

# **Terrains and Chronic Infection**

**Dan Kenner**

# Botanical Medicine

Traditional Naturopathic

TCM

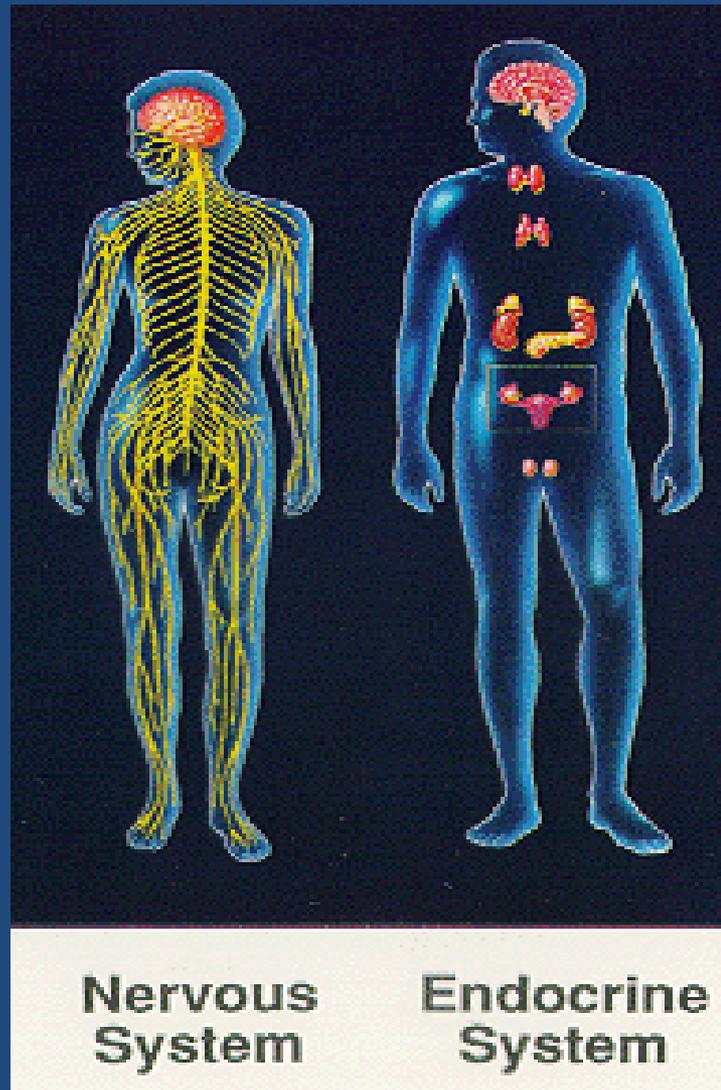
Kampo

French Phytoaromatherapy

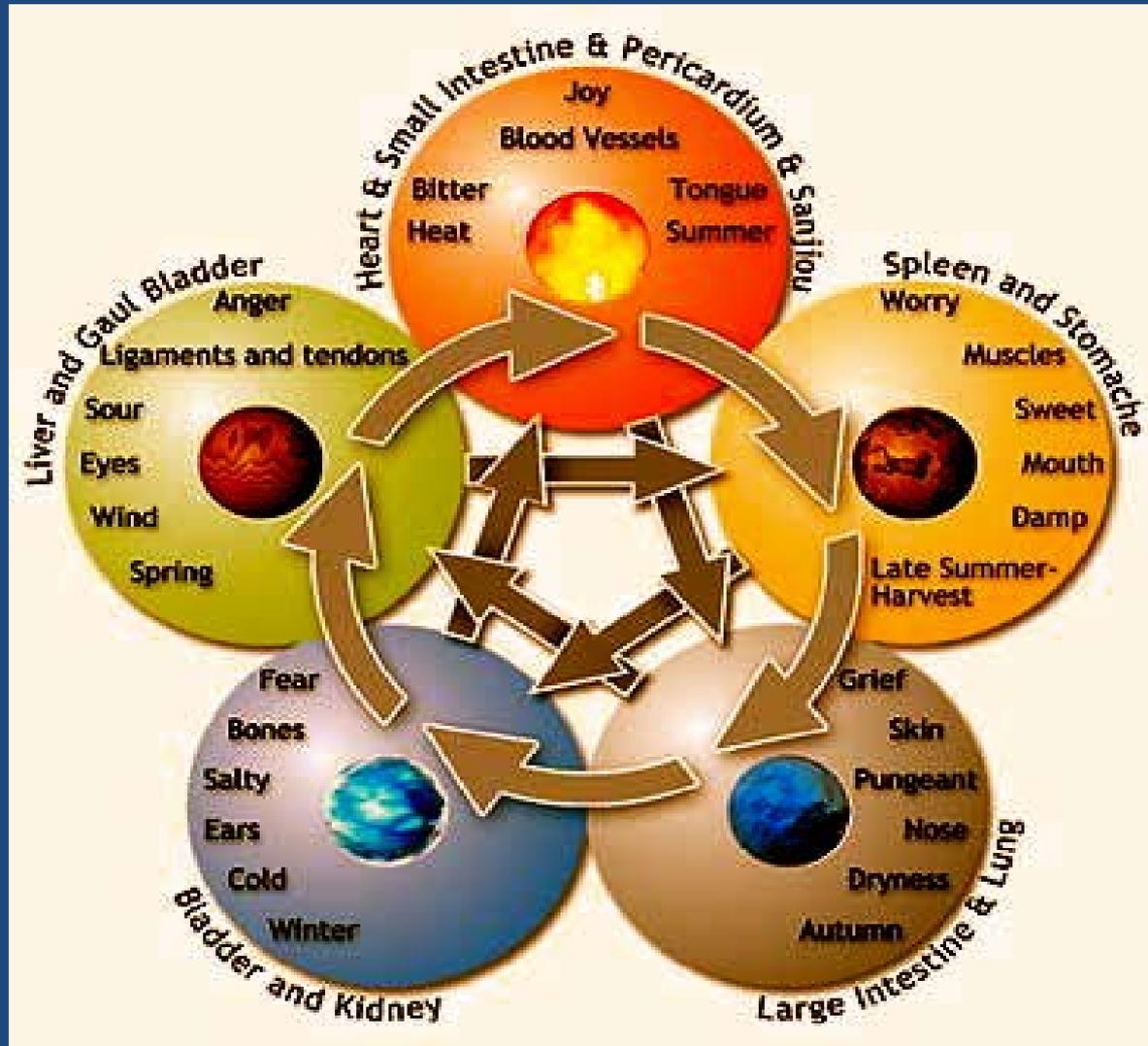
Endobiogeny: [www.endobiogeny.com](http://www.endobiogeny.com)

Ayurveda

# The Neuroendocrine System

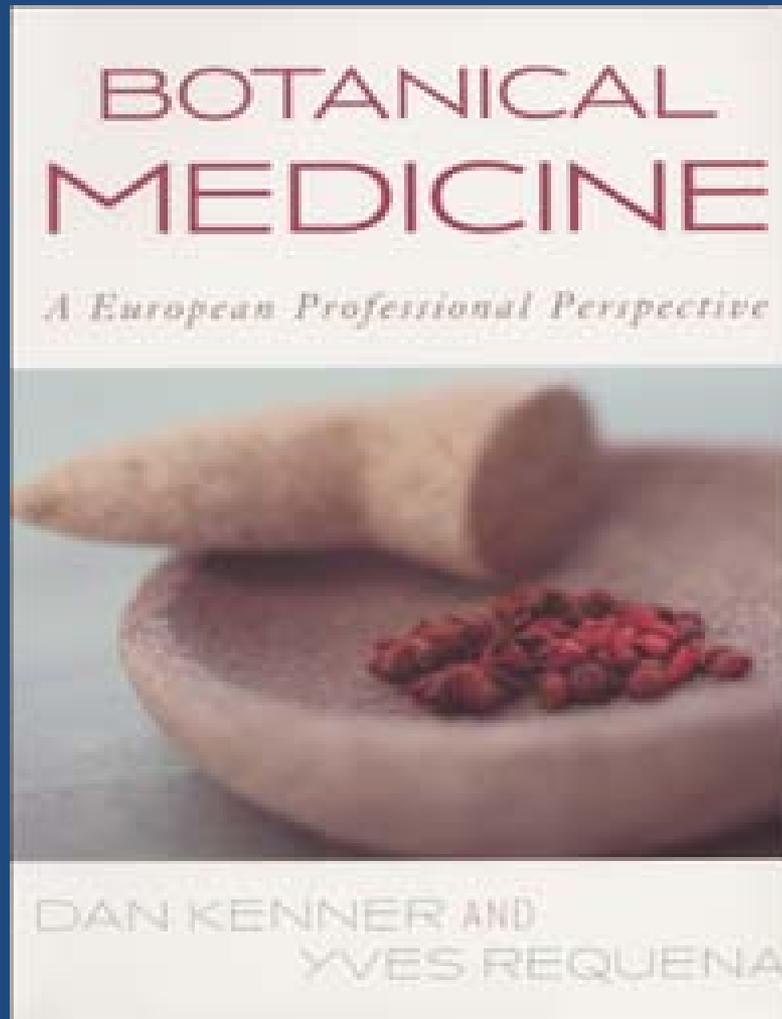


# The Five Phases (Elements)



# Botanical Medicine

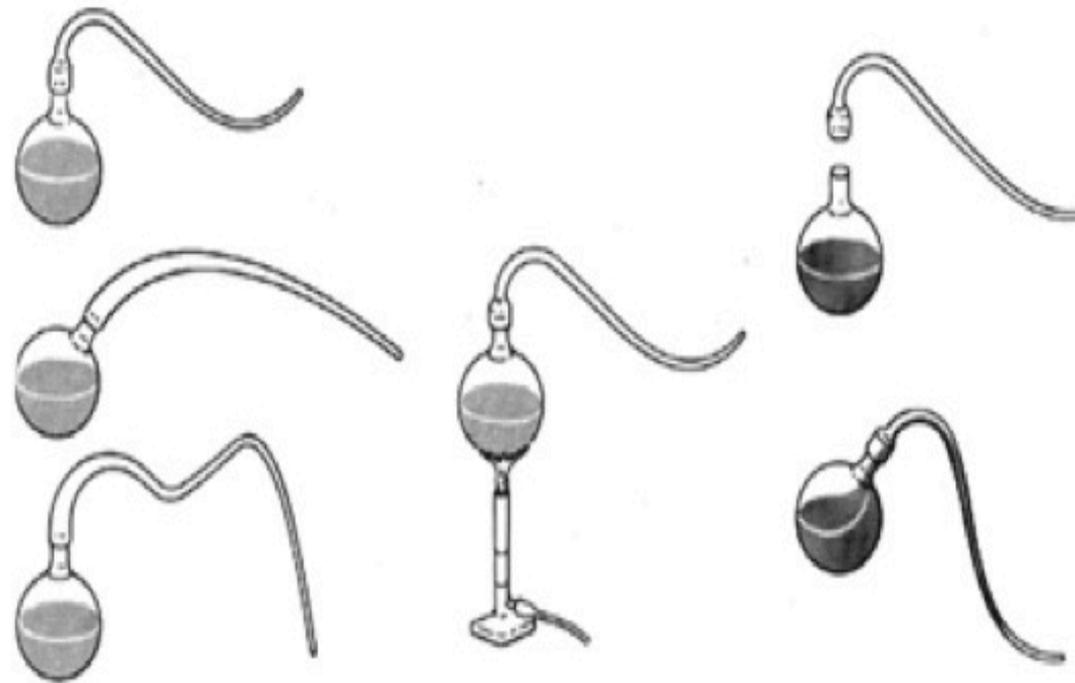
by Dan Kenner, Yves Requena



# The germ theory of disease. I.



Pasteur ends the controversy on spontaneous generation  
moves forward to tackle the infectious origin of disease  
through the discovery of attenuation, develops vaccines



# Claude Bernard



# Infection Co-Factors

- 30% of Americans are vulnerable to a wide range of infections because their nostrils are colonized with *Staphylococcus aureus*.
- Chronic sinusitis is the fifth most common reason people take antibiotics; now it's known that many sinusitis infections are fungal
- Sinus passages of a person with sinusitis inhabited by 900 strains of bacteria; a healthy person has even more – around 1200 species

# The facts are...

Your mouth  
"talks" to  
your body...

...and your  
body "talks"  
to your  
mouth!

Gum disease  
increases the risk of  
**head & neck  
cancer.**

--AAOH

**Cavities** are caused by  
a germ that spreads  
while kissing & sharing  
food.

--American Academy for Oral Health

**Bacteria in your mouth  
travel to other parts of  
your body in your  
bloodstream.**

--American Academy for  
Oral Health

**Diabetes** & bleeding  
gums increases your  
risk of premature  
death by 400 - 700  
percent.

--American Academy for Oral Health

Pregnant women with gum  
disease have only a 1 in 7  
chance of giving birth to a  
healthy child of normal  
size.

--American Academy for Oral Health

People with gum disease  
are twice as likely to die  
from **heart disease** &  
three times as likely to die  
from **stroke**.

--Mayo  
Clinic

Tooth loss & gum disease  
increase the risk of  
**Alzheimer's disease.**

--Mayo Clinic

Gum disease  
increases  
**pancreatic &  
kidney cancer** risk  
by 62%.

-- Harvard

93% of people with  
gum disease are at  
risk for **diabetes.**

--American Academy for Oral Health

Research has found an  
association between gum  
disease **and rheumatoid  
arthritis.**

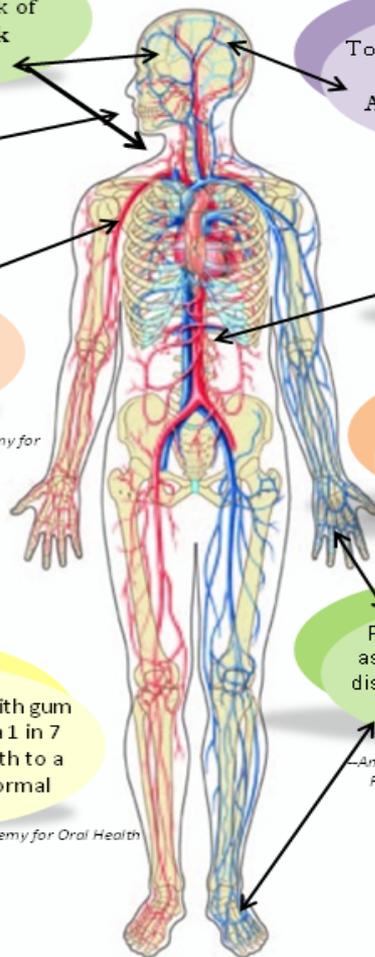
--American Academy of  
Family Physicians

The Surgeon General  
reports that at least  
80% of American  
adults have gum  
disease.

