells: Antibody mediated responses (allergens, parasites)**

DIAGRAMS – LYMPHOCYTES REACTIONS:

The bowel – the most powerful immunological organ

Cellular immunity

Humoral immunity

Allergy

TH0
CD4+

TH1

TH2

IL-2, IL-12

INF- γ

TNF- α , β

Cytotoxic potential +++

IL-3, IL-4

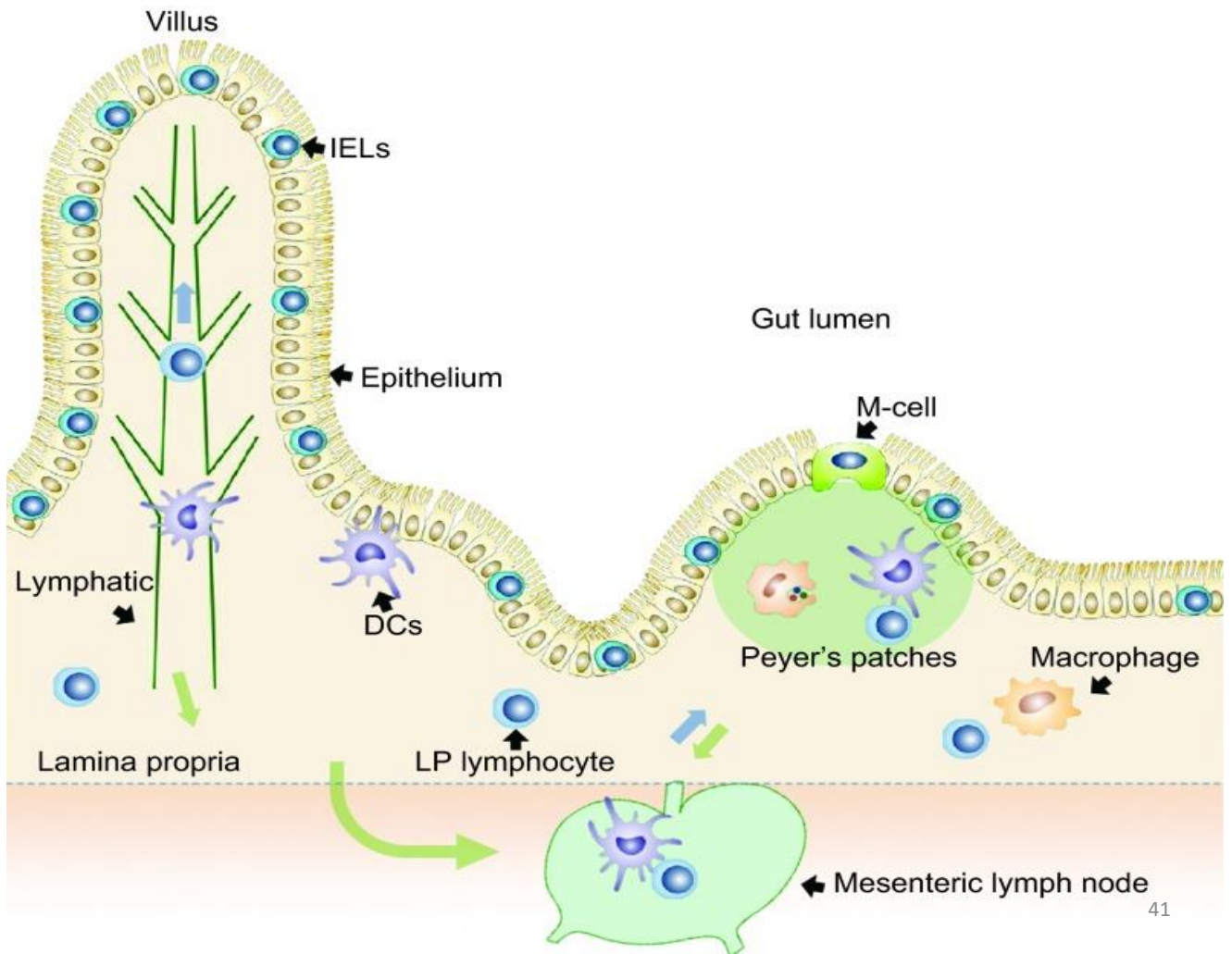
IL-5, IL-6

IL-10, IL-13

Cytotoxic potential -



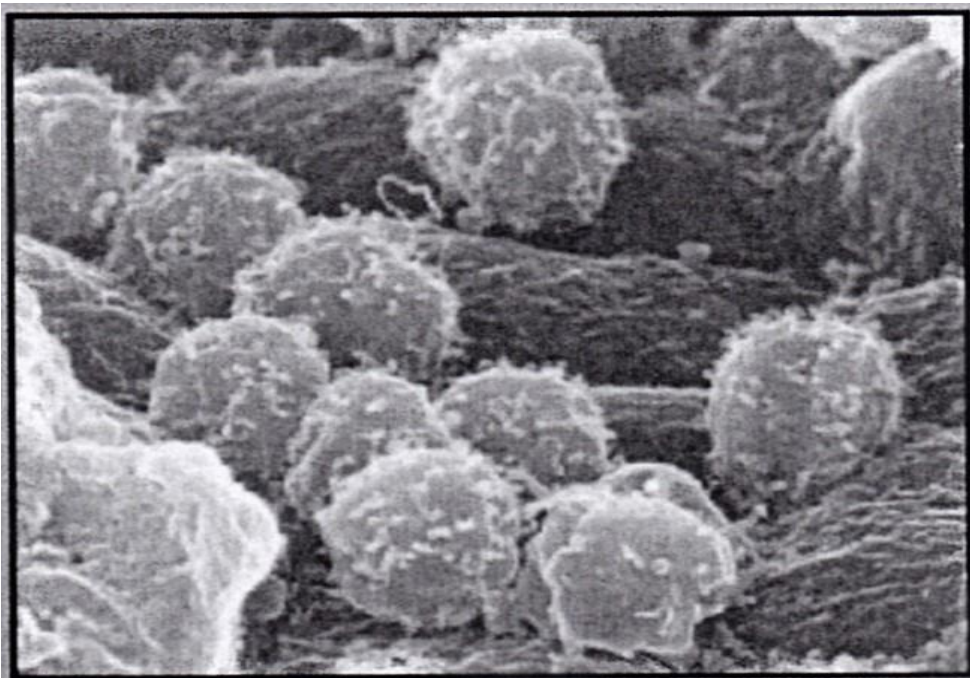
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LYMPHATIC TISSUE OF SMALL INTESTINE:

The Regulatory T - Cells

- Tr cells are found in high density in Peyer's plaques
- TH3 cells (cells of oral tolerance)
 - Formation of TGF- β (transforming growth factor) leads to:
 - ➡ immunosuppressive cytokine
 - TGF- β – isotype switch to IgA in B cells
- Tr cells – helper function for IgA formation
- Suppressor function for the IgG and IgE response



Balance between Proinflammatory factors and mucosal protective mechanisms

PROINFLAMMATORY	MODIFYING FACTORS	PROTECTIVE
Luminal bacteria FMLP, LPS, PG-PS Bacterial and food antigens Bile acid Digestive enzymes	GENETIC Immunoregulation Barrier function ENVIRONMENT Antibiotics Diet, smoking, stress, NSAIDs Infections	Impermeable mucosa Mucus, sIgA PGE ₂ , PGI ₂ IL-1 ra, cortisol IL-4, IL-10, TGF-β VIP, somatostatin Ts lymphocytes Glutamine SCFA

The genetically determined immune response to bacterial products or the epithelial barrier function may affect the body's susceptibility to chronic inflammations, whereas environmental factors influence the initial outbreak and the spontaneous reactivation of inflammation.

