

Phyto BOX





Who are we?

- » Wolfgang and Markus
- » Actively supporting Lyme Patients since 2010
- » Started PhytoBox in 2018 independently of anyone to follow our idea to support patients around the world
- » Development of natural herbal supplements to support patients with chronic illness in a host of different conditions and all stages

How a PhytoBox is developed (1/3)

- » Study research on a single target (pathogen, symptom, indication)
 - » Inhibition of Interleukins
 - » Inhibition of Cytokins
 - » Block of signalling pathways (NF- κ B, quorum sensing, etc.)
 - » In-vitro effects on antiviral/antibacterial effects



How a PhytoBox is developed (2/3)

- » Marketability test
 - » Novel Food Status
 - » Toxicity
 - » Effective dosages
 - » Consumer and practitioner safety





How a PhytoBox is developed (3/3)

- » Search for suitable raw material and raw material suppliers begins
- » Laboratory tests run on the raw materials (mycotoxins, toxicity, heavy metals, aluminum)
- » Galenics investigation (development without fillers, coagulants, flow or release agents)

Monolaurin

An organic compound derived from lauric acid.
Found in coconut oil (highest natural source), and breast milk.
A bioactive lipid with proven antimicrobial properties.

“Monolaurin is a bioactive lipid from medium-chain fatty acids that have been proven safe for consumption, **has a broad spectrum as an antibacterial**, boosts the immune system, and acts as an antiviral.”¹

*"The most effective antimicrobial compounds against all morphological forms of the two tested *Borrelia* sp. were baicalein and **monolaurin**. This might indicate that the presence of fatty acid and phenyl groups is important for comprehensive antibacterial activity.”²*



Bioactive monolaurin as an antimicrobial and its potential to improve the immune system and against COVID-19: a review

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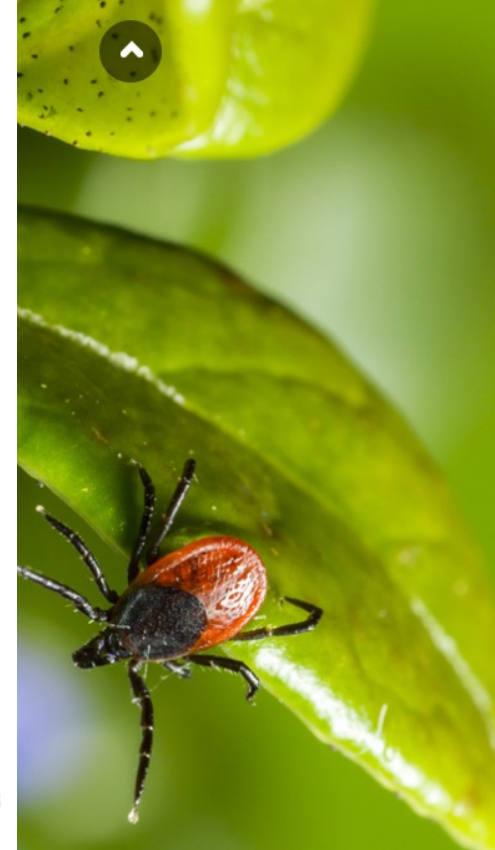
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Abstract

Monolaurin is monoacylglycerol which is a bioactive lipid since it can affect the human biological systems. This review discusses the bioactive properties of monolaurin, especially its role as an antibacterial, immune system enhancement, and its ability as an antiviral so that it has the potential to fight against various viral attacks. Monolaurin can act as an antibacterial in inhibiting the growth of several pathogenic bacteria, especially gram-positive bacteria. Monolaurin is known to be able to enhance the immune system through modulation of various immune systems, controlling pro-inflammatory cytokines, activating and attracting leukocytes to the site of infection. Monolaurin can also act as an antiviral, especially against enveloped viruses, such as Maedi-visna virus, vesicular stomatitis, herpes simplex-1, measles, HIV, cytomegalovirus, influenza, and corona. Monolaurin inhibits the virus through the mechanism of the disintegration of the viral membrane, prevents binding of the viral protein to the host-cell membrane, inhibits the process of assembling the viral RNA, and the process of virus maturation in the replication cycle. Therefore monolaurin has the potential for human consumption to boost the immune system and ward off various virus attacks, including severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which is the cause of COVID-19 which became a pandemic in the world.

Monolaurin references: selected extract (1/2)

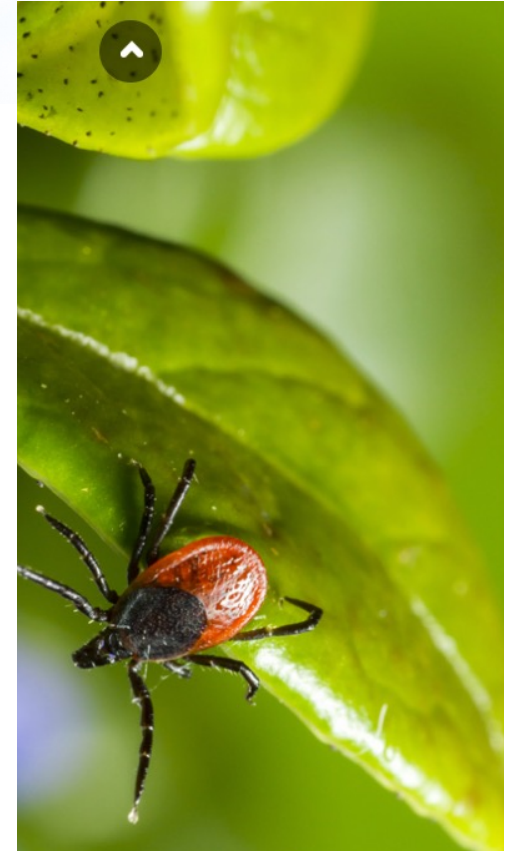


Studies on Monolaurine:

- » In vitro activity of lauric acid or myristylamine in combination with six antimicrobial agents against methicillin-resistant *Staphylococcus aureus* (MRSA)
<https://pubmed.ncbi.nlm.nih.gov/16318911/>
- » Glycerol monolaurate inhibits the effects of Gram-positive select agents on eukaryotic cells
<https://pubmed.ncbi.nlm.nih.gov/16475828/>
- » In vitro inactivation of *Chlamydia trachomatis* by fatty acids and monoglycerides
<https://pubmed.ncbi.nlm.nih.gov/9736551/>
- » Glycerol monolaurate antibacterial activity in broth and biofilm cultures
<https://pubmed.ncbi.nlm.nih.gov/22808139/>
- » Inhibition of Bacterial Spore Growth by Fatty Acids and Their Sodium Salts
<https://pubmed.ncbi.nlm.nih.gov/31084102/>
- » Novel antibacterial activity of monolaurin compared with conventional antibiotics against organisms from skin infections: an in vitro study
<https://pubmed.ncbi.nlm.nih.gov/17966176/>
- » In vitro evaluation of antibacterial activity of phytochemicals and micronutrients against *Borrelia burgdorferi* and *Borrelia garinii*
<https://pubmed.ncbi.nlm.nih.gov/26457476/>
- » Antibacterial Free Fatty Acids and Monoglycerides: Biological Activities, Experimental Testing, and Therapeutic Applications
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5979495/>
- » Investigation of the selective bactericidal effect of several decontaminating solutions on bacterial biofilms including useful, spoilage and/or pathogenic bacteria
<https://www.sciencedirect.com/science/article/abs/pii/S0740002003000510>
- » Inactivation of enveloped viruses in human bodily fluids by purified lipids
<https://pubmed.ncbi.nlm.nih.gov/8030973/>

Monolaurin references: selected extract (1/2)

- » Antibacterial study of the medium chain fatty acids and their 1-monoglycerides: individual effects and synergistic relationships
<https://pubmed.ncbi.nlm.nih.gov/19469285/>
- » In vitro effects of monolaurin compounds on enveloped rna and dna viruses
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7166675/>
- » Virucidal activities of medium- and long-chain fatty alcohols, fatty acids and monoglycerides against herpes simplex virus types 1 and 2: comparison at different pH levels
<https://pubmed.ncbi.nlm.nih.gov/15676016/>
- » Inactivation of enveloped viruses and killing of cells by fatty acids and monoglycerides
<https://pubmed.ncbi.nlm.nih.gov/3032090/>
- » Inactivation of visna virus and other enveloped viruses by free fatty acids and monoglycerides
<https://pubmed.ncbi.nlm.nih.gov/8030974/>
- » Fatty acids and derivatives as antimicrobial agents
<https://pubmed.ncbi.nlm.nih.gov/4670656/>
- » In Vitro Antimicrobial Activities of Organic Acids and Their Derivatives on Several Species of Gram-Negative and Gram-Positive Bacteria
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6832434/>
- » In vitro killing of *Candida albicans* by fatty acids and monoglycerides
<https://pubmed.ncbi.nlm.nih.gov/11600381/>
- » Bactericidal effects of fatty acids and monoglycerides on *Helicobacter pylori*
<https://pubmed.ncbi.nlm.nih.gov/12385681/>
- » Inhibitory activity of monoacylglycerols on biofilm formation
<https://pubmed.ncbi.nlm.nih.gov/27652099/>
- » In Vivo Antifungal Activity of Monolaurin against *Candida albicans* Biofilms
<https://pubmed.ncbi.nlm.nih.gov/30068882/>
- » The Clinical Use of Monolaurin as a Dietary Supplement: A Review of the Literature
<https://pubmed.ncbi.nlm.nih.gov/32952476/>
- » The 1-monolaurin inhibit growth and eradicate the biofilm formed by clinical isolates of *Staphylococcus epidermidis*
<https://pubmed.ncbi.nlm.nih.gov/31890012/>
- » Bactericidal effect of glycerol monolaurate complex disinfectants on *Salmonella* of chicken
<https://pubmed.ncbi.nlm.nih.gov/33294434/>



PhytoBox 1: Baicalein

A phenolic flavonoid compound derived mainly from the root of *Scutellaria baicalensis*

As highlighted by Professor Gilbert previously, the Feng et al study showed that *Scutellaria baicalensis* was one of several herbs that have stronger activity than doxycycline and cefuroxime¹



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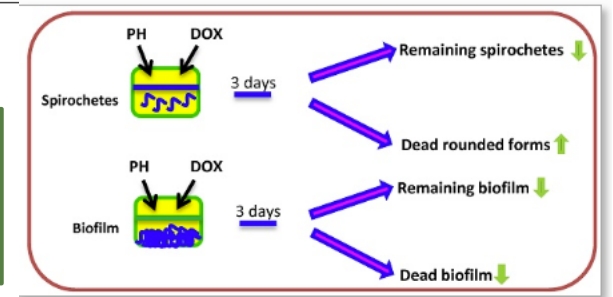
“... only baicalein and monolaurin applied at the same concentrations were effective in reducing biofilm formed by *Borrelia garinii* by approximately 40–60%”²