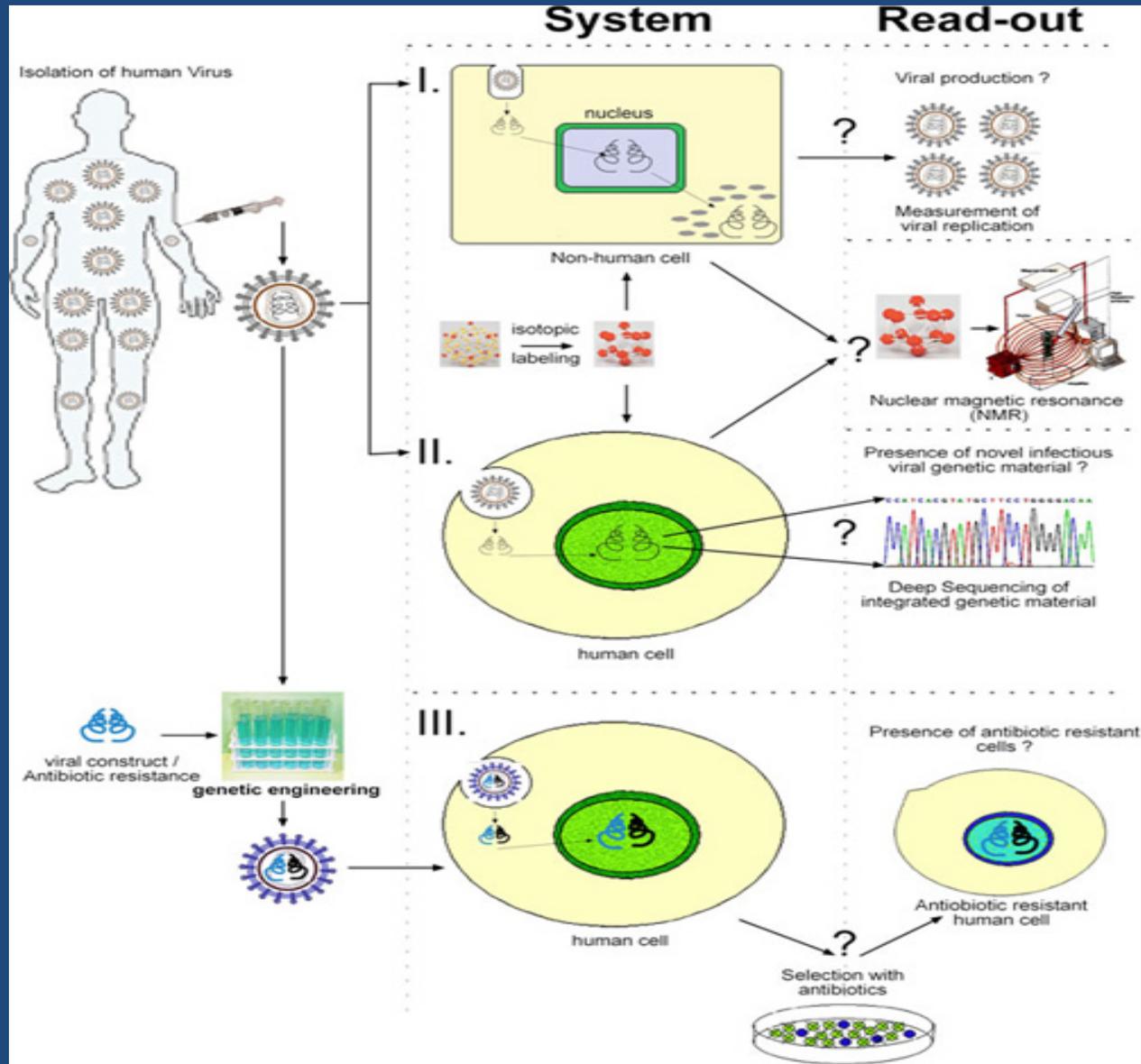
--AAOH

**Bacteria that live in your mouth can cause**

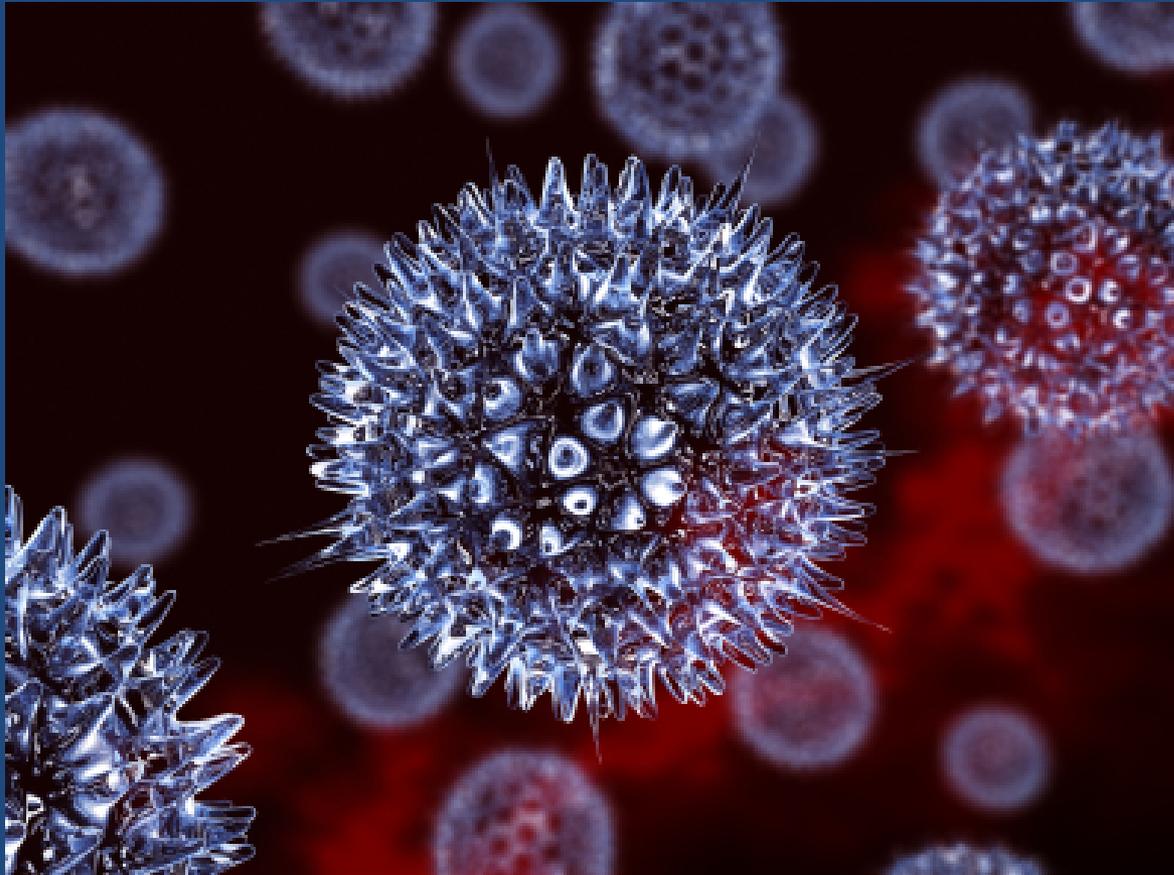
**heart disease,  
high blood  
pressure &  
stroke.**



# Endogenous Retroviruses



# Herpes Virus



# The “Omes”

- Genomes
- Proteomes
- Metabolomes
- Interactomes
- Transcriptomes
- (and the other “-omes”)



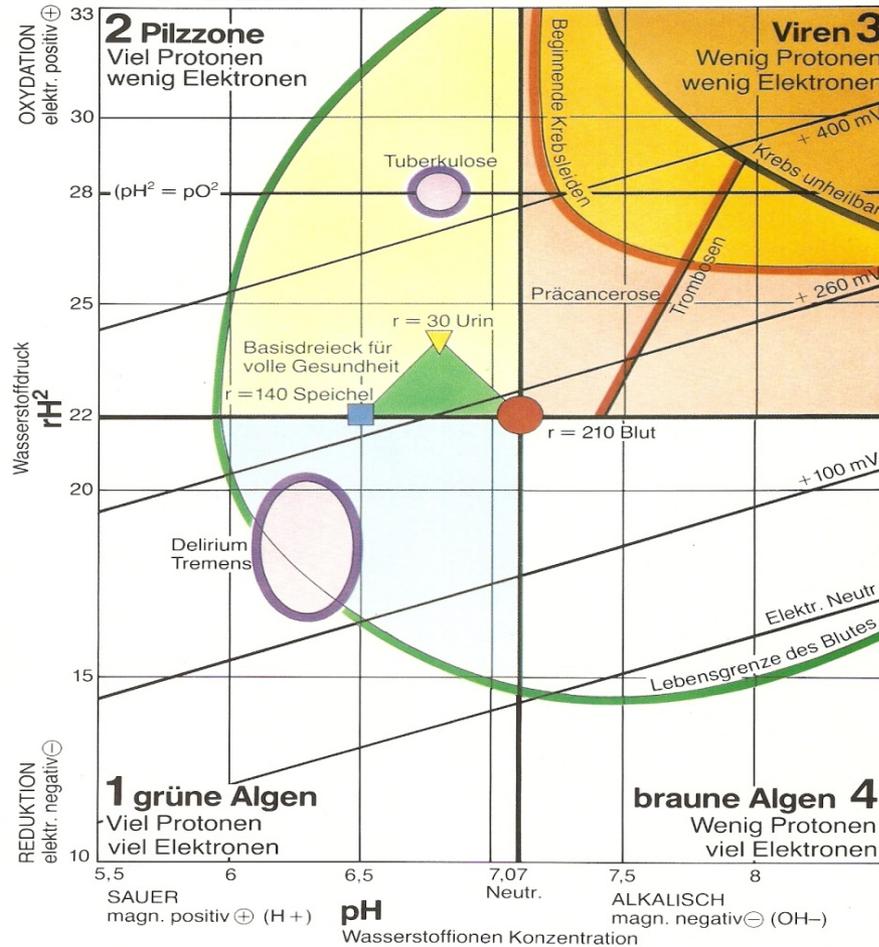
# AROMATOGRAMME



# Louis-Claude Vincent



# BIO-ELEKTRONIGRAMM VINCENT



Normwerte	pH	rH <sup>2</sup>	Ohm r	mV	mA
BLUT	7,1	22	210	236	1,12
SPEICHEL	6,5	22	140	270	1,93
URIN	6,8	24	30	312	10,40



Med-Tronik GmbH

Medizinisch biophysikalische Geräte

Daimlerstraße 2 · D-7632 Friesenheim 1 · Tel. (07821) 6041 · Fax (07821) 67180

# Optimal Physiological Parameters

Vorname: Person      Name: X  
 Geb.-datum: 13.08.1952      Alter: 38 Jahre

Messwerte	pH	rHZ	R
Blut	7.30	22.0	210
Speichel	6.50	22.0	180
Urin	6.80	24.0	30

Auswertung:

Auswertungszahl *pondu*  
 pHp: 0 rHp: 0 Rp 10.57

Energiewerte mal Vol.  
 Blut: 235 <sup>250</sup> 1173  
 Speichel: 405 <sup>450</sup> 522  
 Urin: 3245 <sup>3200</sup> 4543

Faktor C: 10.00  
 Abwehr-Faktor: 105.74  
 Energiepot.: 15.16  
 Integral-Wert: 1602.52  
 IW in %: 737 %

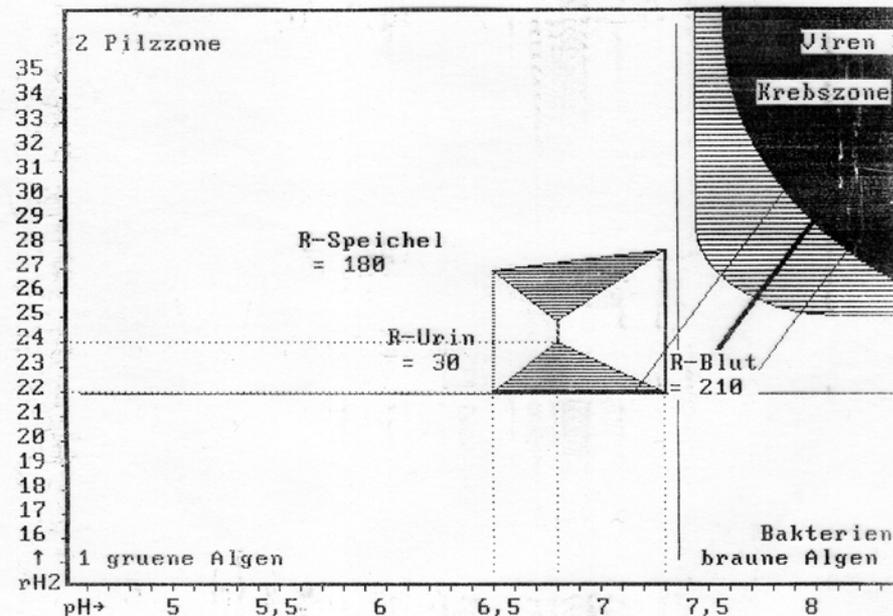
Tatsächliches Alter: 38 Jahre  
 Alter laut BE-Terrain: 20 Jahre

Blut = |  
 Speichel = |  
 Urin = |

Auswertung:  
 pHp: 0  
 rHp: 0  
 Rp: 10.57

pW mal Vol.  
 pW-B: 1173  
 pW-S: 522  
 pW-U: 4543

Energetische  
 Quantifikation  
 pW-Bl. + pW-Sp.  
 pW-Urin  
 = 3733179



Datum: 12.12.1991

Datum der Messung  
12.12.1991

Ucurname: \_\_\_\_\_ Name:  
Geb.-datum: \_\_\_\_\_ Alter: 42 Jahre

Meßwerte	pH	rH2	R
Blut	7.84	27.0	177
Speichel	7.41	29.4	354
Urin	6.20	26.2	133

Tatsächliches Alter: 42 Jahre  
Alter laut BE-Terrain: 107 Jahre

Auswertung:

Auswertungszahl  
pHp: 167 rHp: 137 Rp: 3.29

Energiewerte mal Vol.  
Blut: 652 3258  
Speichel: 540 697  
Urin: 1289 1804

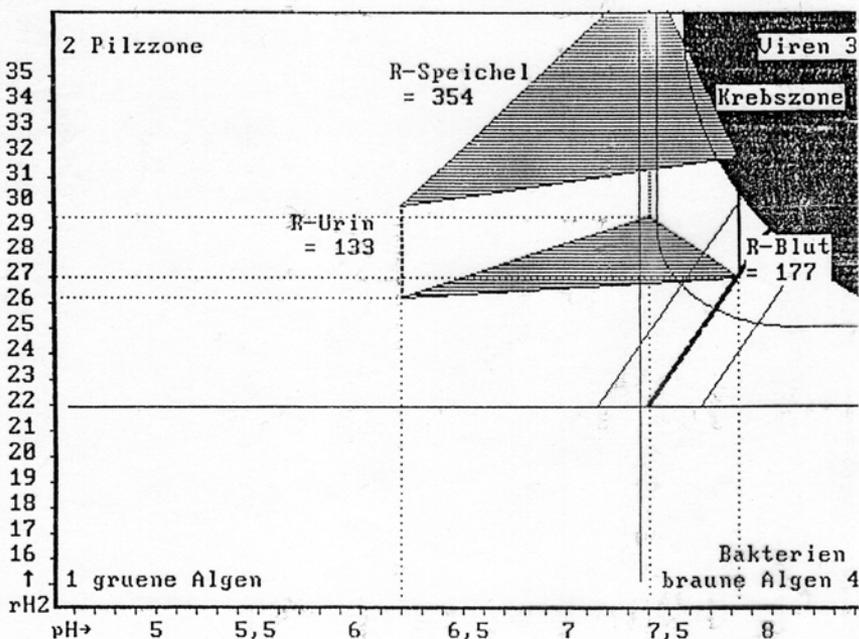
Faktor C: 0.11  
Abwehr-Faktor: 0.37  
Energiepot.: 0.23  
Integral-Wert: 0.08  
IW in %: 0 %

Blut = |  
Speichel = |  
Urin = |

Auswertung:  
pHp: 167  
rHp: 137  
Rp: 3.29

$\mu W$  mal Vol.  
 $\mu W-B$ : 3258  
 $\mu W-S$ : 697  
 $\mu W-U$ : 1804

Energetische  
Quantifikation  
 $\mu W-Bl. + \mu W-Sp.$   
 $\mu W-Urin$   
= 2.192165



# Bioelectronic Measures of Cancer

<b>Fluid</b>	<b>pH</b>	<b>rH2</b>	<b>Resistance (<math>\Omega</math>)</b>
<b>Blood</b>	<b>7.8</b>	<b>29</b>	<b>&lt;120</b>
<b>Saliva</b>	<b>7.1</b>	<b>30</b>	<b>230</b>
<b>Urine</b>	<b>5</b>	<b>12</b>	<b>100</b>

# BIOPHYSICAL PARAMETERS

## MICROBE TERRAINS

**Tuberculosis: pH = 6.71 rH2 = 27.9 r = 197**  
**Cancer (blood): pH > 7.4 rH2 > 24 r < 140**

## PATHOLOGICAL TERRAINS

### Acid-reduced:

**liver cirrhosis; delirium tremens; tetanus; coma;  
late stage of diabetes; acute nephritis; meningitis**

### Alkaline-reduced:

**typhus; cholera; syphilis; bubonic plague**

### Acid-oxidized:

**pediatric illnesses; pertussis; pneumonia; tuberculosis;  
polio; psoriasis; mycoses**

### Alkaline-oxidized:

**thromboses; neurotic disorders; leukemia; epilepsy; obesity;  
chronic nephritis; anemias; cancer; Parkinson's disease**

## DRUGS & VACCINES

**antibiotics - rH2 > 29**  
**tranquilizers - alkaline and oxidized**  
**contraceptives - rH2 > 30**  
**BCG - pH = 7.8 rH2 = 38 r = 95**  
**phenobarbital - pH = 4.5 rH2 = 4.0**  
**cocaine - pH = 4.5 rH2 = 22**  
**penicillin - pH = 5.3 rH2 = 30**  
**snake venom - pH = 1.6 rH2 = 12**  
**morphine pH = 3.5 rH2 = 19**  
**methotrexate - pH = 8.6 rH2 = 33.5 r = 60**

# Dr. Hans-Heinrich Reckeweg



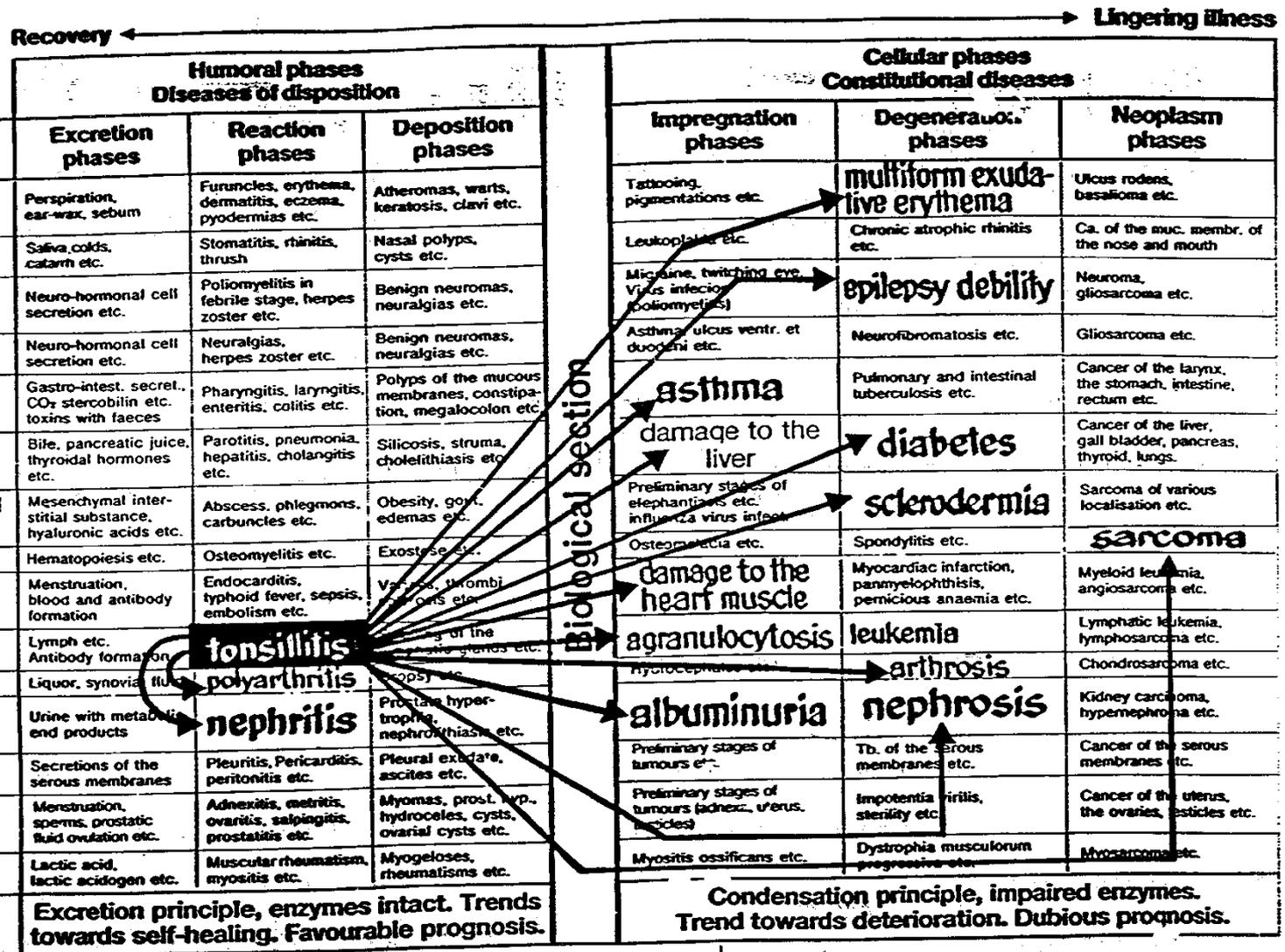
# SIX-PHASE TABLE

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

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

\* Phase nomenclature in psychology.

Figure 13: Tonsillitis (reaction phase)



# STAGES OF DISEASE

HUMORAL (humoral immunity, drainage: This is the stage of acute disease)

- Excretion Phase – Toxic threat eliminated through normal routes: bowel, skin, mucous membranes
- Reaction Phase – Toxic threat oxidized by fever, inflammation; requires liver and thyroid function

# STAGES OF DISEASE (2)

## MATRIX (Accumulation of toxic threat)

- Deposition Phase: Toxic material that cannot be excreted or oxidized deposits in connective tissue
- Impregnation Phase: Infiltration of metabolic debris into the tissues is the beginning of chronic disease

# STAGES OF DISEASE (3)

CELLULAR: (Cellular immunity, damage to the cellular environment)

- Degeneration Phase: Dynamic flow of fluids to the cellular environment compromised resulting in lack of nutrients and inadequate elimination of cellular waste; cytoplasm damage)

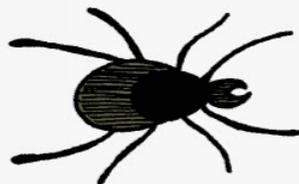
# CELLULAR STAGE (*continued*)

- Dedifferentiation Phase: (Neoplasm):  
Populations of cells disintegrate; nuclear material generates new structures in a toxic environment; unrestrained growth processes; fetal proteins often detectable

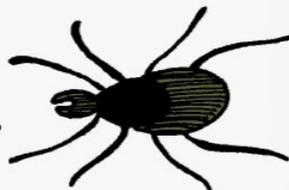
# Embryonic Antigens Found in Tumors

**TABLE 3.1 Embryonic antigens found in tumors**

Name of antigens	Properties	Tumors related to
<b>Embryonic antigens:</b>		
<b>Alpha-fetoprotein (AFP)</b>	Mol. wt. 70000, glycoprotein, soluble antigen	Hepatoma, yolk sac tumor of sexual gland
<b>Carcino-embryonic antigens (CEA and CEA-S)</b>	Mol. wt. 200k-370k, glycoproteins, surface antigens	Tumors in colon and other parts of alimentary canal
<b><math>\alpha_2</math>H-ferritin</b>	17S, macromolecular globulin, ferrum-containing	Infantile teratoma, liver cancer, lymphoma, neuroblastoma, nephroblastoma
<b><math>\beta</math>S-fetoprotein</b>	Mol. wt. > 200k, glycoprotein	Liver cancer, bile duct cancer, stomach cancer, leukemia, lymphosarcoma
<b>Gamma-fetoprotein (<math>\gamma</math>FP)</b>	$\gamma$ -Globulin	Parenchymatous tumors in colon, ovary, kidney, muscle, bone, nerve, and so on
<b>Fetal sulfur-containing antigen (FSA)</b>	Sulfur-containing glycoprotein	Carcinous gastric juice, tissue of stomach cancer
<b>S<sub>2</sub>-sarcoma antigen</b>	Cytoplasm antigen	Sarcoma, gigantocellular carcinoma, breast cancer, lung cancer, carcinoma of alimentary canal, melanoma
<b>Leukemia association antigen (LAA)</b>		Leukemia
<b>Placental antigens:</b>		
<b>Placental alkaline phosphatase</b>	Isoenzyme of AKP	Carcinogenic tissues
<b>Human chorionic gonadotropin (HCG)</b>	Hormone	Choriocarcinoma, teratoma



# LYME DISEASE



## Flu-Like Symptoms

- Headache
- Fatigue
- Fever
- Chills
- Sore Throat
- Muscle Aches

Hearing Loss

Paralysis of Face

Heart Complications  
Rapid or Slow Heart Rate  
Chest Pain

Syncope, Palpitations,  
Dyspnea

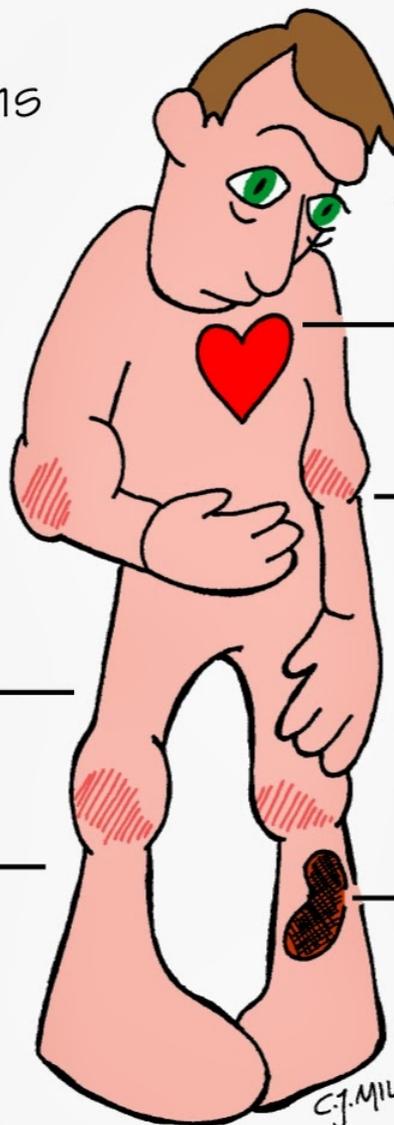
Insomnia

Hot, Swollen,  
Painful Joints

Psychological  
Complications  
(Long Term)