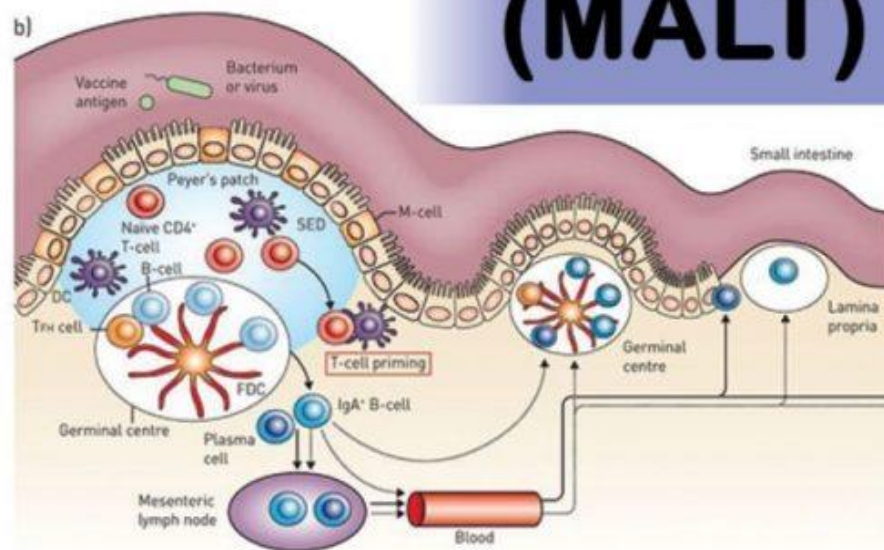
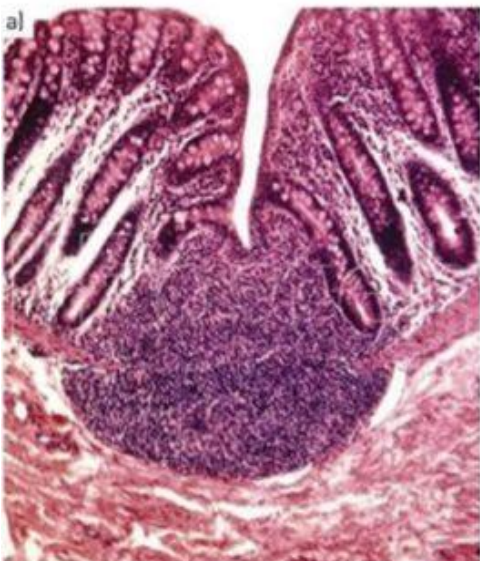
Tip: Supplement with Omega 3 – 3000mg daily to help reduce inflammation.

MUCOSAL MEMBRANES AND MALT:

- **Internal Barrier**
- **Largest selective absorption organ**
- **Mucosal Associated Lymphoid Tissue (MALT) is the main immune organ:**
 - **Bronchial (BALT)**
 - **Gut (GALT)**
- **Prevention of homotoxins invading the body**
- **Elimination by activation of defence cells**

Mucosa Associated Lymphoid Tissues

(MALT)



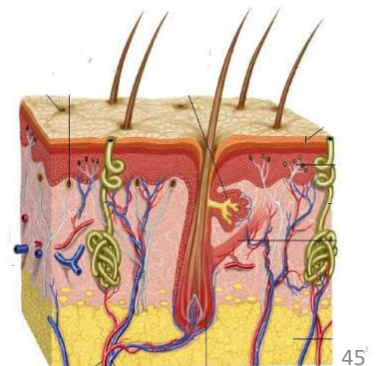
Note: Triple Antihomotoxic Therapy or treatment/detox

ORGANS OF DETOXIFICATION: THE SKIN

- ❑ External Barrier
- ❑ Minimal absorption organ
- ❑ Regulation of temperature , evaporation
- ❑ Excrete Sweat
- ❑ UV Protection
- ❑ Barrier function but also a detoxifying function
- ❑ P450 present in the skin
- ❑ Absorbs chemicals and pesticides
- ❑ Protects against UV Rays
 - P450 can get damaged by UV rays
 - Free Radicals through detoxification
 - Ageing, tissue destruction & cancer

DETOXIFICATION VIA THE SKIN TECHNIQUES / METHODS USED:

- ❖ Hydrotherapy
- ❖ Fresh air baths
- ❖ Dry Brushing
- ❖ Sauna
- ❖ Cupping
- ❖ Cantharid plaster
- ❖ Baunscheidt's method



Epidermis

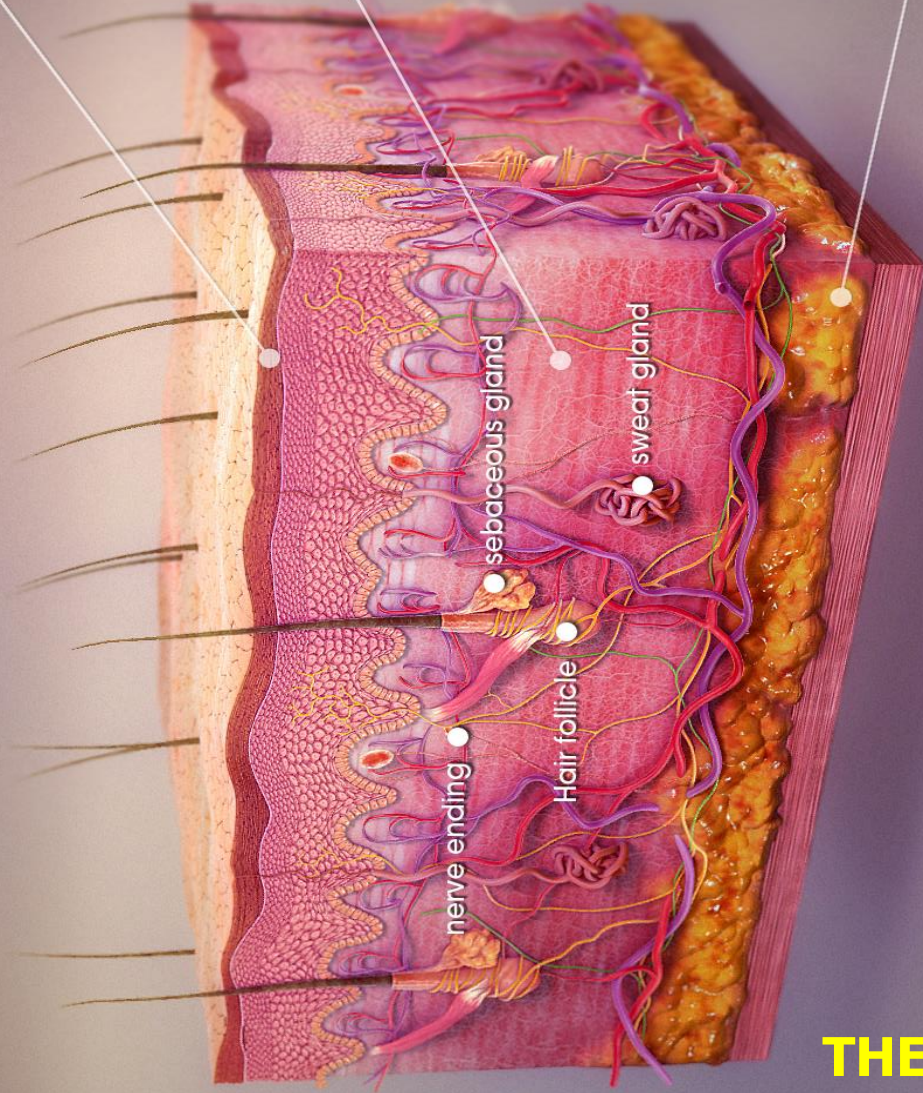
- relatively waterproof
- prevents most bacteria, viruses, and other foreign substances from entering the body
- produces the pigment melanin that gives human skin, hair, and eyes their color