Review article

Baicalin, a natural antimicrobial and anti-biofilm agent

Mahdi Asghari Ozma^{a, b}, Ehsaneh Khodadadi^b, Farzaneh Pakdel^c, Fadhil S. Kamounah^d, Mehdi Yousefi^e, Bahman Yousefi^c, Mohammad Asgharzadeh^f, Khudaverdi Ganbari^g, Hossein Samadi Kafil^b  

“... combination of doxycycline with flavones such as baicalein and luteolin exhibited additive effects against all morphological forms of studied *Borrelia sp.*”³



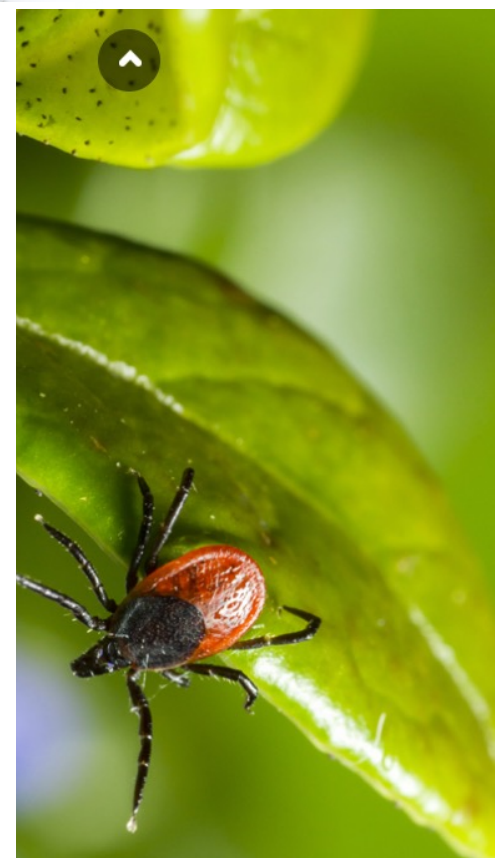
Sources: 1. Feng J et al. Evaluation of Natural and Botanical Medicines for Activity Against Growing and Non-growing Forms of *B. burgdorferi*. Front Med (Lausanne). 2020 Feb 21;7:6; 2. Goc A, Rath M. The anti-borreliae efficacy of phytochemicals and micronutrients: an update. Ther Adv Infect Dis. 2016 Jun;3(3-4):75-82; 3. Goc A, Niedzwiecki A, Rath M. Cooperation of Doxycycline with Phytochemicals and Micronutrients Against Active and Persistent Forms of *Borrelia sp.* Int J Biol Sci. 2016 Jul 22;12(9):1093-103.

Baicalein references: selected extract



Studies on Baikal skullcap (*Scutellaria baicalensis*):

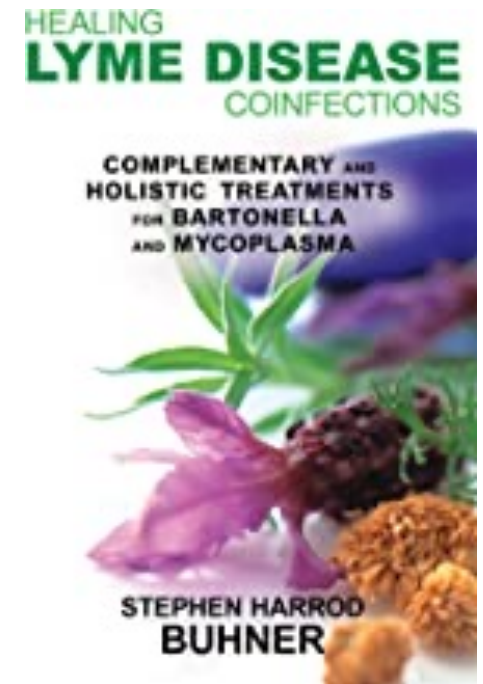
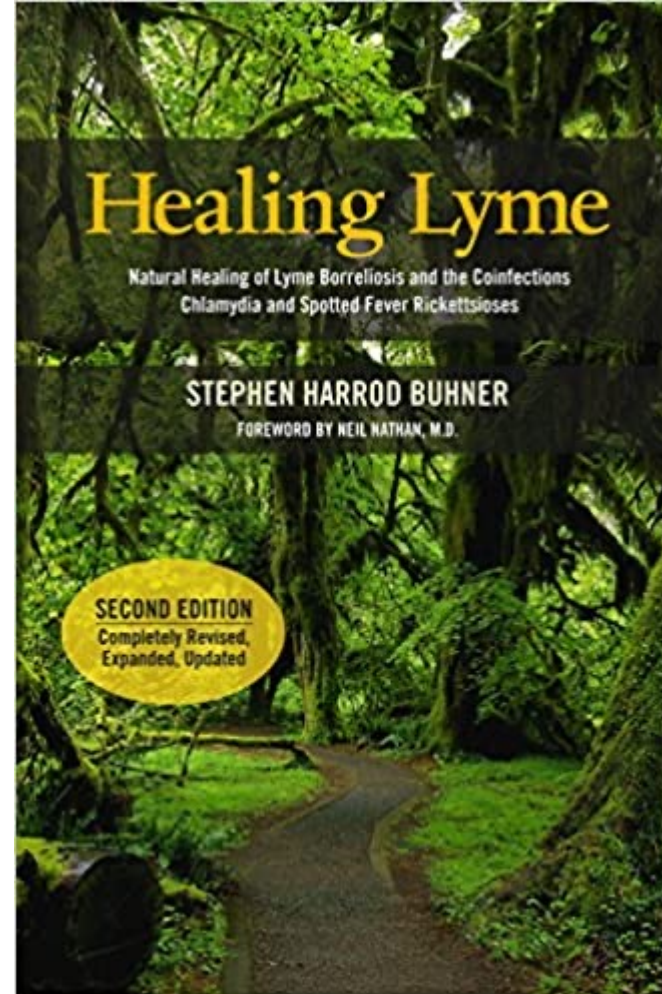
- » *Scutellaria baicalensis* Inhibits Coxsackievirus B3-Induced Myocarditis Via AKT and p38 Pathways
<https://pubmed.ncbi.nlm.nih.gov/31370111/>
- » Antiviral Activity of Oroxylin A against Coxsackievirus B3 Alleviates Virus-Induced Acute Pancreatic Damage in Mice
<https://pubmed.ncbi.nlm.nih.gov/27195463/>
- » Potential therapeutic and pharmacological effects of Wogonin: an updated review
<https://pubmed.ncbi.nlm.nih.gov/33165817/>
- » Baicalin ameliorates *Mycoplasma gallisepticum*-induced lung inflammation in chicken by inhibiting TLR6-mediated NF- κ B signalling
<https://pubmed.ncbi.nlm.nih.gov/33252265/>
- » Effect of Baicalin on Bacterial Secondary Infection and Inflammation Caused by H9N2 AIV Infection in Chickens
<https://pubmed.ncbi.nlm.nih.gov/33294434/>
- » Baicalin Liposome Alleviates Lipopolysaccharide-Induced Acute Lung Injury in Mice via Inhibiting TLR4/JNK/ERK/NF- κ B Pathway
<https://pubmed.ncbi.nlm.nih.gov/33223957/>
- » Neuroprotective Effects of Baicalein, Wogonin, and Oroxylin A on Amyloid Beta-Induced Toxicity via NF- κ B/MAPK Pathway Modulation
<https://pubmed.ncbi.nlm.nih.gov/33147823/>
- » *Scutellaria baicalensis* Georgi. (Lamiaceae): a review of its traditional uses, botany, phytochemistry, pharmacology and toxicology
<https://pubmed.ncbi.nlm.nih.gov/33294434/>
- » The anti-rotavirus effect of baicalin via the gluconeogenesis-related p-JNK-PDK1-AKT-SIK2 signaling pathway
<https://pubmed.ncbi.nlm.nih.gov/33567320/>