- Depression
- Dementia

Rash at the Site  
of the Tick Bite -  
Itching



CJ.MILLER



# Lyme Co-infections

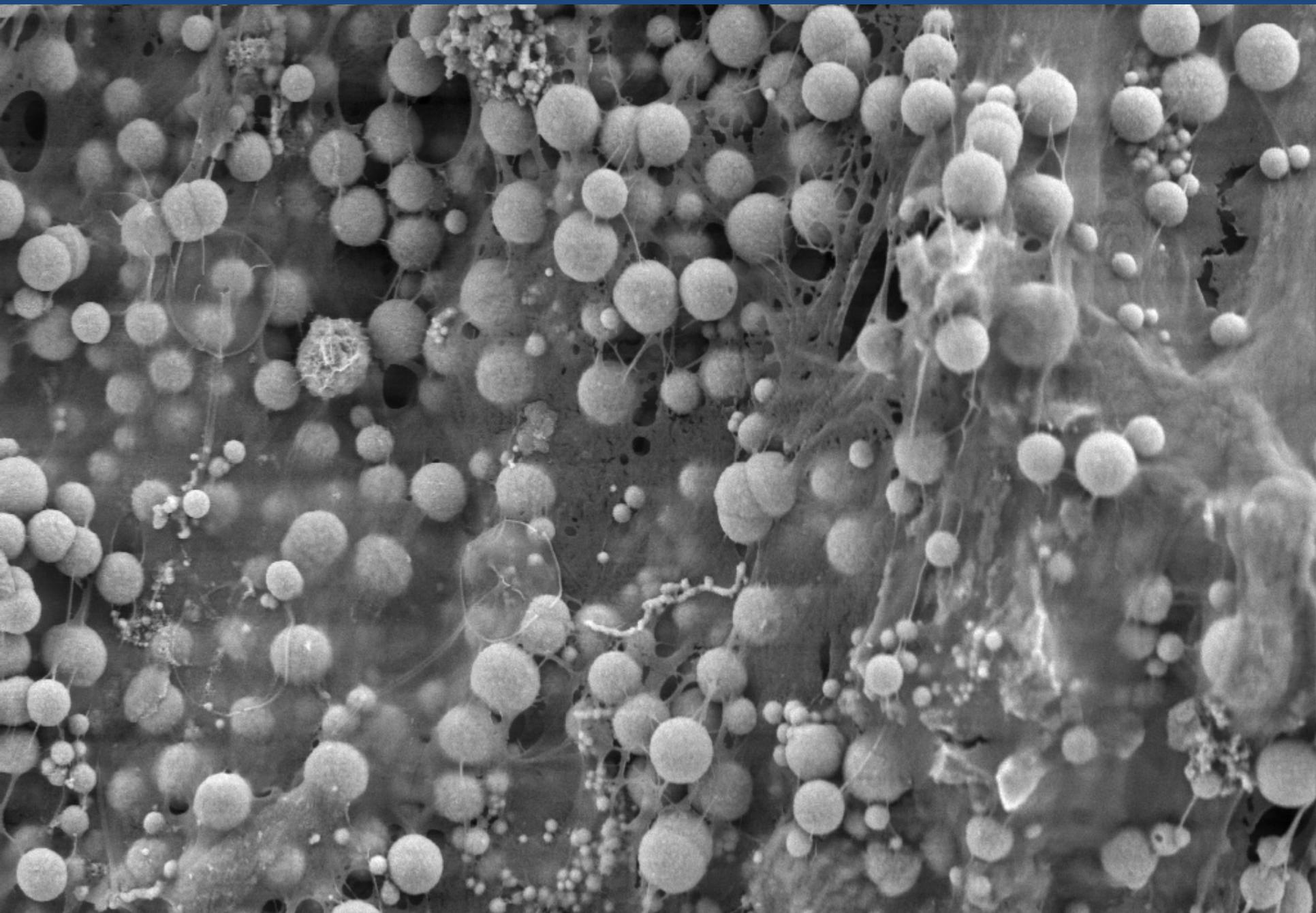
- Bartonella
- Ehrlichiosis
- Babesia
- Fungal infections
- Viral infections
- Mycoplasma
- Other bacteria and parasites

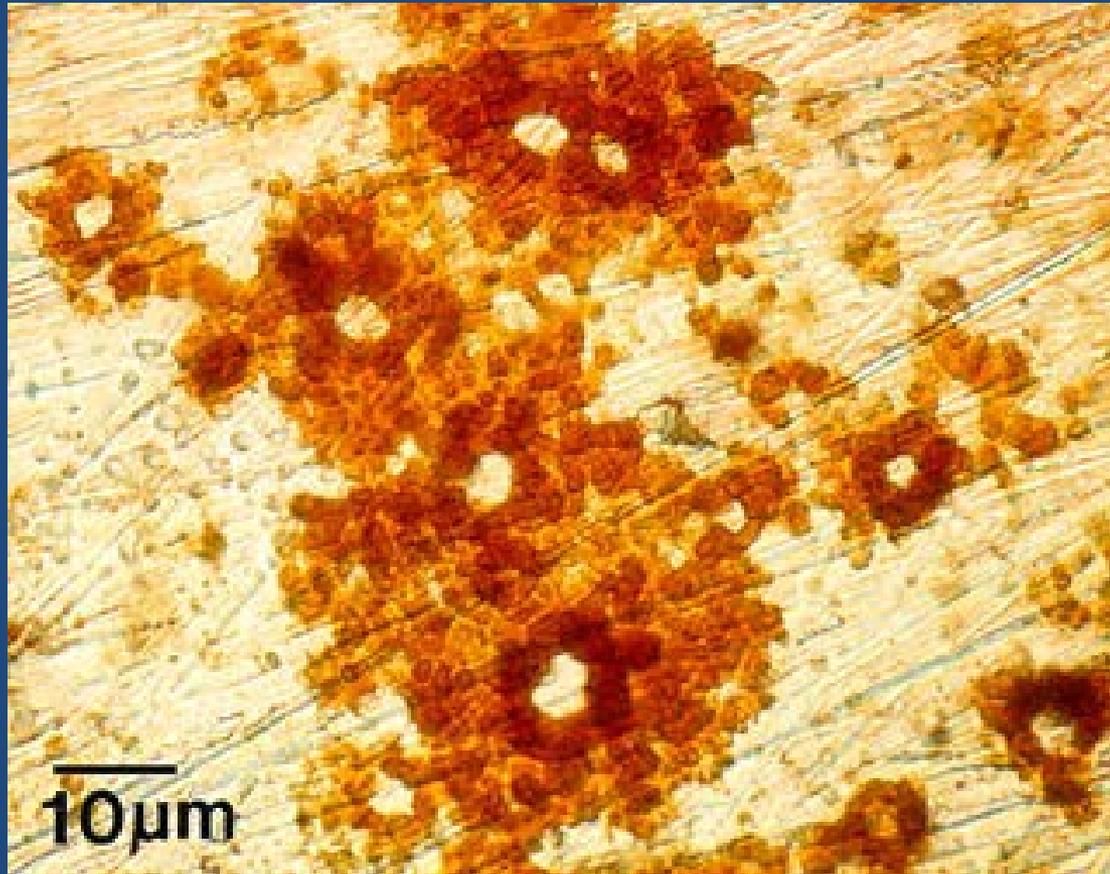
# Components of Treatment

- Disinfection: cleansing terrain, destroying pathogenic microbes
- Drainage: especially liver
- Symptomatic treatment: pain, brain fog, fatigue
- Regulating the terrain: Neuroendocrine regulation, acid-base regulation
- Boosting immunity (the first four will probably do that)
- Tissue repair: Healing membranes, especially gut; nourishing the tissues

# Essential Oil and Phytochemical Mechanisms

- Dissolve biofilms (phenols, terpenes, ketones, alcohols)
- Restore condition of intestinal probiotics (polyphenols)
- Repair DNA/RNA (terpenes): the only way to get rid of a virus is to either dismantle or reprogram DNA or RNA
- Destroy the cell wall: the interaction between terpenes/phenolic compounds and bacterial cell wall is mainly a disruption of the cell membrane provoking cell compound leakage, perturbation of proton motive pumps, dissolution or coagulation of cell compounds, membrane and transmembrane protein blockage etc. Mechanisms are different depending on the involved compound, and generally, phenolic compounds are the most powerful
- Lower pH in blood, large intestine





# Essential Oils are Solvents



# Dissolving Biofilms

“About 80% of human infections affecting the gastrointestinal, genitourinary and respiratory systems, oral mucosa and teeth, eyes, middle ear and skin are caused by biofilm-associated microorganisms. Therefore, the search for modern strategies is even more important as microbial biofilms resistant to conventional antibiotics, antiseptics and disinfectants are involved in the frequent treatment failures of some chronic inflammatory diseases and wounds. Natural products containing secondary metabolites, such as aromatic compounds, sulphurated derivatives, terpenoids (essential oils)...”

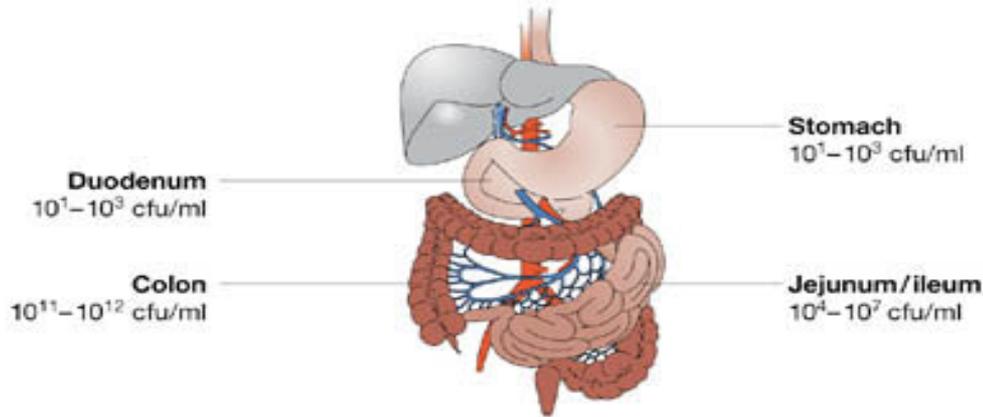
Mogosanu G, Grumezescu A, Huang K, *et al*, Prevention of microbial communities: novel approaches based natural products, *Current Pharmaceutical Biotechnology*, 2015;16(2):94-111.

# Probiotics Support Various Functions of Microbiome

- Probiotics roles and benefits:
- Immune function
- Supply of fatty acids and vitamins
- Bile salt deconjugation
- Lactose hydrolysis
- Produce lactic acid- lowers the pH of intestines and inhibiting bacterial villains such as *Clostridium*, *Salmonella*, *Shigella*, *E. coli*, etc.
- Decreases the production of a variety of toxic or carcinogenic metabolites.
- Aid absorption of minerals, especially calcium, due to increased intestinal acidity.
- Production of  $\beta$ - D- galactosidase enzymes that break down lactose.
- Produce a wide range of antimicrobial substances -acidophilin and bacteriocin etc. help to control pathogenic bacteria .
- Produce vitamins (especially Vitamin B and vitamin K)
- Act as barriers to prevent harmful bacteria from colonizing the intestines

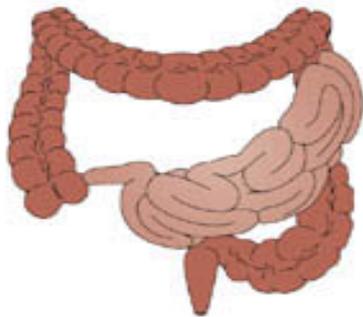
# Functions of Gut Flora

A



Anaerobic genera	Aerobic genera
<i>Bifidobacterium</i>	<i>Escherichia</i>
<i>Clostridium</i>	<i>Enterococcus</i>
<i>Bacteroides</i>	<i>Streptococcus</i>
<i>Eubacterium</i>	<i>Klebsiella</i>

B



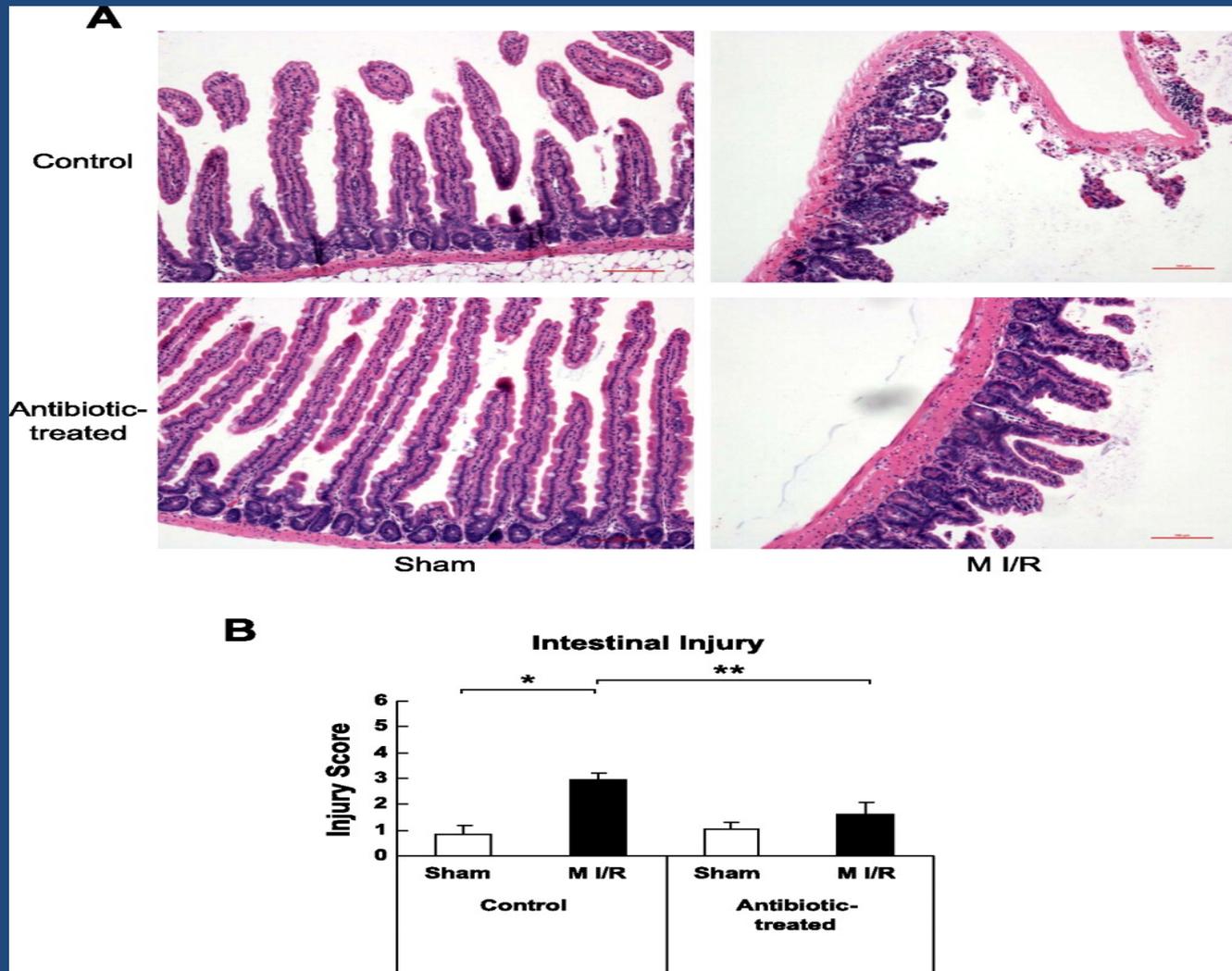
Protective functions	Structural functions	Metabolic functions
<ul style="list-style-type: none"> <li>Pathogen displacement</li> <li>Nutrient competition</li> <li>Receptor competition</li> <li>Production of anti-microbial factors e.g., bacteriocins, lactic acids</li> </ul>	<ul style="list-style-type: none"> <li>Barrier fortification</li> <li>Induction of IgA</li> <li>Apical tightening of tight junctions</li> <li>Immune system development</li> </ul>	<ul style="list-style-type: none"> <li>Control IEC differentiation and proliferation</li> <li>Metabolize dietary carcinogens</li> <li>Synthesize vitamins e.g., biotin, folate</li> </ul>
<p>Commensal bacteria</p>	<p>IgA</p>	<p>Short-chain fatty acids</p> <p>Mg<sup>2+</sup> Ca<sup>2+</sup> Fe<sup>2+</sup></p> <p>Vitamin K Biotin Folate</p>