Dermis

- **nerve endings:** sense pain, touch, pressure, and temperature
- **sweat glands:** produce sweat in response to heat and stress
- **sebaceous glands:** secrete sebum into hair follicles. Sebum is an oil, that keeps the skin moist and soft
- **hair follicles:** produce various types of hair found throughout the body

Fat Layer

helps insulate the body from heat and cold, provides protective padding, and serves as an energy storage area.



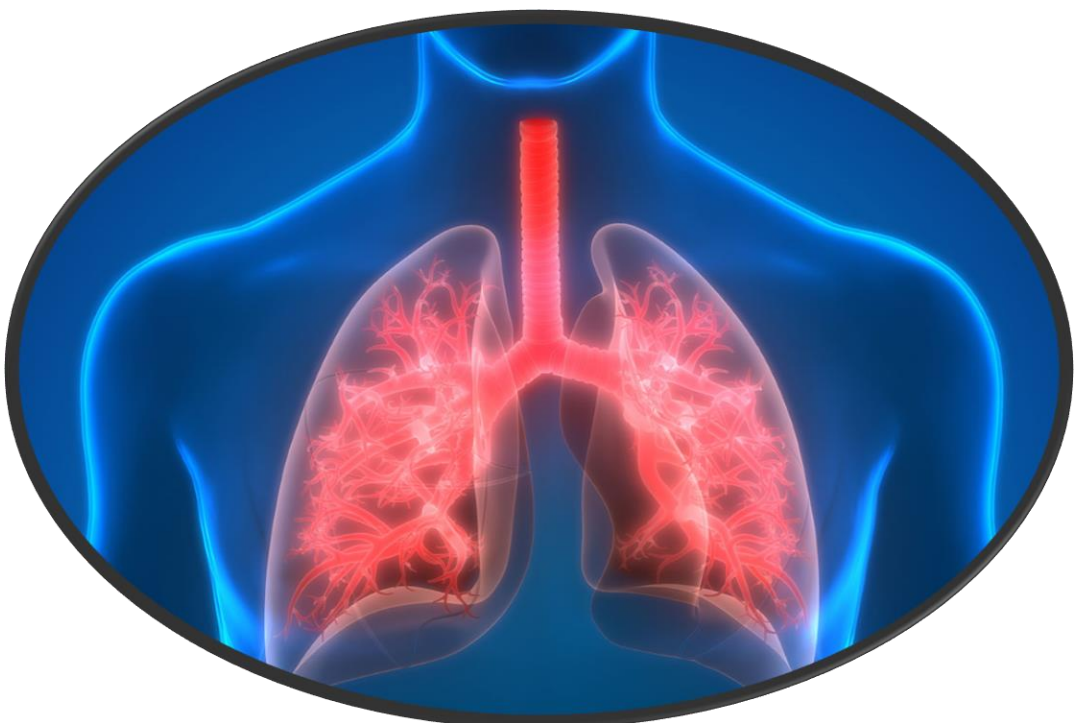
THE SKIN STRUCTURE

ORGANS OF DETOXIFICATION: THE LUNG

- ❑ **Barrier function of the mucosa**
- ❑ **Main point of excretion of gaseous and volatile drugs**
 - **Alcohol (Breathalyser)**
 - **Anaesthetics**
- ❑ **Gases and vapours with low solubility in the blood.**

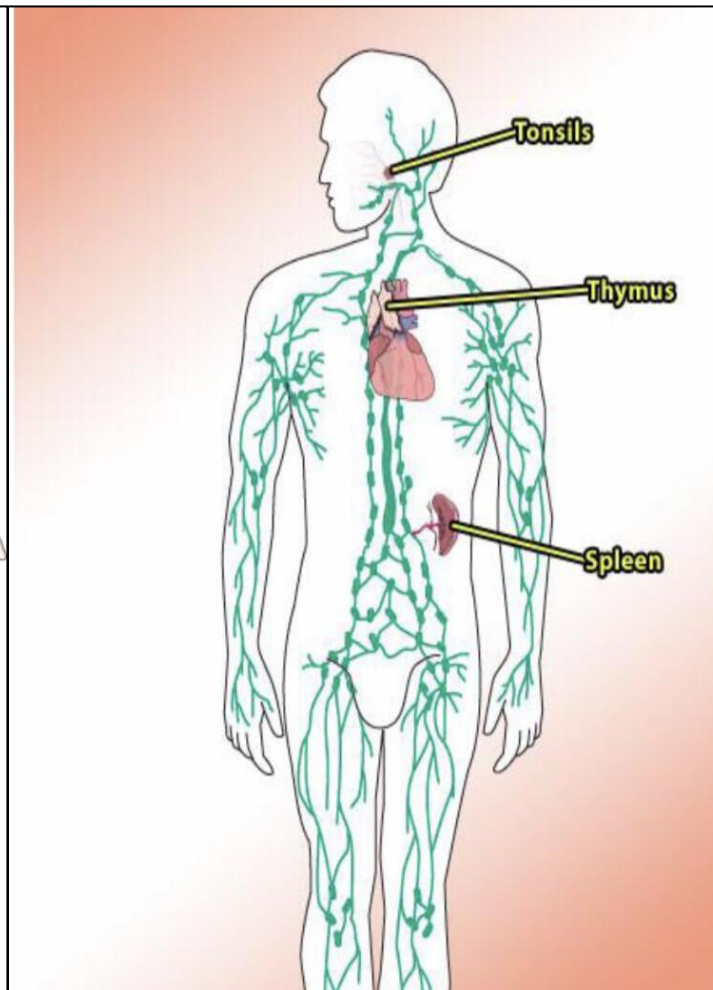
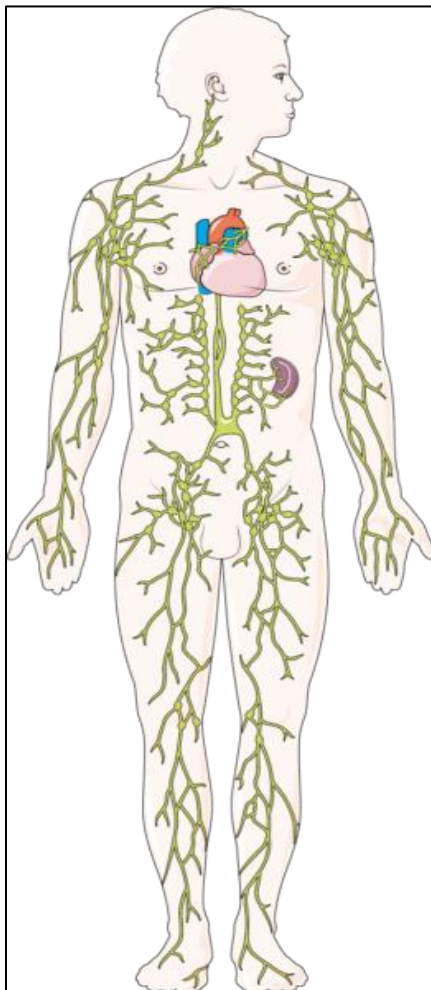
Stimulation of the lungs' detoxification function:

- ❖ **Respiration and locomotion**
- ❖ **Respiratory therapy**
- ❖ **Aerosol therapy with essential oils**
- ❖ **Chest Compresses**



LYMPH SYSTEM AS DETOXIFYING ORGAN

- ❑ **Macromolecules contribute to the oncotic pressure of interstitium**
- ❑ **Lymph System is the only way out, interaction with gut, liver and kidney**
- ❑ **The Lymphatic system is the only pathway through which toxins can drain from the matrix.**
- ❑ **These structures form a biophysical filter through which all nutrients and cellular stimuli from the arteries and nerves (hormones, etc) must pass.**



BASIC CONSIDERATIONS IN DETOXIFICATION

The 4 S Treatment Protocol:

- **STOP** – External supply of toxins
- **SUPPORT** – the organs of detoxification and drainage
- **STIMULATE** – elimination of toxins
- **SENSITIZE** – the patient for further detoxification

How to use the 4 S Treatment:

S = STOP FLOW OF TOXINS – DIETARY:

- ✓ Diet poor in refined foods, alcohol, sugar, red meat
- ✓ Lots of clear fluid eg: water, herbal tea
- ✓ Avoid too strict elimination diets
- ✓ Avoid aggressive fasting
- ✓ Avoid other toxins eg:
 - Dry cleaning fluids
 - Buildings with a lot of gaseous toxins such as shopping centres
 - Cigarette smoke
 - Newly furnished houses

S = SUPPORT:

- ✓ **Advanced Detoxification:**
 - Tissue Support
 - Little Drainage
- ✓ **Basic Detoxification:**
 - Functional support (Homaccords)
 - Increased Drainage

S = STIMULATE TOXINS ELIMINATION:

- ✓ **Sauna**
- ✓ **Exercise**
- ✓ **Massage**
- ✓ **Water Therapy**
- ✓ **Detox Kit – Full details see Appendix A**

S = SENSITIZE THE PATIENT:

- ✓ ***For the need to detox and drain regularly:***
 - **Most patients who have not detoxified before or in the Severe group must try detoxify 2x a year for the first two years**
 - **After that once a year is sufficient**
- ✓ ***For the environment:***
 - **Patients don't realise where the most toxic places are, eg: Shopping Malls**
 - **Sensitize patients to read labels on food and to buy fresh organic food if possible. Canned and processed foods are more toxic.**

THE DETOX QUESTIONNAIRE:

- ❖ **Works on the Detoxification Scale**
- ❖ **Clinical assessment according to the history of the patient.**
- ❖ **This is a tool for both assessing the starting point of detoxification as well as a tool to follow the patients progress**
- ❖ **Symptoms are listed from the more superficial organs to the deeper organs**
- ❖ **The order follows the vertical and horizontal axis on the Disease Evolution Table (Six phase table)**
- ❖ **Each symptom is assessed by the patient in the following manner:**
 - **Point Count**
 - **0 = Never or almost never have symptoms**
 - **1 = Occasionally, the effect not severe**
 - **2 = Occasionally, the effect is severe**
 - **3 = Frequently, the effect is not severe**
 - **4 = Frequently, the effect is severe**

Next is Practical Detoxification, please have your Questionnaire hand out to refer

PRACTICAL DETOXIFICATION:

Practical Detoxification assessment works on the Detoxification point scale:

- ❖ **Incorporates all major toxicity symptoms**
- ❖ **Evaluation of symptoms by the patient**

Interpretation of the Detoxification Questionnaire:

The followings are guidelines to toxic burden:

- **Point Count <100: Patient with mild to moderate toxicity**
- **Point Count >100: Patient with moderate to severe toxicity**
- ❖ **Mild to Moderate toxicity – Group 1 (Point count less than 100)**
 - **Mostly the well person who wants to clean his/her body & optimise drainage of toxins**
 - **Mostly the patient with mild disease such as skin conditions, fatigue, other signs of toxicity.**

❖ **Moderate to Severe Toxicity – Group 2 (Point count more than 100) and Special Groups:**

- **The Chronic, overmedicated patient**

❖ **Special Groups:**

- a) **The Cancer patient on active treatment such as Chemotherapy and Radiation therapy**
- b) **The older patient**
- c) **The obese patient, metabolic disease**
- d) **The patient with impairment of the elimination organs such as the liver or the kidneys**
- e) **The patient who had significant drug addiction in the past, even if this was long time ago**

If you have any questions at this point please free to ask.

Let's have a look at the Detoxification Questionnaire...

Frequency		Points
Never or almost never have the symptom		0
Occasionally have it		1
Frequently have it, effect is severe		2
Infrequently have it, effect is not severe		3

Symptoms	Points
Irritability	
Nervousness	
Blood sweat	
Fragmented sleep	
Aggressive behavior, e.g., food fight	
Anxiety	
Pain	
Confusion	
Incontinence	
Clinical scoring	
Total score	

Signs	Points
Increased sweating, dry skin, dry skin	
Red rashes	
Itching	
Swelling on hands and face	
Swelling	
Skin tags (flesh hanging warts)	
Alopecia	
Fever chills	
Vomits	
Total score	

Detoxification and Drainage Questionnaire

Point count	Points
Never or almost never have the symptom	0
Occasionally have it	1
Occasionally have it, effect is severe	2
Frequently have it, effect is not severe	3
Frequently have it, effect is severe	4

Emotions	Points
Irritability	
Nervousness	
Mood swings	
Frequent crying	
Aggressive behavior, e.g., road rage	
Anxiety	
Fear	
Confusion	
Depression	
Suicidal thoughts	
Total Emotions	

Skin	Points
Increased sweating, ear wax, oily skin	
Skin rashes	
Brown spots on hands and face	
Boils	
Skin tags (small hanging warts)	
Acne	
Eczema	
Fever blisters	
Warts	
Total Skin	

Ear, Nose and Throat	Points
Increased salivation	
Mouth ulcers	
Common cold	
Sinusitis	
Sore throats	
Ear infections	
Hay fever	
Loss of smell	
Cough	
Total Ear, Nose and Throat	

Mind and Brain	Points
Hyperactivity	
Stammering when speaking or word finding problems	
Difficulty in concentration	
Sleep disturbance	
Difficulty in making decisions	
Headache	
Poor memory	
Poor coordination	
Compulsive behavior	
Severe sleep disturbance	
Memory loss	
Total Mind and Brain	

Point count	Points
Never or almost never have the symptom	0
Occasionally have it	1
Occasionally have it, effect is severe	2
Frequently have it, effect is not severe	3
Frequently have it, effect is severe	4

Digestive System	Points
Loose stools	
Diarrhea	
Heartburn	
Constipation	
Bloating	
Abdominal pain	
Intolerance to certain foods	
Nausea or vomiting	
Severe diarrhea with blood or mucous	
Total Digestive System	