PhytoBox 2: Andrographis, Cat's Claw, Resveratrol and Grapefruit seed extract

- Andrographis paniculata
- Chinese Cat's Claw standardised to contain 80% ginsenosides
- Japanese knotweed - a rich source of resveratrol
- Grapefruit seed extract, well known as a "cyst buster"

Stephen Buhner's research found that Andrographis is perhaps the best primary herb to address Lyme Disease. It is antispirochetal, antibacterial, anti-inflammatory, an immune stimulant, and much more. His research also showed that Resveratrol and Cat's Claw are among the best herbs for neuroborreliosis.





PhytoBox 2 references: selected extracts

» Support of the immune system for neuroborreliosis and neuropathic disorders

Studies on *Andrographis paniculata*:

- » Andrographolide, an Anti-Inflammatory Multitarget Drug: All Roads Lead to Cellular Metabolism
<https://pubmed.ncbi.nlm.nih.gov/33374961/>
- » *Andrographis paniculata* and Its Bioactive Diterpenoids Against Inflammation and Oxidative Stress in Keratinocytes
<https://pubmed.ncbi.nlm.nih.gov/32560449/>
- » Polyphenolic-rich extracts of *Andrographis paniculata* mitigate hyperglycemia via attenuating β -cell dysfunction, pro-inflammatory cytokines and oxidative stress in alloxan-induced diabetic Wistar albino rat
<https://pubmed.ncbi.nlm.nih.gov/33553038/>
- » *Andrographis paniculata* (Burm.f.) Nees and its major constituent andrographolide as potential antiviral agents
<https://pubmed.ncbi.nlm.nih.gov/33610706/>
- » Effect of *Andrographis paniculata* leaves extract on neurobehavioral and biochemical indices in scopolamine-induced amnesic rats
<https://pubmed.ncbi.nlm.nih.gov/32441354/>

Studies on grapefruit - *Citrus paradisi*:

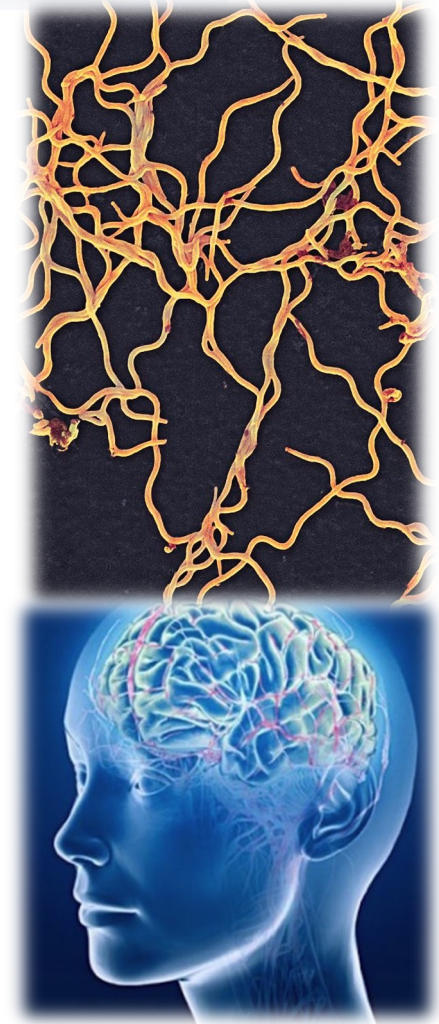
- » NQO1 mediates the anti-inflammatory effects of nootkatone in lipopolysaccharide-induced neuroinflammation by modulating the AMPK signaling pathway
<https://pubmed.ncbi.nlm.nih.gov/33460769/>
- » Potentiating and synergistic effect of grapefruit juice on the antioxidant and anti-inflammatory activity of aripiprazole against hydrogen peroxide induced oxidative stress in mice
<https://pubmed.ncbi.nlm.nih.gov/29566693/>