# Gut-associated lymphoid tissue (GALT)

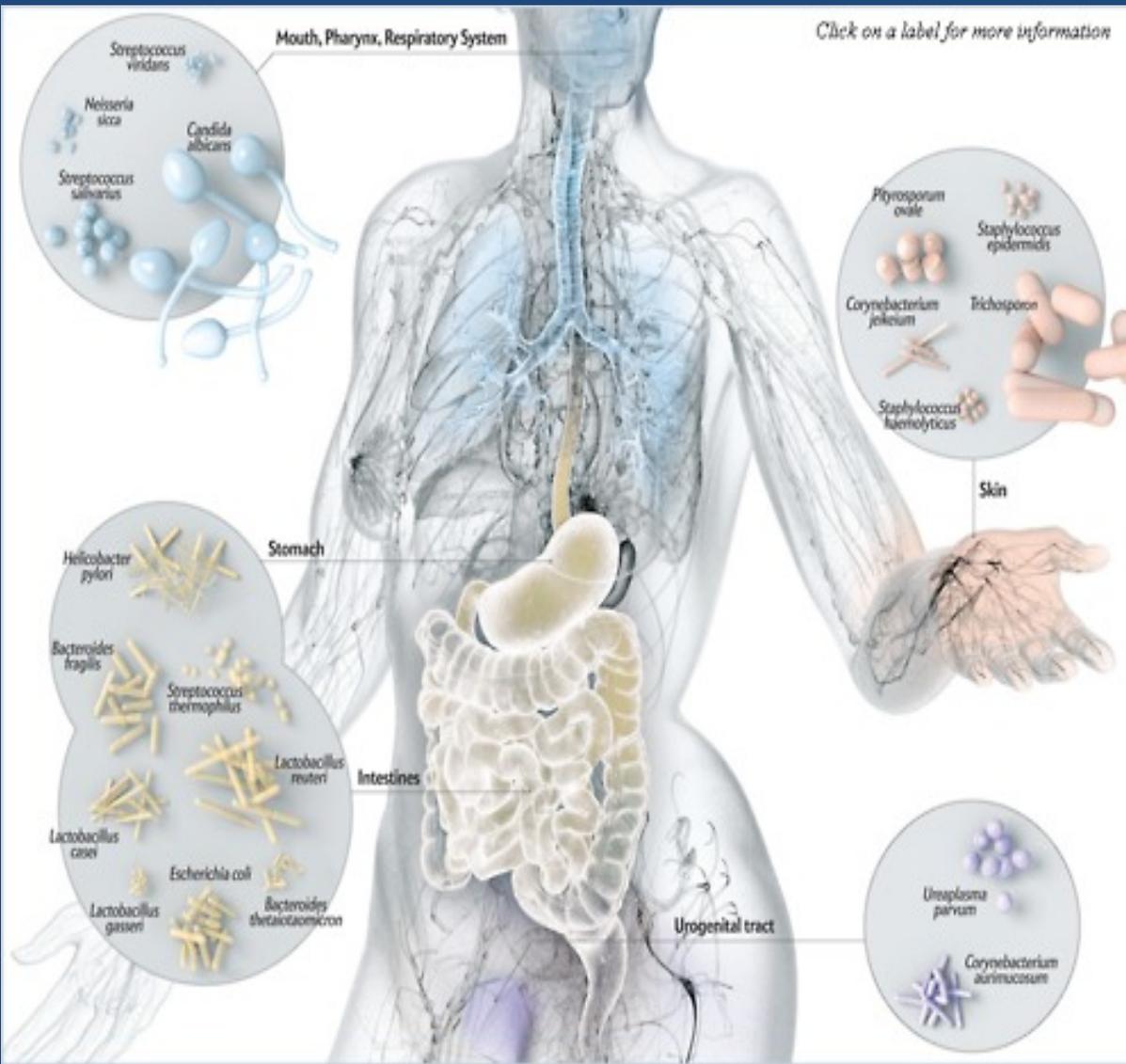
- 80% of all immune cells reside in the gut
- The small intestine is the largest immune organ in the body
- Enteric flora help modulate immunity through interaction with toll receptors and bacterial pattern recognition by lymphocytes
- By modulating the immune system intestinal flora can reduce the occurrence or severity of various inflammatory disorders

# Depletion of Gut Commensal Bacteria

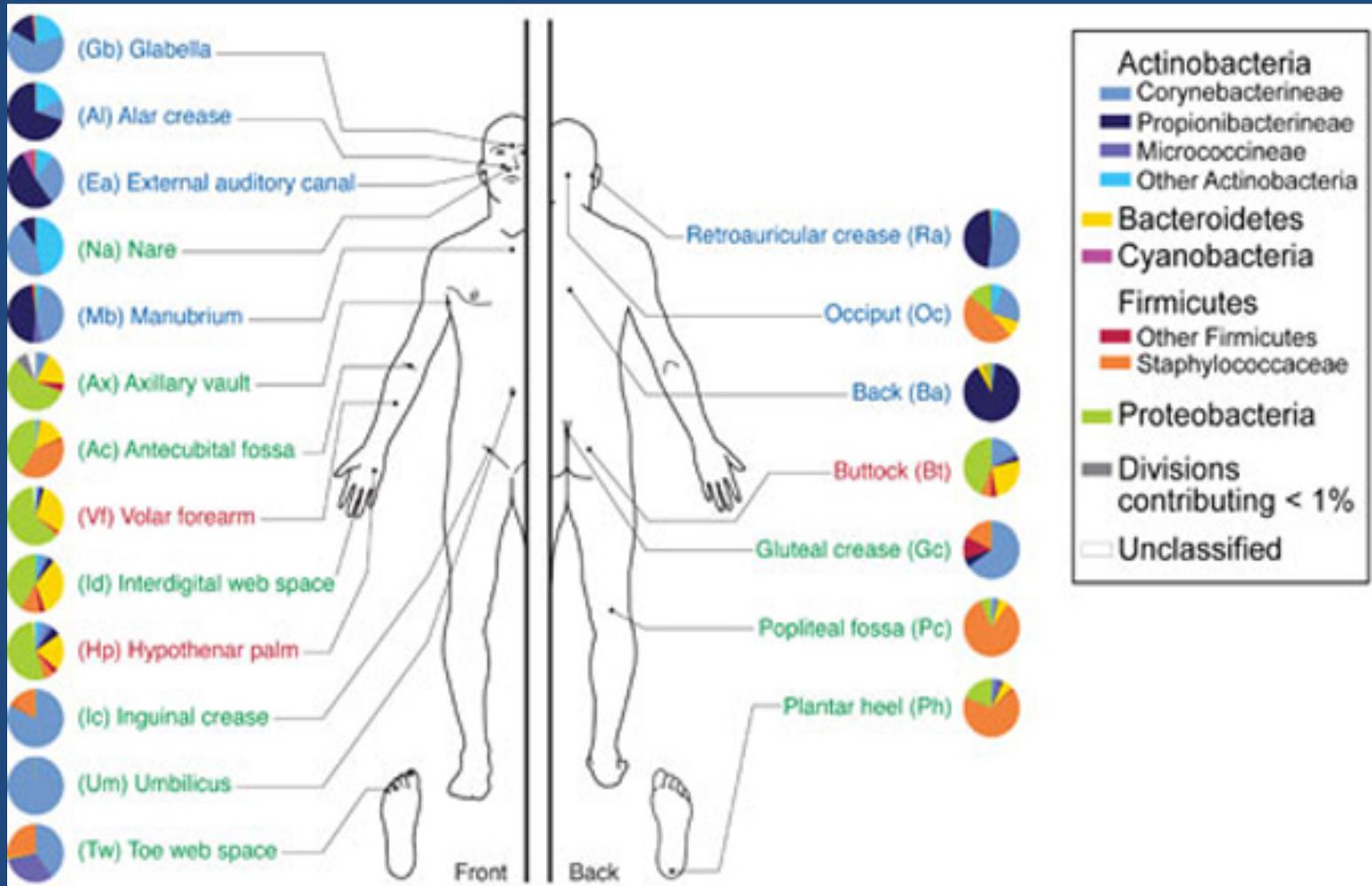
“Death sits in the bowels; a bad digestion is the root of all evil” - Hippocrates, ca. 400 BC



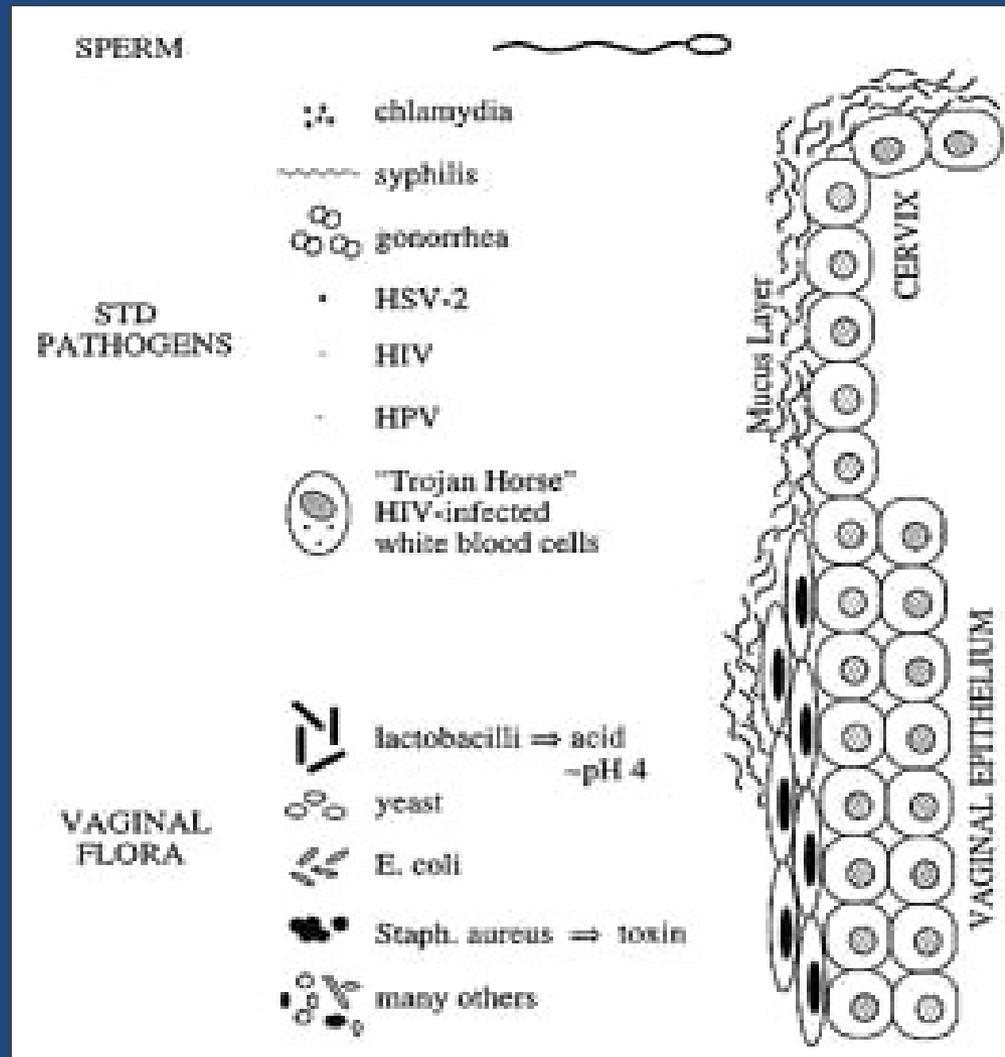
# Intestinal microbes are connected with the rest of the body



# Skin Microbes



# Vaginal Flora and Pathogens



# Oral Microbes



Anaerobic bacteria in the oral cavity include: *Actinomyces*, *Arachnia*, *Bacterioides*, *Bifidobacterium*, *Eubacterium*, *Fusobacterium*, *Lactobacillus*, *Leptotrichia*, *Peptococcus*, *Peptostreptococcus*, *Propionibacterium*, *Selenomonas*, *Treponema* and *Veillonella*

# Probiotics in Infant and Pediatric Diarrhea

The strongest evidence of a beneficial effect of probiotics has been established with *Lactobacillus rhamnosus* GG and *B. lactis* BB-12 for prevention and *L. reuteri* SD2222 for treatment of acute diarrhea mainly caused by rotaviruses in children.