Kidney	Points
Increase in urination frequency and amount	
Needing to get up in the night to pass urine	
Urinary tract infections and cystitis	
Kidney stones	
Blood in the urine	
Total Kidney	

Joints and Muscles	Points
Fleeting muscle aches or joint aches	
Tendinitis (e.g., tennis elbow, golfer's elbow, achilles tendinitis)	
Gout	
Arthritis	
Fibromyalgia	
Total Joints and Muscles	

Metabolism	Points
Feeling of coldness	
Hypoglycemia	
Craving certain foods	
Water retention	
Obesity	
Cellulite	
Total Metabolism	

GRAND TOTAL	
--------------------	--

INTRODUCTION TO THE DETOX KIT

The Detox Kit eliminates toxins, stimulates the cleansing process with a “deep cleanse”. It consists of 3 carefully chosen Homeopathic remedies, namely:

- **Lymphomyosot**: Cleanses & supports the Lymphatic system and Matrix, respiratory system, gut & strengthens Immunity
- **Nux-Vomica**: Supports & cleanses the Liver, gastrointestinal tract (prevents nausea while detoxifying)
- **Berberis Homaccord**: Eliminates toxins from the kidneys, urinary tract and general body detox.



HOW TO USE THE DETOX KIT:

- **Mix 30 drops of each remedy in 1.5 litre of mineral water daily**
- **Drink out over the day**
- **Minimal 3 weeks use (1 kit)**
- **Optimal 6 weeks use (2 kits)**

The Detox Kit is available to order directly from my Practice – Silverwind Health at a wholesale price so you may resell to your clients. To order contact us on:

❖ Cell / WhatsApp: 064 544 1493

❖ Email: silverwindhealth@gmail.com

We courier all orders nationwide.



APPENDIX A

THERAPEUTIC FAST

- This is an important technique of active dietetics which intent to modify the mesenchyma and organic toxicosis, through the drainage stimulus.
- An important series of modifications in the diet are the keystones to recover the organism or to eliminate the homotoxic nutritional factors, that play an important role in the etiologies of the distinct homotoxic phases.

THERAPEUTIC FAST

The following material will serve as helpful information to correctly realise your therapeutic fast.

The fast, one of the techniques of treatment that is lost in the history of time, has been used by many cultures. The fast is applied by many medical doctors and clinics principally in Europe where it has been used since more than four decades in a permanent way. Scientific works exist that demonstrate the benefits of fasting in purifying the organism. In addition, it is a element of reactivation of the body.

In general, people have fear of the fast considering it as harmful to the health. It is important to differentiate the fast from starvation. While in starvation, the person finds herself obliged to abstain from food, in the fast, this is done voluntarily. This presents a favourable psychological factor, which permits to achieve great benefits with an increase in vitality and health.

The fast is a necessary discipline obliged by nature in acute illnesses, being also an essential ingredient in the treatment of all chronic illnesses. The fast is not difficult. It is also convenient to be practised by a very healthy person as an element of prevention. In these cases the rupture with food demands resolution and firm will.

Even though the fast is a therapy unknown by the general public and by the grand majority of the allopathic medical doctors. The fast is an ancient and natural way to treat an illness and was one of the measures of nature that has permitted not only the human race but also the animals to survive in times when medication was unknown. We encounter permanently that the fast is instinctive in cases of illness, often observed in a sick animal that abstains to consume food. Its reflex based in evolution, that the body has acquired more instinctively than by learning or intelligence.

Research in biological medicine has determined not to use a total fast, as customary in the Orient, it is considered stressful and biologically inconvenient. We promulgate a therapeutic fast with fruit juices, this being a semi-fast since we are only withdrawing solid foods and proteins.

Apart from the fact that this form is easier to adapt to for most people, the fruit juice is extremely useful, supplying the body with many valuable vitamins and minerals. This is exceedingly important in persons whom have lived on a bad diet for years and are generally deficient in these vital elements. Any fruit or vegetables that produces juice can serve and, logically, we don't have to add any sweetener. These juices contain natural sugars and are excellent for maintenance for those who want to fast for up to one week. Juices are particularly valuable for their effect on the urinary system, acting as a diuretic thus stimulating the secretion of urine and promoting the elimination of toxins.

During the fast, one will feel a sensation of hunger for the first three days. Thereafter this feeling disappears and leaves the individual with a very positive sensation of well being.

A basic fast is put together as follows:

- 2 days of the diet preparation
- 6 days of therapeutic fast with juices
- 6 days of transition diet

DIET PREPARATION

Initiate the fast gradually with two days during which you will prepare your body eating only fruits and vegetables, drinking juices and flavoured water. Optionally preparation can be done by eating cereals for breakfast and salads for the other meals, again drinking juices and flavoured water.

After, the fast is initiated this way:

HOW THE FAST IS DONE

- Every two hours, starting at rising, drink one glass of fruit or vegetable juice without sweetener, mixed half and half with water. This recommendation is extremely important, even if not hungry. Omission can lead to weakness or headaches.
- At the lunch time, eat cooked vegetables with their stock. Do not eat any other products, particularly not commercial stock cubes that are loaded with chemical products. A little sea salt can be added for flavour.
- At any time during the day, you can drink flavoured water without sweetener and water every time you feel hungry.

No other type of food should be taken during the fast.

Do not interrupt the fast under any circumstances.

Remember the indications given in the treatment rules of the initial pages of the folder.

To the limit one may eat an apple, but preferably do communicate with us before doing any variations.

INTESTINAL CLEANSING

Like we have explained in other parts of our folder, constipation is one of the problems related with intestinal autointoxication. Due to the fact that fruit juices and vegetable juices do not contain fiber to stimulate the action of the intestines, it will be necessary to adopt other means to overcome this difficulty. It is also possible that you already suffer of constipation or have difficulty to eliminate correctly. The answer is the enema, a most indispensable part of the dietetic reform.

Bad intestinal elimination during constipation hinders digestion and normal assimilation. Therefore it is indispensable that during the fast this disorder of the intestines be overcome to allow proper absorption of the juices.

The intestinal cleansing is very simple and you can administer it easily yourself. For that you simply buy a Cleansing bag with its respective canulas and hose pipe. The commercial cleansers are not recommended because they generally are made with irritating chemicals. You should administer it once a day during all the period of the fast.

The temperature of the water should be equal or slightly superior to the temperature of your body. The quantity depends on each person, and vary between half a liter to a liter, to which it is added a cup of camomile infusion, which will refresh and help to counteract the congestion of the intestinal mucus. The injected water will be retained a few minutes before expulsion.

Cleaning out the content of the intestines and to relieve congestion is important during the fast and will be continued until the diet permits the intestines to evacuate on its own. It can be done on alternating days in the cases where the body evacuates voluntarily.

In the case where the clinical history shows a possible load of intestinal toxins, a coloclisis will be formulated, a technique which permits a total evacuation of all the sediments contained within the intestines, as well as the accompanying toxic mucus. For more information, read the informative material concerning coloclisis and refer to the corresponding video.