Studies on Resveratrol:

- » Nanoparticles of resveratrol attenuates oxidative stress and inflammation after ischemic stroke in rats
<https://pubmed.ncbi.nlm.nih.gov/33676175/>
- » Pterostilbene Improves Stress-Related Behaviors and Partially Reverses Underlying Neuroinflammatory and Hormonal Changes in Stress-Challenged Mice
<https://pubmed.ncbi.nlm.nih.gov/33739881/>

Studies on *Uncaria rhynchophylla*:

- » Isorhynchophylline Ameliorates Cerebral Ischemia/Reperfusion Injury by Inhibiting CX3CR1-Mediated Microglial Activation and Neuroinflammation
<https://pubmed.ncbi.nlm.nih.gov/33643044/>
- » Protection by rhynchophylline against MPTP/MPP⁺-induced neurotoxicity via regulating PI3K/Akt pathway
<https://pubmed.ncbi.nlm.nih.gov/33188898/>
- » Rhynchophylline attenuates migraine in trigeminal nucleus caudalis in nitroglycerin-induced rat model by inhibiting MAPK/NF- κ B signaling
<https://pubmed.ncbi.nlm.nih.gov/31420791/>



PhytoBox 3: Phytonutrients with action against the pleomorphic form of *Borrelia*, the “round body” or cyst form

Chlorella pyrenoidosa, Stinging Nettle extract, Bilberry extract, Cranberry extract, Lingonberry fruit powder, Artichoke extract, Sage leaf extract, Wild garlic, *Cistus incanus*



Microbes and Infection 18 (2016) 484–495



www.elsevier.com/locate/micinf

Original article

Pleomorphic forms of *Borrelia burgdorferi* induce distinct immune responses

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Abstract

Borrelia burgdorferi is the causative agent of tick-borne Lyme disease. As a response to environmental stress *B. burgdorferi* can change its morphology to a round body form. The role of *B. burgdorferi* pleomorphic forms in Lyme disease pathogenesis has long been debated and unclear. Here, we demonstrated that round bodies were processed differently in differentiated macrophages, consequently inducing distinct immune responses compared to spirochetes *in vitro*. Colocalization analysis indicated that the F-actin participates in internalization of both forms. However, round bodies end up less in macrophage lysosomes than spirochetes suggesting that there are differences in processing of these forms in phagocytic cells. Furthermore, round bodies stimulated distinct cytokine and chemokine production in these cells. We confirmed that spirochetes and round bodies present different protein profiles and antigenicity. In a Western blot analysis Lyme disease patients had more intense responses to round bodies when compared to spirochetes. These results suggest that round bodies have a role in Lyme disease pathogenesis.

PhytoBox 3 references: selected extracts (1/2)



» Supports the immune system in detoxification and breakdown of pleomorphic forms

Studies on *Chlorella pyrenoides*:

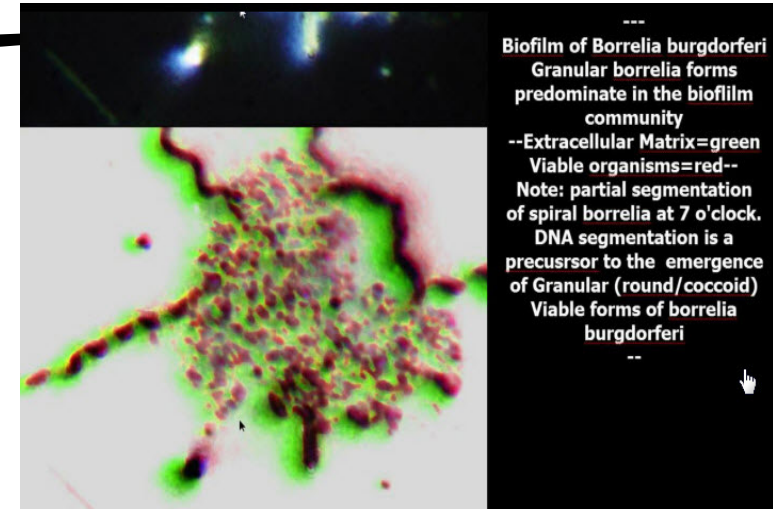
- » Evaluation of antioxidant and anticancer activity of crude extract and different fractions of *Chlorella vulgaris* axenic culture grown under various concentrations of copper ions
<https://pubmed.ncbi.nlm.nih.gov/33546663/>
- » Effect of *Chlorella vulgaris* on Liver Function Biomarkers: a Systematic Review and Meta-Analysis
<https://pubmed.ncbi.nlm.nih.gov/33564655/>
- » Evaluation of the simultaneous effect of *Chlorella vulgaris* supplementation and high intensity interval training on resting levels of oxidative stress markers and aerobic fitness in overweight healthy men
https://www.researchgate.net/publication/337952135_Evaluation_of_the_simultaneous_effect_of_Chlorella_vulgaris_supplementation_and_high_intensity_interval_training_on_resting_levels_of_oxidative_stress_markers_and_aerobic_fitness_in_overweight_healthy
- » Physicochemical characterization and antioxidant effects of green microalga *Chlorella pyrenoidosa* polysaccharide by regulation of microRNAs and gut microbiota in *Caenorhabditis elegans*
<https://pubmed.ncbi.nlm.nih.gov/33301848/>