# Adult Gastroenteritis

“In the short-term, taking probiotics in conjunction with antibiotics appears to be a safe and effective way of preventing diarrhea associated with *Clostridium difficile* infection.”

Bradley C. Johnston, Ph.D., from the Hospital for Sick Children Research Institute, Toronto

# Obesity

An animal study published in the *Journal of Proteome Research* in 2012, suggests that bacteria living in the large bowel may also play a role in obesity by slowing down the activity of energy-burning brown fat.

# Metabolic syndrome

Researchers at the University of Maryland School of Medicine have found that bacteria in the human gut microbiota that appear to be linked to obesity, insulin resistance, high blood sugar levels, increased blood pressure and high cholesterol.

# High Blood Pressure

A team of scientists from Johns Hopkins and Yale University discovered that a specialized odor-sensing receptor normally present in the nose can also be found in blood vessels throughout the body. In the gut, the receptor reacts to small molecules generated by bacteria by raising blood pressure. The study may aid understanding of how antibiotics, probiotics, and changes in diet affect blood pressure.

# Brain Health

**“The knowledge that signals are sent from the intestine to the brain and that they can be modulated by a dietary change is likely to lead to an expansion of research aimed at finding new strategies to prevent or treat digestive, mental and neurological disorders,” Kirsten Tillisch, Emeran Mayer, MD, professor of medicine, physiology, and psychiatry at the David Geffen School of Medicine at UCLA. Quoted in *Medscape Medical News***

# Autism

“Many children with autism have gastrointestinal (GI) disturbances that can complicate clinical management and contribute to behavioral problems. Understanding the molecular and microbial underpinnings of these GI issues is of paramount importance for elucidating pathogenesis, rendering diagnosis, and administering informed treatment.

Here we describe an association between high levels of intestinal, mucoepithelial-associated *Sutterella* species and GI disturbances in children with autism. These findings elevate this little-recognized bacterium to the forefront by demonstrating that *Sutterella* is a major component of the microbiota in over half of children with autism and gastrointestinal dysfunction (AUT-GI) and is absent in children with only gastrointestinal dysfunction (Control-GI) evaluated in this study.”

Dr. Natasha Campbell-McBride, British Neurologist

# Multiple Sclerosis

In mice bred to develop a disease similar to multiple sclerosis, those raised in an environment with no bacteria did not develop symptoms. But a new study found that once typical gut bacteria were introduced, the mice began to show signs of multiple sclerosis.

# Urinary tract infections

In a study on the prevention of urinary tract infection using once-weekly vaginal administration of a suppository containing  $10^9$  *L. rhamnosus* GR-1 and *L. fermentum* B-54 for 1 year, there was a significant reduction in urinary tract infection during lactobacillus use (from an average of six episodes per year to 1.6 episodes per year (30%).

# Surgical infections

In a study Lactobacilli were administered 24 h after surgery four times a day for 6 weeks.

Only 13% of patients developed infections, compared to 34 to 48% in controls, with a drop in enterococcal infections being notable.

# Cancer

*An in vivo* study with *Lactobacillus rhamnosus* GG and LC-705 and a *Propionibacterium* sp. showed a decrease in availability of carcinogenic aflatoxin in the lumen of the large intestine.

# Allergies

Twenty-three randomized, placebo-controlled intervention studies regarding the clinical effect of probiotic supplementation on development of allergy and eczema in particular have been published.

Around 60% of the studies show a favorable effect decreasing the risk of eczema during the first years of life.

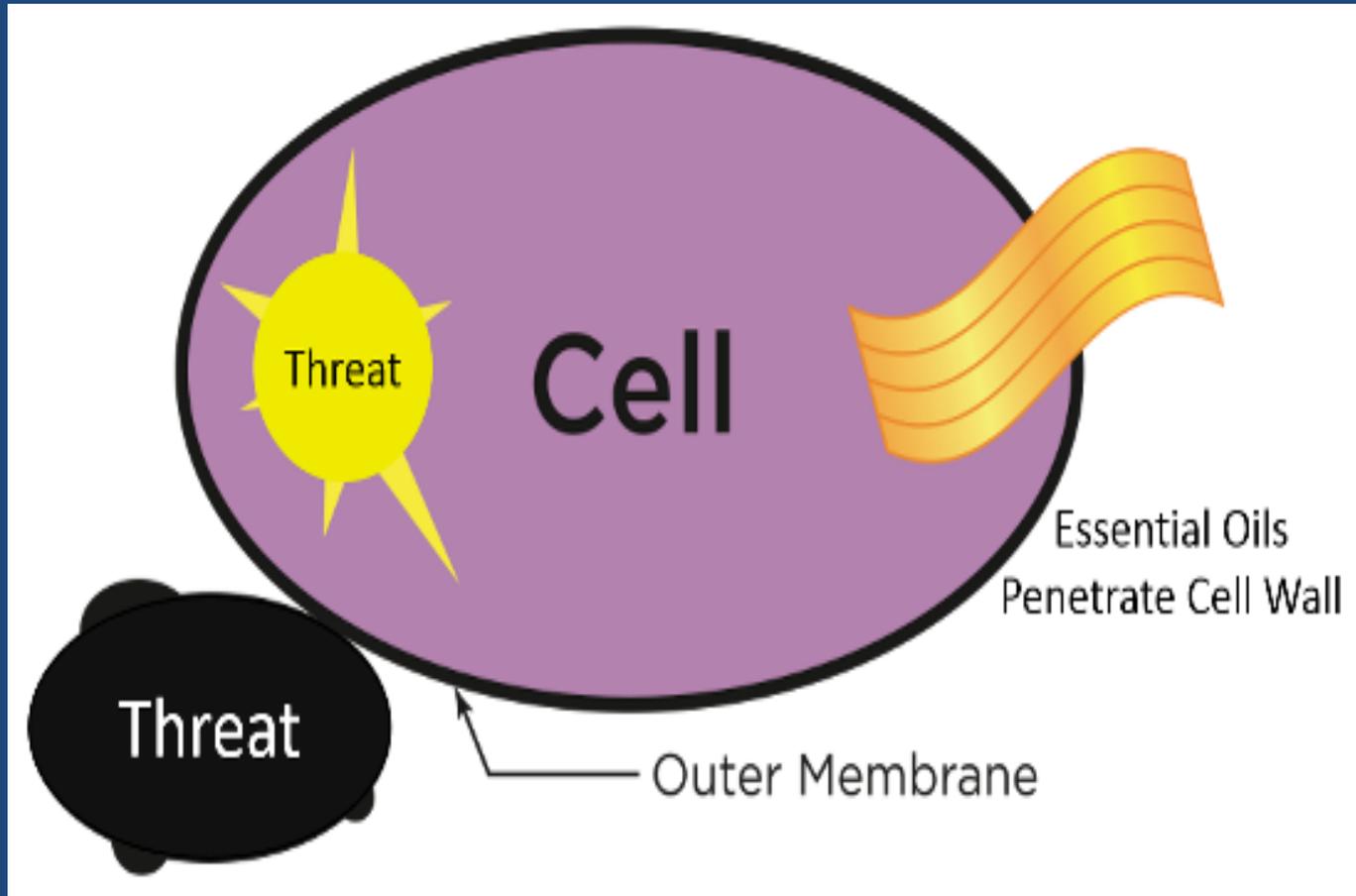
# Effects of GMO Foods on Gut Microbes

- In a study at Harvard School of Public Health researchers found intestinal bacteria associated with **irritable bowel disease (IBD)**. These microbes were identified over 10 years ago as types that come from genetically modified foods. Both Crohn's disease and IBD affect over 5 million people in the U.S. and are among the highest risk factors for colorectal cancer.
- It may be that GMO foods are not only a possible source of toxic microbes, but that **genetic material from other species** can escape the gut and infiltrate our body cells. The previous assumption was that DNA would be rapidly broken down by digestive enzymes. A research model using calves recently demonstrated that a certain amount of DNA survives in the intestines. It also showed that the DNA was absorbed into the general circulation through the intestinal wall. Bacteria carrying trans-species DNA can potentially be carried by bacteria into the body's cells.
- A member of the European Union Commission for Biotechnology Reevaluation reported that **three genetically modified varieties of GMO corn from Monsanto are toxic to rats** in animal studies. Gilles-Eric Séralini, co-author of a paper published in *The International Journal of Biological Sciences*, stated that “for the first time in the world, we've proven that GMO are neither sufficiently healthy nor proper to be commercialized.

# Colonization Resistance

- Prevention of colonization by pathogenic organisms by competing for essential nutrients or for epithelial attachment sites
- Production of antimicrobial compounds, volatile fatty acids, and chemically modified bile acids
- The ability of indigenous gut bacteria to create a local environment that is generally unfavorable for the growth of enteric pathogens

# Essential Oils and Phytochemicals Destroy (Reprogram) Viruses



# TB-CNS

TB-CNS is an antimicrobial compound for treating the central nervous system. It is for inflammation, dementia, depression, brain fog and potentially other symptoms. It regulates blood sugar to the brain affecting cognition and inflammation. It is traditionally used to treat parasites and a variety of gastrointestinal complaints. It is indicated for fever, brain fog and to support liver and pancreatic function. Lemon oil is effective for dissolving biofilms and penetrates the blood-brain barrier.

## TBD-CNS

Andrographis (*Andrographis paniculata*)

Black walnut (*Juglans nigra*)

Sarsaparilla (*Smilax medica*)

Neem (*Azadirachta indica*)

Lemon essential oil (*Citrus limomum*)

# TB-JNT

TB-JNT has two herbal extracts used for pain – devil's claw and corydalis. Cat's claw is also used for Lyme-related joint pain. TB-JNT simultaneously disinfects and supports liver function. Andrographis is a disinfectant herb with potent effects on various bacteria, viruses and parasites. It also has some pain relieving and anti-inflammatory properties, including joints. One of the active components of oregano oil is carvacrol, which can be very effective in treating arthritis. It is also effective against mycoplasma, which is a factor in some types of arthritis (e.g. some cases of rheumatoid). Oregano is also effective in dissolving biofilms that can accumulate in tissues causing pain.

## TB-JNT

Andrographis (*Andrographis paniculata*)

Corydalis (*Corydalis yanhusuo*)

Devil's Claw (*Harpagophytum procumbens*)

Cat's Claw (*Uncaria tomentosa*)

Oregano essential oil (*Origanum vulgare*)

# TB-NRG

TB-NRG is indicated for fatigue from chronic infection. It boosts immunity when immune resources are weak and adrenal function is low. It raises androgen levels and is an immunomodulator. It can help with pain and inflammation and support digestive function. TB-NRG is especially good for candida and for a wide range of intractable infections including Clostridia.

# TB-NRG

**Teasel root** (*Dipsacus sylvestris*)

**Noni fruit** (*Morinda citrifolia*)

**Burdock root** (*Arctium lappa*)

**Ginger root** (*Zingiber officinalis*)

**Cinnamon bark** (*Cinnamomum cassia*)

**Savory essential oil** (*Satureia montana*)

Michel Iderne Group was founded 35 years ago.

Since the beginning we have spearheaded to maintain and develop natural substances.

Our joint research with our experts at the University of Montpellier was the quest for a better galenical form to maximize the benefit of natural substances.

New research conducted with pharmaceutical products expands the phytomicrospheres process to developing medications from herbs.



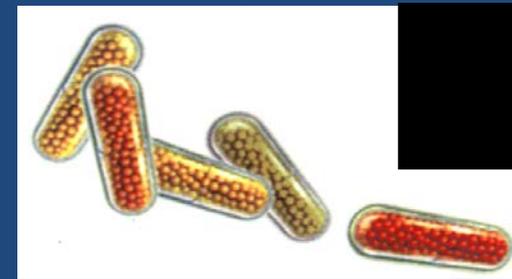
**Phytomicrospheres,**  
a breakthrough in delivery system for nutraceuticals.

*The convenience of dried forms  
and the full spectrum of fluid extracts.*

USA, Canada, China and Europe patented.