APPENDIX B

PRACTICAL CLASSIFICATION OF TOXINS

(There is no place in which we don't encounter toxins, but by becoming aware of the exposure possibilities, we may better plan to avoid them, and if not possible, at least limit them and/or learn to detoxify)

EXOGENOUS ('Toxicants' or 'Xenobiotics')		ENDOGENOUS ('Toxins')				
<p>INGESTION</p> <p>The mucosal surface of the GI tract is about 200x that of the skin surface. In a person's lifetime over 25 tons of food is processed by the GI system, thus an enormous load of possible toxins (antigens, xenobiotics, microbes etc.)</p> <table border="1"> <tr> <td> <p>FOOD</p> <p>Chemical Contamination</p> <ol style="list-style-type: none"> Toxic Metals -Arsenic, Lead, Cadmium, Hg etc. Polycyclic Aromatic Hydrocarbons - from incomplete combustion of hydrocarbons Industrial Chemicals - PCBs -Chloroform - Trichloroethylene etc. Hormones & Drugs in Animals Fertilizers Pesticides </td> <td> <p>WATER</p> <p>Chemicals</p> <ol style="list-style-type: none"> Solvents Phosphates Nitrates Herbicides Pesticides Fertilizers Industrial wastes etc.....Water is usually analyzed for less than 60 of over 700 chemicals found regularly in drinking water. <p>By products of Microbes</p> <ol style="list-style-type: none"> Bacteria (e.g. E. Coli) Viruses (e.g. Hepatitis virus) Parasites (e.g. Giardia) Algae (& their toxins) </td> <td> <p>Drugs</p> <p>Prescription Recreational</p> </td> </tr> </table>		<p>FOOD</p> <p>Chemical Contamination</p> <ol style="list-style-type: none"> Toxic Metals -Arsenic, Lead, Cadmium, Hg etc. Polycyclic Aromatic Hydrocarbons - from incomplete combustion of hydrocarbons Industrial Chemicals - PCBs -Chloroform - Trichloroethylene etc. Hormones & Drugs in Animals Fertilizers Pesticides 	<p>WATER</p> <p>Chemicals</p> <ol style="list-style-type: none"> Solvents Phosphates Nitrates Herbicides Pesticides Fertilizers Industrial wastes etc.....Water is usually analyzed for less than 60 of over 700 chemicals found regularly in drinking water. <p>By products of Microbes</p> <ol style="list-style-type: none"> Bacteria (e.g. E. Coli) Viruses (e.g. Hepatitis virus) Parasites (e.g. Giardia) Algae (& their toxins) 	<p>Drugs</p> <p>Prescription Recreational</p>	<p>DERMAL (Skin)</p> <p>Active (Injections)</p> <ol style="list-style-type: none"> Prescription drugs Recreational drugs Animal toxins (bites or puncture by fish arthropods, parasites, etc.) <p>Passive</p> <p>(Substances that are both water & fat soluble are more easily absorbed through the epidermis especially if not integral and through the hair follicles):</p> <ol style="list-style-type: none"> Drugs Cosmetics Chemicals (especially from the air and from waters ...showers, bathing etc.) Radiations 	
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<p>INHALATION (Environmental)</p> <p>The lungs have the greatest exposure of any organ to the environment. The air we breathe contains dust, chemicals, pollutants, gasses, microbes, small particles and liquid aerosols. T</p> <table border="1"> <tr> <td> <p>OUT-DOOR</p> <p>Air quality standards measure pollutants:</p> <ol style="list-style-type: none"> Suspended particulates Carbon dioxide Nitrogen Oxides Sulphur dioxide Photochemical oxidants (e.g. ozone, aldehydes) Lead <p>Natural Sources of Air Pollutants</p> <ol style="list-style-type: none"> Volcanoes (Ashes) Natural gas Terpenes (plants) Ammonia (from biological decomposition) Smoke (fires) Dust (soil) Plants/pollens Microbes </td> <td> <p>IN-DOOR</p> <p>Indoor air pollutants may come from out-door, from materials in the building, or from human activities.</p> <p>Chemicals & Minerals</p> <ol style="list-style-type: none"> Asbestos Formaldehyde Volatile organic chemicals (VOCS) Radon gas Nitrogen Oxide Carbon dioxide <p>Furniture & Renovations</p> <ol style="list-style-type: none"> Wood (phenols & formaldehyde from plywood, panelling, etc.) VOCS (from glues, fillers, paints, stains, varnishes etc.) Paints (with volatile fungicides, pesticides and mildew-cides) Fiberglass (from insulations) Plasticizers (flexible vinyl floors) Upholstery fabrics & carpets (dye, formaldehyde, plasticizers, fungicides) New carpets (contain more than 20 chemicals to kill bacteria, hold colours, bind fibers and also release acetone, benzene, styrene, xylene, toluene and formaldehyde in addition to dust, chemical and microbes that it can harbour) </td> </tr> </table>		<p>OUT-DOOR</p> <p>Air quality standards measure pollutants:</p> <ol style="list-style-type: none"> Suspended particulates Carbon dioxide Nitrogen Oxides Sulphur dioxide Photochemical oxidants (e.g. ozone, aldehydes) Lead <p>Natural Sources of Air Pollutants</p> <ol style="list-style-type: none"> Volcanoes (Ashes) Natural gas Terpenes (plants) Ammonia (from biological decomposition) Smoke (fires) Dust (soil) Plants/pollens Microbes 	<p>IN-DOOR</p> <p>Indoor air pollutants may come from out-door, from materials in the building, or from human activities.</p> <p>Chemicals & Minerals</p> <ol style="list-style-type: none"> Asbestos Formaldehyde Volatile organic chemicals (VOCS) Radon gas Nitrogen Oxide Carbon dioxide <p>Furniture & Renovations</p> <ol style="list-style-type: none"> Wood (phenols & formaldehyde from plywood, panelling, etc.) VOCS (from glues, fillers, paints, stains, varnishes etc.) Paints (with volatile fungicides, pesticides and mildew-cides) Fiberglass (from insulations) Plasticizers (flexible vinyl floors) Upholstery fabrics & carpets (dye, formaldehyde, plasticizers, fungicides) New carpets (contain more than 20 chemicals to kill bacteria, hold colours, bind fibers and also release acetone, benzene, styrene, xylene, toluene and formaldehyde in addition to dust, chemical and microbes that it can harbour) 	<p>Produced in the Body</p> <p>1.-Physiologically</p> <ul style="list-style-type: none"> Bilirubin Ammonia Uric acid Lactic acid Creatinine <p>Etc.</p> <p>Become 'toxic' if in excess for: ↑ - production ↓ - detoxification and excretion</p> <p>2. Under Abnormal Conditions</p> <p>↑ - production of waste products (CO₂, H₂O₂, free radicals etc.) ↑ - hormones and/or neurotransmitters - microbial debris - pH imbalances etc.</p> <p>Stored in the Body</p> <p>Originally from external origin but introduced into the body where they are stored and become a continuous source of 'toxic' release</p> <p>(Water-soluble chemicals are easily excreted, but fat-soluble chemicals accumulate in fat cells & cell membranes)</p> <ol style="list-style-type: none"> Dental materials Medical implants Microbes (foci) etc. 		
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Microbes

1. Bacteria/viruses
 2. Mycotoxins
 3. Protozoa
- etc.

Food Additives

1. Colouration
 2. Preservatives
- etc.

Heavy Metals

1. Mercury
 2. Lead
 3. Arsenic
- etc.

Others

1. Asbestos
 2. Radioactive elements (radon, radium, uranium)
 3. Gasoline
- etc.

Human -Caused Air Pollutants

1. Chemical dumps
 2. Waste disposal
 3. Fuel combustion
 4. Transportation
 5. Industrial
 6. Farm spraying
- etc.

Household Products

1. Personal care products
2. Laundry products & fabric softeners contain numerous toxic chemicals such as:
 - Carcinogenics (chloroform, benzyl acetate, limonene)
 - S.N.C. toxins (camphor, ethyl acetate, benzyl alcohol, linalool, pentane)
3. Household cleaning products
4. Pesticides (used frequently)

Microbes, Molds, Dust, Pets

1. Molds & mildews in humid areas
2. Dust & dust mites
3. Bacteria, viruses, fungi etc.
4. Pets increase toxins (dander, fleas, use of flea powder & collars that have toxic chemicals etc.)