Studies on Stinging Nettle - *Urtica dioica*:

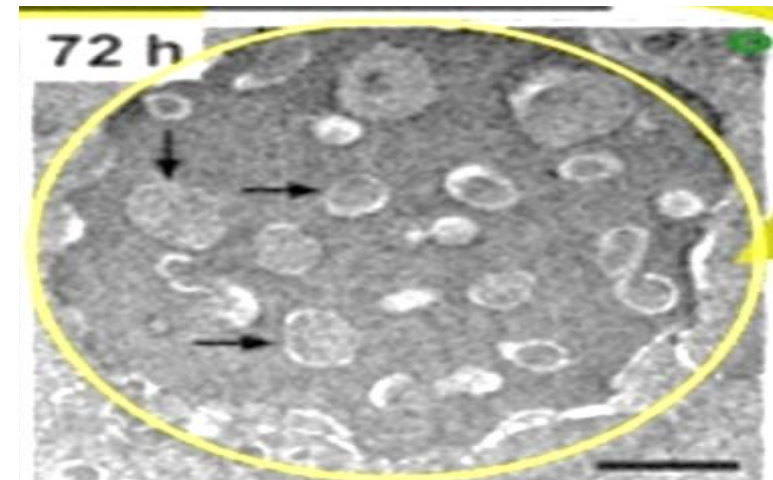
- » Metagenomic insights into the effects of *Urtica dioica* vegetable on the gut microbiota of C57BL/6J obese mice, particularly the composition of Clostridia
<https://pubmed.ncbi.nlm.nih.gov/33545322/>
- » Ameliorative effect of cotreatment with the methanolic leaf extract of *Urtica dioica* on acute kidney injury induced by gentamicin in rats
<https://pubmed.ncbi.nlm.nih.gov/32523882/>
- » *Urtica Dioica* Root Extract on Clinical and Biochemical Parameters in Patients with Benign Prostatic Hyperplasia, Randomized Controlled Trial
<https://pubmed.ncbi.nlm.nih.gov/32981268/>
- » Screening of pharmacological uses of *Urtica dioica* and others benefits
<https://pubmed.ncbi.nlm.nih.gov/31163183/>

Studies on blueberries - *Vaccinium myrtillus*:

- » Whole Blueberry and Isolated Polyphenol-Rich Fractions Modulate Specific Gut Microbes in an In Vitro Colon Model and in a Pilot Study in Human Consumers
<https://pubmed.ncbi.nlm.nih.gov/32932733/>
- » Bilberry anthocyanin extracts enhance anti-PD-L1 efficiency by modulating gut microbiota
<https://pubmed.ncbi.nlm.nih.gov/32211663/>



Biofilm of *Borrelia burgdorferi*
Granular borrelia forms predominate in the biofilm community
--Extracellular Matrix=green
Viable organisms=red--
Note: partial segmentation of spiral borrelia at 7 o'clock.
DNA segmentation is a precursor to the emergence of Granular (round/cocoid) Viable forms of borrelia burgdorferi
--



PhytoBox 3 references: selected extracts (2/2)

» Supports the immune system in detoxification and breakdown of pleomorphic forms



- » Stability and Antglycoxidant Potential of Bilberry Anthocyanins in Simulated Gastrointestinal Tract Model
<https://pubmed.ncbi.nlm.nih.gov/33228062/>
- » Blueberry Prevents the Bladder Dysfunction in Bladder Outlet Obstruction Rats by Attenuating Oxidative Stress and Suppressing Bladder Remodeling
<https://pubmed.ncbi.nlm.nih.gov/32369959/>

Studies on Cranberry - *Vaccinium macrocarpon*:

- » Cranberry Extract for Symptoms of Acute, Uncomplicated Urinary Tract Infection: A Systematic Review
<https://pubmed.ncbi.nlm.nih.gov/33375566/>
- » Cranberry Powder Attenuates Benign Prostatic Hyperplasia in Rats
<https://pubmed.ncbi.nlm.nih.gov/33136465/>
- » Efficacy of Daily Intake of Dried Cranberry 500 mg in Women with Overactive Bladder: A Randomized, Double-Blind, Placebo Controlled Study
<https://pubmed.ncbi.nlm.nih.gov/32945735/>

Studies on Lingonberry - *Vaccinium vitis idaea*:

- » Supplementing diet with Manitoba Lingonberry juice reduces kidney ischemia-reperfusion injury
<https://pubmed.ncbi.nlm.nih.gov/28074603/>
- » Phenolic compounds and antioxidant activity of lingonberry (*Vaccinium vitis-idaea* L.) leaf, stem and fruit at different harvest periods
<https://pubmed.ncbi.nlm.nih.gov/29478554/>

Studies on Artichoke - *Cynara scolymus*:

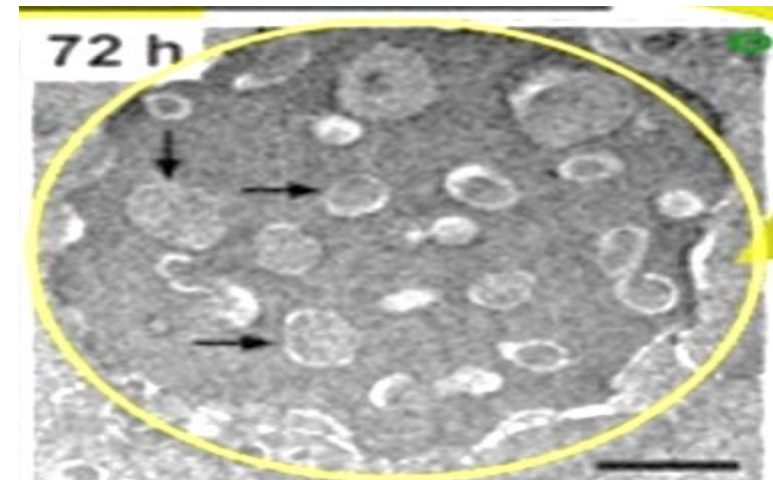
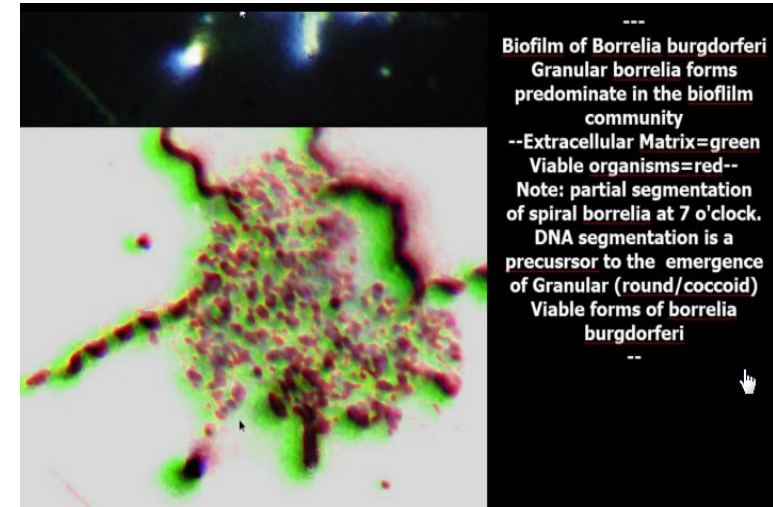
- » Bioaccessibility of Tudela artichoke (*Cynara scolymus* cv. Blanca de Tudela) (poly)phenols: the effects of heat treatment, simulated gastrointestinal digestion and human colonic microbiota
<https://pubmed.ncbi.nlm.nih.gov/33537693/>
- » Study on literature of artichoke and properties of traditional Chinese medicine
<https://pubmed.ncbi.nlm.nih.gov/32726065/>
- » Preventive effect of Artichoke (*Cynara scolymus* L.) in kidney dysfunction against high fat-diet induced obesity in rats
<https://pubmed.ncbi.nlm.nih.gov/31855072/>
- » Effect of fosfomicin, *Cynara scolymus* extract, deoxynivalenol and their combinations on intestinal health of weaned piglets
<https://pubmed.ncbi.nlm.nih.gov/31890916/>
- » Intestinal anti-inflammatory effects of artichoke pectin and modified pectin fractions in the dextran sulfate sodium model of mice colitis. Artificial neural network modelling of inflammatory markers
<https://pubmed.ncbi.nlm.nih.gov/31781703/>

Studies on Sage leaf - *Salvia officinalis*:

- » Anti-oxidant and hepatoprotective effects of *Salvia officinalis* essential oil against vanadium-induced oxidative stress and histological changes in the rat liver
<https://pubmed.ncbi.nlm.nih.gov/33106906/>
- » The effect of common sage extracts on the intestinal microbiota in experimental infectious colitis
<https://pubmed.ncbi.nlm.nih.gov/32535583/>
- » Current State of the Art on the Antioxidant Activity of Sage (*Salvia* spp.) and Its Bioactive Components
<https://pubmed.ncbi.nlm.nih.gov/31975363/>
- » The protective effects of *Salvia officinalis* essential oil compared to simvastatin against hyperlipidemia, liver, and kidney injuries in mice submitted to a high-fat diet
<https://pubmed.ncbi.nlm.nih.gov/32010989/>

Studies on Wild garlic herb - *Allium ursinum*

- » *Allium ursinum* and *Allium oshaninii* against *Klebsiella pneumoniae* and *Candida albicans* Mono- and Polymicrobial Biofilms in In Vitro Static and Dynamic Models
<https://pubmed.ncbi.nlm.nih.gov/32120894/>
- » Study on the antioxidant and antimicrobial activities of *Allium ursinum* L. pressurised-liquid extract
<https://pubmed.ncbi.nlm.nih.gov/24895887/>



PhytoBox 7: Phytonutrients with anti-inflammatory action

» Support of the immune system in Cytokine Storms



Studies on Astaxanthin:

» Cytokine storm relief

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3579738

Studies on Licorice root:

» Reduction chemokine production

<https://www.sciencedirect.com/science/article/pii/S1567576904002498>

» Inhibition TNF alpha, MME, PGE

https://pubmed.ncbi.nlm.nih.gov/27650551/?from_single_result=27650551%5Bpmid%5D&expanded_search_query=27650551%5Bpmid%5D

» Inhibition IL-1 β

<http://inforesights.com/phytopharmacology/files/pp4v113.pdf>

Studies on Shiitake:

» Inhibition cytokines

https://pubmed.ncbi.nlm.nih.gov/32413619/?from_single_result=32413619%5Bpmid%5D&expanded_search_query=32413619%5Bpmid%5D