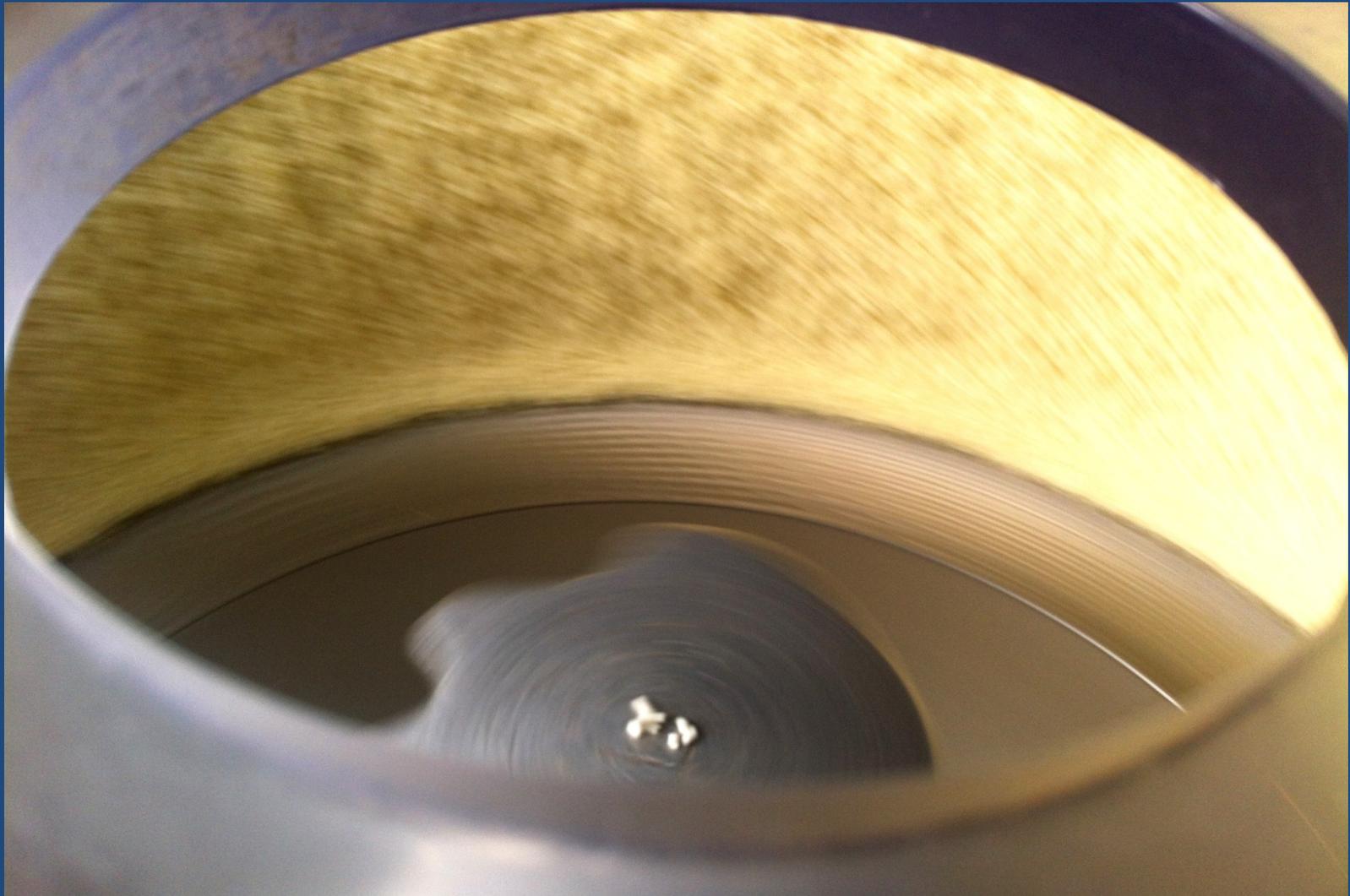


Extrusion  
Spheronisation  
Drying



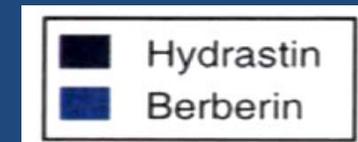
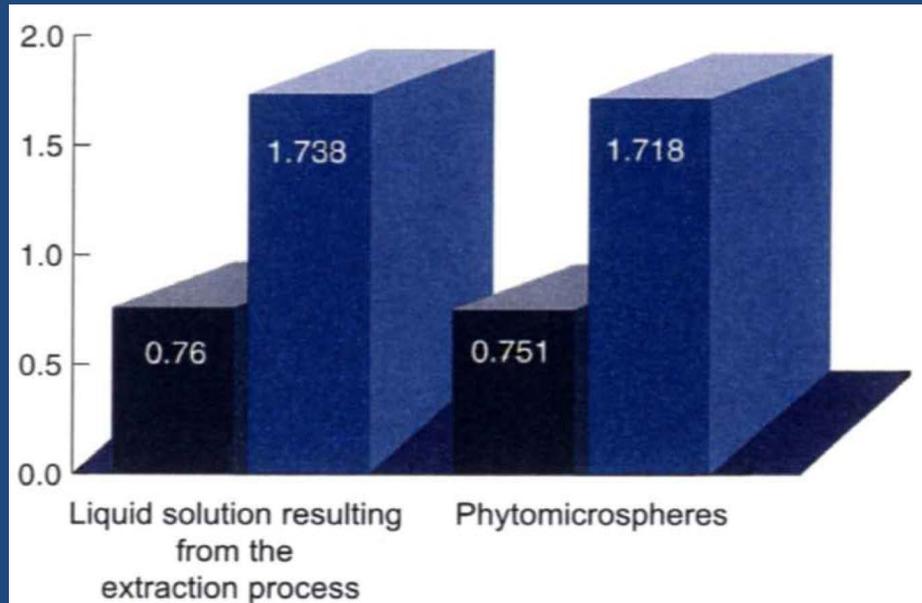


# Microspheres swirled with Special Plant Fiber

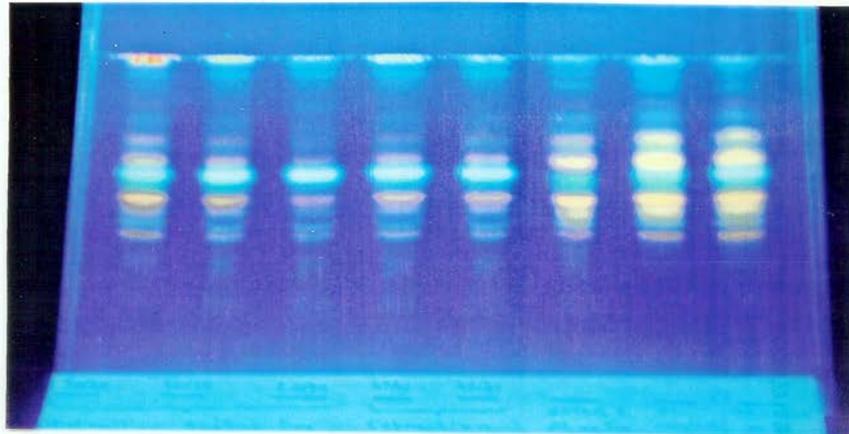




**Phytomicrospheres** capture the full spectrum of natural substances found in liquids (tinctures, fluid extracts) and simply transfer into a dry, stable and completely natural form.

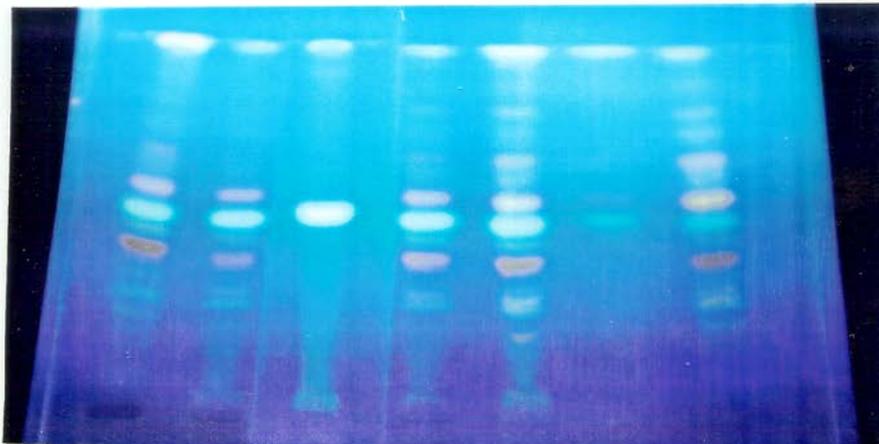


## Ginkgo (*Ginkgo biloba*)



1 2 3 4 5 6 7 8

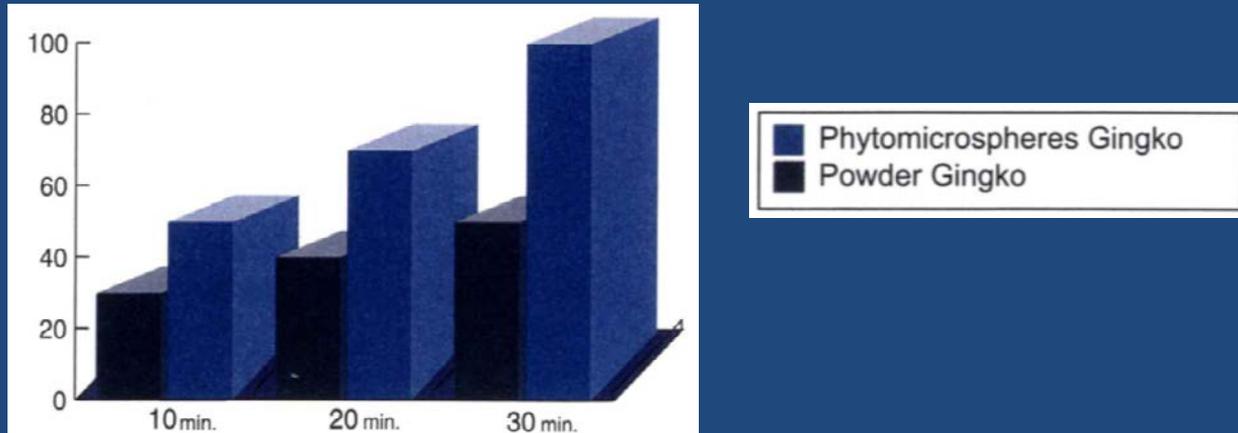
1. Aceton-Water 80/20
2. Aceton-Water 50/50
3. Aceton-Water 20/80
4. Alcool 60%
5. Alcool 40%
6. Ginkgo extract
7. Ginkgo S.A.N.
8. Sp. B1 Sol.



1 2 3 4 5 6 7

1. S.A.N. batch 1
2. S.A.N. batch 2
3. Chlorogenic acid
4. Ginkgo vegetal
5. Ginkgo extract
6. Sp. B2 Caps
7. Sp. B3 Sol.

**Fast and complete liberation.**



**Excellent yield** (1 kg fluid extract = 1 kg phytomicrospheres).

**Production rate = 1t / day**

**100% natural** (only one single excipient = cellulose).

**Sugar, alcohol, color, additive and preservative free.**

# Libération Rapide et Totale

Au niveau gastrique, **99% des principes actifs** sont libérés pendant les **30 premières minutes**.



**Test de dissolution** effectué selon les normes de la pharmacopée française sur **60** espèces botaniques, pour évaluer la lyodisponibilité des phytomicrosphères par rapport à celle de la poudre de plante.



# Advantages of Microspheres

- Ease of forming the delivery system, particularly in capsules, allowing a dosage that is suitable for therapeutic purposes with a 100% release of active components
- Lower dosage effective
- Superior preservation in the common conditions, requiring no addition of preservative
- There is no need to use additives such as added sugar, coloring agents, sweeteners etc.
- There is no residual alcohol
- No problems with bacteria
- It can be mass produced

# Two Microspheres Products Studied in Human Trials



# Human Trials of Artemisinin Microspheres for Malaria

REPUBLIQUE DE COTE D'IVOIRE  
UNION · DISCIPLINE · TRAVAIL

MINISTRE DE L'ENSEIGNEMENT SUPERIEUR  
ET DE LA RECHERCHE SCIENTIFIQUE



UFR SCIENCES PHARMACEUTIQUES ET BIOLOGIQUES

**<<EFFICACITE ET TOLERANCE DE « ARTESUNATE » 200 mg  
TRANSPORTE PAR MICROSPHERES SELON LE PROCEDE  
BREVETE CHEZ L'ADULTE DANS LE TRAITEMENT DE L'ACCES  
PALUSTRE SIMPLE A PLASMODIUM FALCIPARUM A ABIDJAN>>**

**“EFFICACY AND TOLERANCE OF "ARTESUNATE" 200 mg.  
TRANSPORTED BY MICROSPHERES ACCORDING TO THE  
PATENTED PROCESS, IN ADULTS FOR THE TREATMENT OF  
UNCOMPLICATED MALARIA FALCIPARUM IN ABIDJAN “**

**Professor Hone Moussa  
Parasitology and Mycology Service  
UFR Pharmaceutical and Biological Sciences, Abidjan**

# Synopsis of Study

## TYPE OF STUDY

This was a prospective study on the efficacy and safety of Artesunate 200 transported by microspheres produced according to the patented process.

## STUDY POPULATION

The study population consisted of 53 patients at least 15 years old with non-complicated acute malaria from *Plasmodium falciparum*.

## TREATMENT PROTOCOL

The drug was administered at 400 mg on day 1 and 200 mg a day on days 2, 3, 4 and 5. All daily doses were taken at the hospital with the assistance of a co-investigator.

# Results

The study included 53 patients. During follow-up, we observed two cases of violation of the protocol and 1 case of withdrawal of consent. No patients were lost. All 50 patients were followed until Day 28. These are the results of only these patients.

Parasite clearance time: 32.64 hours (standard deviation = 11.63).

# Conclusion

The 200 mg of Artesunate delivered by the patented microspheres process is effective for malaria and well tolerated. Indeed, this new formulation of artesunate has achieved 100% therapeutic efficacy in 14 days and 94% after 28 days.

Since we know that WHO, has acknowledged a favorable therapeutic response after 14 days in areas of high transmission such as the Ivory Coast, we can affirm that this medication has its place in the therapeutic arsenal of sub-Saharan Africa.

Acknowledgement:

The staff of the Diagnostic and Research Center on AIDS and Opportunistic Diseases (CeDReS) for the realization of laboratory tests, Dr. Serge OGA (Epidemiologist) for the statistical treatment of data.

# Artemisinin Indicated as an Initial (Pre-referral) Treatment of Severe Malaria

For adults: One or more artesunate suppositories inserted in the rectum, dose as indicated below.