Human activities

1. Transmission of microbes
 2. Tobacco smoke & fireplaces
 3. Recreational drugs
- etc.
- Air-conditioning & heating systems together with 'better' sealings from windows/doors have drastically reduced natural ventilations – the number of air exchanges have been practically eliminated (toxins remain and further accumulate inside)

APPENDIX C

Matrix and Matrix Regulation

Significance of the extracellular matrix (ground substance)

By Prof. Hartmut Heine

This article is a summary of a lecture delivered by Prof. Heine at a Biological Therapy Symposium held in Lisbon, Portugal on May 30, 1992.

The life of a higher, multicellular organism is essentially bound up with the triad represented by capillaries, **extracellular** matrix or ground substance, and cells. A cell is capable of functioning only in its surrounding milieu: the structured **extracellular** space. Contrary to views of cellular pathology which currently predominate, it is not conceptually feasible to artificially separate cellular functions from their surrounding environment. Wherever this may be attempted, the cell becomes an abstraction, a model. And in cases in which actual patients are involved, such an unnatural approach divorces their illnesses from their individuality and, in the final analysis, enables therapy of only the model of an illness. The results of this unfortunate outlook have become especially apparent in futile attempts currently widespread in the therapy of tumors and chronic diseases.

Every cell is intimately linked to its **extracellular** space. The **extracellular** space alone enables metabolic processes to reach the cell, and only as a result of such conditions can the genetic material in the cell nucleus become active. The **extracellular** space provides a molecular sieve between cell and associated capillaries (blood and lymph capillaries). The substances which structure the **extracellular** matrix form a network of high-polymer sugar complexes: sugars bonded to pro-

teins — the **proteoglycans** (PGs), as well as sugars not bonded to proteins — the **glycosaminoglycans** (GAGs).

Embedded in this network are the structural **glycoproteins** (collagen, **elastin**) as well as cross-linkage **glycoproteins** (e.g., fibronectin and **laminin**). Also found here is the entire spectrum of connective-tissue cells: **fibroblasts**, fibrocytes, myocytes, macrophages, lymphocytes, and **granulocytes**. Since autonomic nerve fibers terminate in the ground substance, there is a direct connection to the central nervous system and to the brain — as well as to the system of endocrine glands via the capillaries. In turn, the central nervous system and the hormone system are interlinked in the brain stem. These elements consequently go to make up a ground system which is subject to both local as well as central control functions; termed ground **regulation***.

The fast reaction capability characteristic of the **fibroblasts** is particularly significant for the ground regulation system. This cell type is capable of effectively responding to all information input entering the ground system — e.g., in the form of neurotransmitter substances and neuropeptides, cellular messenger substances (including **lymphokines**, cytokines, **prostaglandins**, **leukotrienes**, and many others), hormones, metabolites and catabolites. The responses of **fibroblasts** are highly suitably adapted to the particular situation prevailing, and they answer to all information with an appropriate synthesis of all **extracellular** matrix components mentioned. In these func-

tions, the **fibroblasts** do not differentiate between “good and evil.” This synthesis is indeed effectively adapted in its response to the particular burdens imposed on the ground system from non-physiological sources: from exogenous origins (environmental toxins, such as heavy metals) or from **endogenous** intoxication (e.g., malnutrition). These toxins (generally termed “**homotoxins**”) in conjunction with **fibroblast** synthesis result in a production of ground substance not favorable to the good health of the organism. If such toxic burdens continue to be imposed over lengthy periods of time, the pathologically modified properties of the molecular sieve of the ground substance will increasingly cut off organ cells from regular and healthy metabolic processes. These developments will in turn lead to alterations in the genetically controlled reactivity of the associated cells (themselves connected to the ground substance via a cell surface sugar film (Fig. 1). Danger of development of chronic diseases and tumors subsequently arises. The vicariation effects well known from **homotoxicology** may consequently be observed, whereby sequences of various illnesses may follow as a result of tissue alterations.

Characteristics of the high-polymer sugar-protein complexes in the matrix: PG/GAGs

The functions performed by the ground system in its intermediary role between **microcirculation** and **organ-cell** functions is essentially determined

*Ground substance (**extracellular** matrix) = Network of PG/GAG's structural **glycoproteins**, and network-forming **glycoproteins**

Ground system = Ground substance plus cellular, **humoral** and nervous components

Ground regulation = Local regulatory possibilities for the ground system, plus higher-ranking nervous, hormones, and hormonal regulatory systems.

by the characteristics of the PG/GAGs. These complexes are capable of polymerization and depolymerization, and they can effect ring closure. As a result of these processes, a tunnel system is created which is capable of guest-host complexation; in the interior of these tunnels, lipophilic and hydrophobic substances can be transported simultaneously to the outside tunnel wall while bonded with hydrophilic substances. As a result of their negative charges they are capable of forming bonds with water and of performing ion exchange. These characteristics of the PG/GAGs play essential roles in the important conditions of isonia, isoosmia, and isotonia prevailing in the organism: i.e. homeostasis depends on the composition and the biological half-life of the PG/GAGs in the matrix. The degree of polymerization and the half-life of PG/GAGs can, however, undergo extensive change as a result of bonding by heavy-metal ions (especially mercury, lead, and cadmium), antigen-antibody complexes, defective proteins (et., carbon monoxide/hemoglobin), cholesterol, and uric acid — in general, by all substances which may be termed homotoxins.

In the initial stages of such processes under normal conditions, toxic substances are effectually intercepted, and the body's defense functions are activated. In cases of chronic toxic burdens and/or resistance deficiencies, however, the organism cannot completely eliminate such toxins and the patient faces the danger of development of a broad spectrum of illnesses. Using the concepts and terminology of homotoxicology, we can summarize this process in the following manner: the illness passes from the impregnation phase of the ground system into the degeneration phase.

Particular as a consequence of increasing life expectancy in Europe and North America, the condition of the matrix has become increasingly more important in the essential role which it plays in the development of chronic illnesses and tumors among the aged.

In this context, the phenomenon of

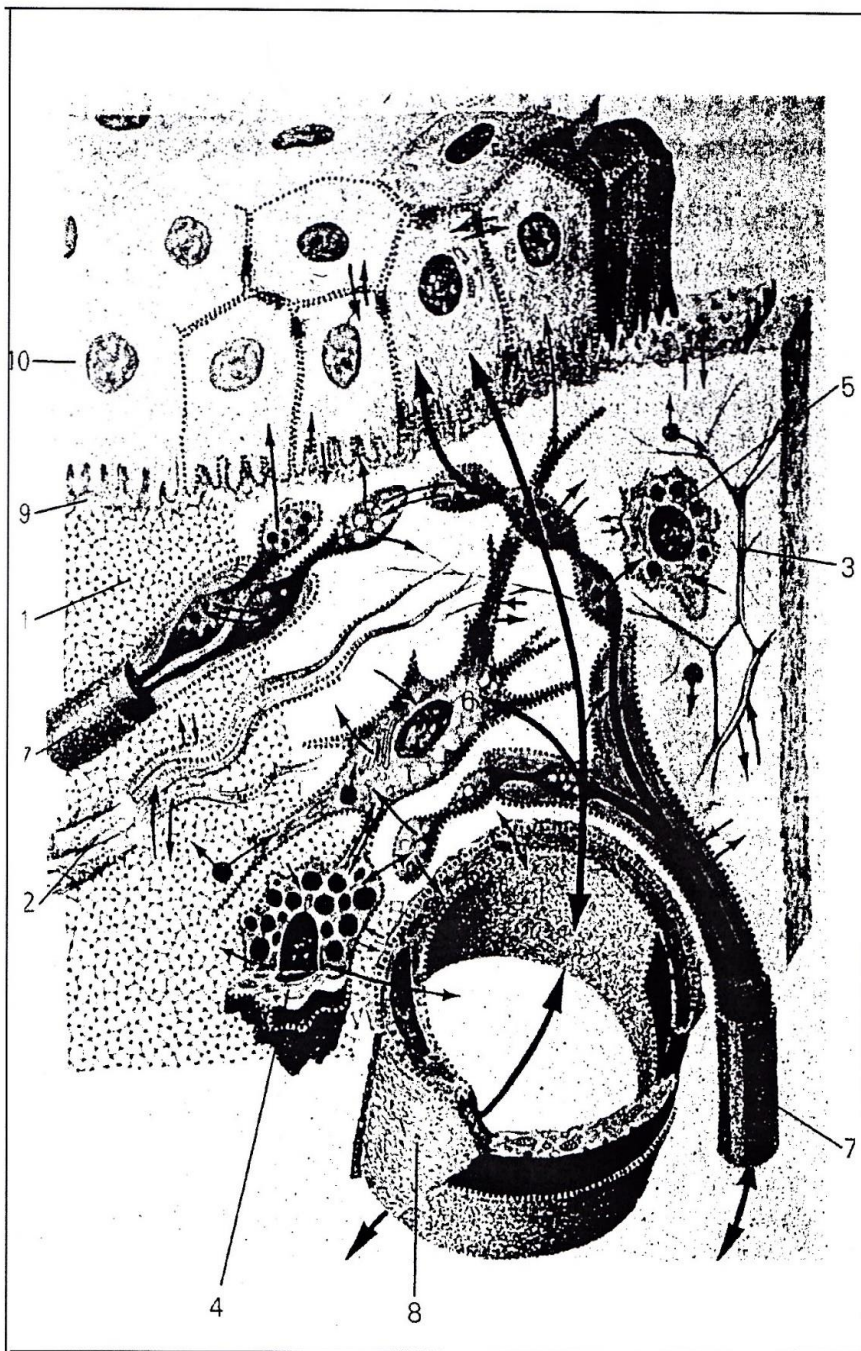


Figure 1. This illustration shows the relationship between capillary (8); ground substance: proteoglycan and structural glycoproteins (1), collagen (2), elastin (3); cells in the connective tissue, mastcells (4) and other immune system cells (5); fibrocyte (6); terminal axon of the autonomic nervous system (7); cellular parenchyma (10); basement membrane (9).

The fibrocyte is the regulator of the ground substance. Only this cell type is in position through its connection to tissue cells and the nervous system to synthesize the ground substance. The transmitters and filters of information are the proteoglycans and the structural glyco-proteins such as found in the cellular membrane (glycocalyx, collagen, and elastin.)

nonenzymatic glycosylation has attained predominant importance in the aging process. The glucose utilization disorders which occur more frequently with advancing age, and which are associated with a decrease in cellular insulin receptors and/or with insulin de-

ciency, lead to a wide variety of bonds between glucose and homotoxins and all the constituents of the extracellular matrix PGs, GAGs, collagen, elastin, myelin of the nerve fibers, as well as cell membranes, with accompaniment by pathological polymerization and

meshing processes. The ground substance is consequently drawn into a vicious circle of pathological structure formation, with corresponding pathological reactions of the cells involved (Heine 1992).

Significance of physiological leukocytolysis for regulation of the matrix. The effectiveness of biological remedies.

To serve as a normal transit route for metabolic processes, the **extracellular** matrix must demonstrate exactly defined characteristics of dynamic composition and regulation. It reflects the actual state of homeostasis. This can be measured by a variety of techniques. One is the physiological **leukocytolysis**. It plays among all regulatory processes a central role. Even the slightest deviation from homeostasis leads to reactive **lysis** among leukocytes: a process accompanied by release of a corresponding quantity of biologically active substances (including **lymphokines** and **cytokines**) capable of regulating all biological material which may be involved in this context (Pischinger 1990).

And it is at this point that the principle of biological therapy — in the form of applying stimulation to help

the organism to help itself — becomes especially logically apparent. It has been estimated that, under normal circumstances, approximately 1.2 million leukocytes undergo **lysis** per second in the **intra-** and **extravascular** spaces of the human organism. The principle of therapeutic action of biological medication therefore lies in their capability of stimulating physiological **leukocytolysis** or, in cases in which **cytolysis** is already at a high level owing to conditions of illness, in their adjustment of **leukocytolysis** processes back to a more nearly normal level. A fundamentally important characteristic of therapy by biological medication is that no further stimulation or attenuation of **leukocytolysis** can take place if normal values have been reached. In other words, overmedication under these circumstances is hardly possible with biological remedies.

A key prerequisite of successful treatment of this nature is, however, that the ground system must be basically capable of therapeutic regulation. Confirmation of this possibility is available through tests involving biorhythms: e.g., serum level of hormones, immunoglobulins, and electrolytes. It is, after all, rhythm which enables the

processes of the physical organism, its soul, and the mind to be developed and maintained. In this sense, rhythmic processes represent the very foundation of the identity of a human individual. Loss of rhythm therefore always entails loss of identity, a situation which may be observed among tumor patients undergoing chemotherapy. Any therapy, on the other hand, which can effectively maintain or restore the patient's own rhythmic functions will prove to be the most suitable.

References

1. Heine, Hartmut. *Lehrbuch der biologischen Medizin*, Hippocrates Verlag, Stuttgart 1991.
2. Pischinger, Alfred, *Matrix and Matrix Regulation: Basis for a Holistic Theory in Medicine*, Haug International, Brussels 1991.

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Ed. Note:

Readers are advised that the English edition of the book *Matrix and Matrix Regulation* by Dr. Pischinger is now available at BHL.

Course Evaluation Assignment:

Assignment – Case Study:

To complete the course you must please submit 1 case study using the Detoxification and Drainage Questionnaire and the Disease Evolution Table. You can assess a friend, client or yourself, complete the Questionnaire to evaluate the symptoms, indicate the total points to evaluate the level of toxicity and incorporate the results to the corresponding category on the Disease Evolution Table. Also include guidelines or treatment plan, nutritionally or with any supplements you would advise the client to start with the detoxification process.

You may email your case studies to: silverwindhealth@gmail.com you have 30 days to complete the assignment.

Thank you and Good Luck