Dosage for initial (pre-referral) treatment in adult patients:

Weight (kg.)	Artesunate dose	Regimen (single dose)
< 40	10 mg/kg body weight	Use appropriate number of 100-mg suppositories
40 – 59	400 mg	One 400-mg suppository
60 – 80	800 mg	Two 400-mg suppositories
> 80	1200 mg	Three 400-mg suppositories

<http://archives.who.int/eml/expcom/expcom15/applications/formulations/artesunate.pdf>



**Guinex-HTA<sup>®</sup>**  
HYMENOCARDIA ACIDA

**Antihypertenseur**

**Guinex-HTA<sup>®</sup>**  
HYMENOCARDIA ACIDA  
**Antihypertenseur**

Boîte de 60 gélules  
Microsphères

**Guinex-HTA<sup>®</sup>**  
Hymenocardia acida

Boîte de 60 gélules  
Microsphères

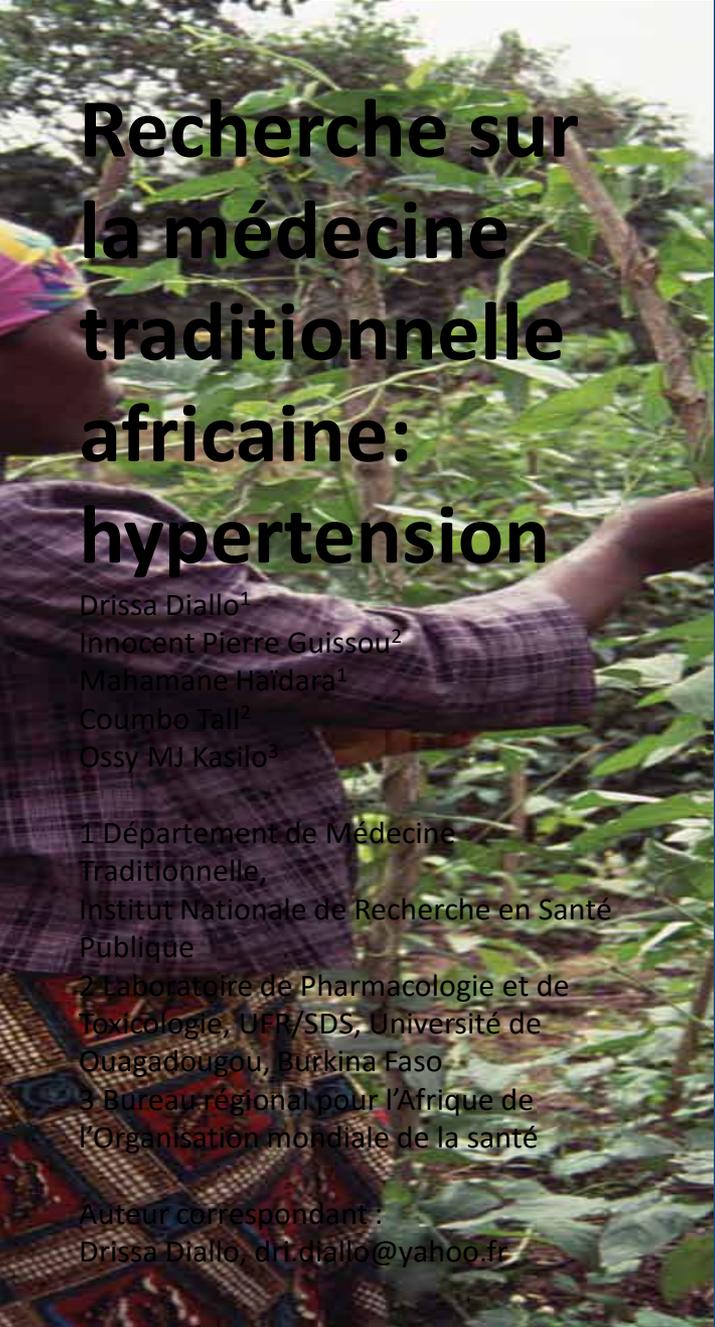
**Antihypertenseur**



Boîte de 60 gélules  
**Microsphères**

**GROUPE  
MICHEL  
IDERNE**

Groupe Michel Iderne département LPF - Parc d'Activités du Rosenmeer - F-67560 Rosheim - iderne@iderne.com

A photograph of a person wearing a plaid shirt, seen from the side, reaching out to touch a plant in a lush green field. The background is filled with various types of vegetation, including tall stalks and leafy plants. The lighting is natural, suggesting an outdoor setting.

# Recherche sur la médecine traditionnelle africaine: hypertension

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l'Organisation mondiale de la santé

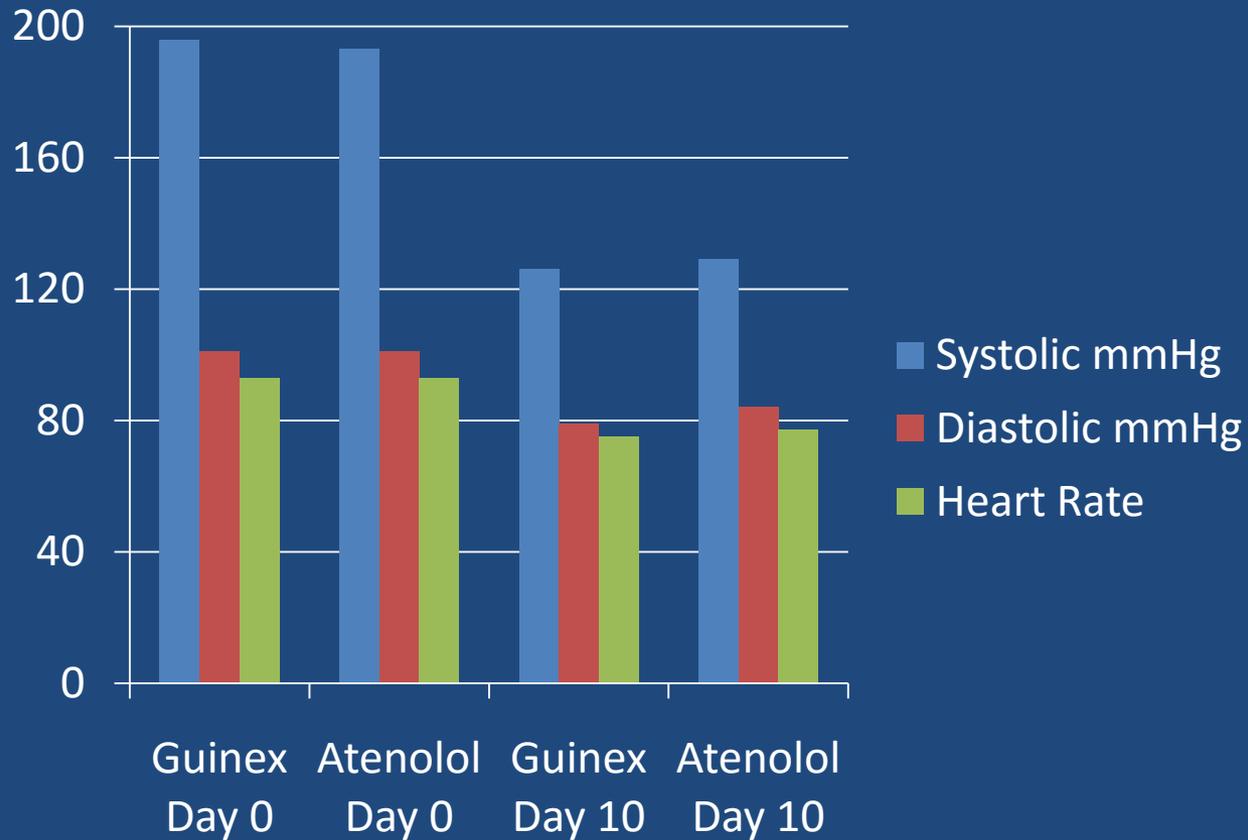
Auteur correspondant :

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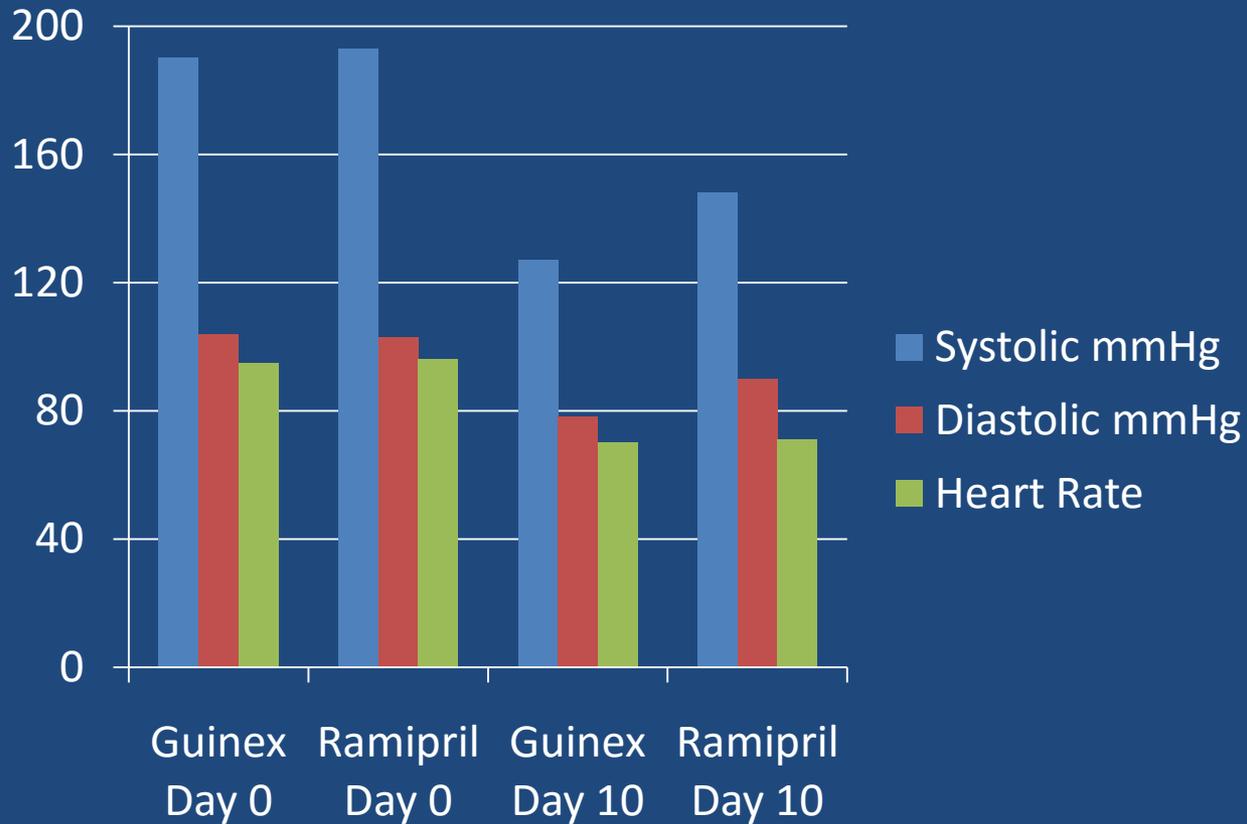
## Abstract :

The research organizations created for the development of traditional medicine, supported in this area by the WHO, are involved in activities dealing with the main illnesses such as malaria, HIV/AIDS, sickle cell anaemia, diabetes and hypertension. The treatment of hypertension with conventional medicines is too expensive, leading many patients to use traditional medicines. It is essential that these should be safe, efficient and of proven quality. Very few phytomedicines from traditional African medicine have obtained approval for commercialization, with the exception of **Guinex-HTA**, produced in Guinea.

# Guinex HTA vs. Atenolol



# Guinex HTA vs. Ramipril



# Guinex-HTA

mmHg

166

160

158

154

150

146



# Nifédipine

mmHg

165

165

155

155

145

140

135

130



# Optizen 24

Optizen 24 is for anxiety, panic disorder, depression and sleep disorders. Some doctors in France are taking patients off of SSRIs and replacing them with Optizen 24. Optizen 24 is a global neurotransmitter precursor. Griffonia is a serotonin precursor, rhodiola supports dopamine production and regulates dopamine levels, melissa is GABA-ergic and gentian is an acetylcholine reuptake inhibitor. There is no known risk of serotonin syndrome. Serotonin syndrome is almost always the result of excessive use of either tricyclic antidepressants or SSRIs and MAO inhibitors.

Martin T, Serotonin syndrome, *Annals of Emergency Medicine* 28:520-526; 1996.

# OPTIZEN 24 Microspheres

Griffonia seed (*Griffonia simplicifolia*)

Rhodiola root (*Rhodiola rosea*)

Bamboo resin (*Bambusa arundinacea*)

Gentian root (*Gentiana lutea*)

Melissa flowering tops (*Melissa officinalis*)

Zinc (Zinc sulfate)

# Releva

One of the ingredients of Releva, meadowsweet, was the original botanical source for aspirin. Devil's claw is a powerful anti-inflammatory. Releva is especially useful for joint pain and tension headaches. Several users have claimed that they have been able to stop taking ibuprofen and Naproxen by using Releva. Devil's claw (*Harpagophytum*) is used as an anti-inflammatory in rheumatic disorders esp. in diabetic patients and those with cardiac abnormalities; tendinitis, sprains, arthritis. It is an analgesic in joint disease, back pain and headache. It is a mild COX-2 inhibitor and inhibits pro-inflammatory cytokines.

## RELEVA Microspheres

Devil's claw root (*Harpagophytum procumbens*)

Meadowsweet (*Spiraea ulmaria*)

Black currant leaf (*Ribes nigrum*)

Colloidal Manganese (from Manganese sulfate)

Colloidal Copper (from Copper gluconate)

# Glyxcel

Glyxcel is for diabetes, metabolic syndrome and obesity. Ash is a blood sugar regulator patented in Europe under the name “Glucevia.” Human clinical trials in Spain found it as effective as Metformin, but it also lowered triglyceride levels, which Metformin does not do. Regulates leptin levels and may be useful for appetite control. Animal studies showed that juniper berries play a role in the regulation of blood pressure, initiation of weight loss, and prevention of cardiovascular disease. They increase insulin sensitivity and the peripheral uptake of glucose. Juniper also has the ability to potentiate insulin production by the pancreas. Zinc has insulin-like action; chromium combats insulin resistance.

## **GLYXCEL Microspheres**

Ash leaf extract (*Fraxinus excelsior*)

Juniper berry extract (*Juniperus communis*)

Colloidal Zinc (from Zinc sulfate)

Colloidal Chromium (from Chromium chloride)

# European Ash Clinical Study

Zulet M, Navas-Carretero S, Lara y Sánchez D, *et al*, A *Fraxinus excelsior* L. seeds/fruits extract benefits glucose homeostasis and adiposity related markers in elderly overweight/obese subjects: a longitudinal, randomized, crossover, double-blind, placebo-controlled nutritional intervention study, *Phytomedicine*, 2014; Sep 15;21(10):1162-9. doi: 10.1016/j.phymed.2014.04.027. Epub 2014 May 28.

# Stiruba

Stiruba is a microspheres product of simarouba (*Simarouba officinalis*). After a 200-year documented history of use for dysentery, the use simarouba for amebic dysentery was finally validated by conventional doctors in 1918. A military hospital in England demonstrated that the bark tea was an effective treatment for amebic dysentery in humans. The Merck Institute reported that simarouba was 91.8% effective against intestinal amebas in humans in a 1944 study and, in 1962, other researchers found that the seeds of simarouba showed active anti-amebic activities in humans. In the 1990s scientists again documented simarouba's ability to kill the most common dysentery-causing organism, *Entamoeba histolytica*, as well as two diarrhea-causing bacteria, *Salmonella* and *Shigella*. Doctors in France have used it for a variety of parasites including *Trichomona vaginalis*, Babesia and salmonella.



**FIN**