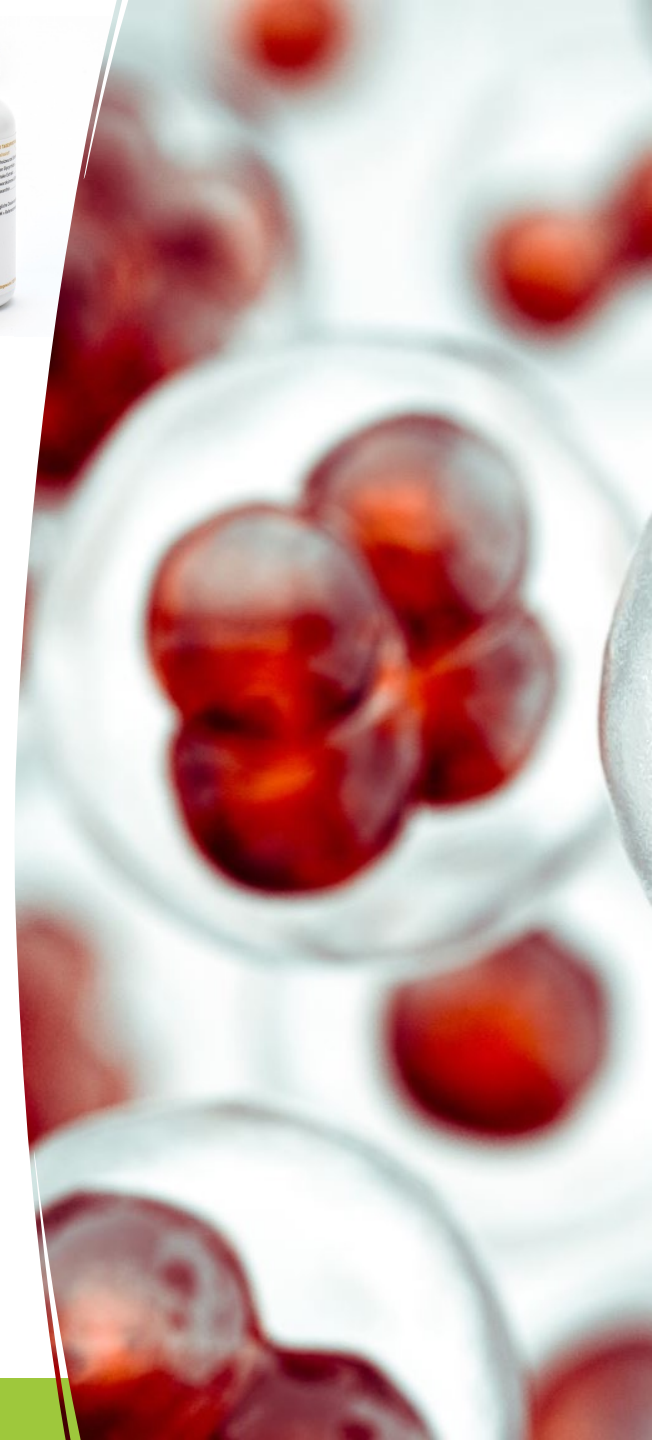
Studies on Black cumin:

» Modulating NF- κ B expression in sepsis

<https://onlinelibrary.wiley.com/doi/full/10.1002/ptr.6793>

» Immunomodulatory and anti-inflammatory effect (TNF alpha reduction)

<https://pubmed.ncbi.nlm.nih.gov/29437018/>



Usage of PhytoBox



RECOMMENDED DURATION OF INTAKE:
12-16 weeks, followed by a new laboratory test



INDICATION:
Borrelia (Lyme Disease) OPTION 1

BACTERIA

DIETARY SUPPLEMENT	DOSAGE	INTAKE	COMMENTS
Pathogens			
Baikal skullcap, Monolaurine PhytoBox 1	2 cps 2 cps	Morning with breakfast Evening with a meal	
Andrographis Paniculata, Uncaria, Japanese knotweed, grapefruit seed PhytoBox 2	1 (+1) cps 1 (+1) cps	Morning with breakfast Evening with a meal	Higher dosage for severe neurological symptoms
Chlorella, Nettle, Blueberry, Cranberry, Arctchoke, Sage leaves, Wild Garlic PhytoBox 3	2 cps 2 cps	Morning with breakfast Evening with a meal	
NAC, Berberine, Serrapeptase, Lipase BioDisrupt	1 cps 1 cps	Morning Evening	1 hour before a meal or 2 hours after
Support of the cellular immune response - Specially focused on Borrelia			
Transfer Factors Transfer Factor L+	2 cps	30 min before a meal or 2 hours after	1 capsule per day in the first week, 2 capsules per day from the second week onwards
Natural Killer Cell Function			
Ginseng root, vitamin C, maitake, cordyceps, spirulina, shiitake, reishi PhytoBox 10	1 cps 1 cps	Morning with breakfast Noon with a meal	
Transfer Factors Multi-Messenger	3 cps	1 hour before a meal or 2 hours after	
Oxidative Stress - Detoxification / Herxheimer reactions			
Astaxanthin, liquorice, shiitake, Baikal helmet herb, black cumin PhytoBox 7	1 (+1) cps 1 (+1) cps	Morning with breakfast Evening with a meal	
Liposomal L-Glutathione Tri-Fortify	1 teaspoon	1 hour before a meal or 2 hours after	contains Vitamin C
Inflammation / Neuroinflammation			
OPC, Curcuma, Rutin, Resveratrol PhytoBox 4	1 (+1) cps 1 (+1) cps	Morning with breakfast Evening with a meal	Higher dosage for severe physiological symptoms
Intestinal Flora			
Synbiotic, Acacia fiber, biotin, riboflavin, nicotinamide PhytoBox 5	1 cps 1 cps	Morning 30 min before breakfast or 1 hour after Evening 30 min before a meal or 1 hour after	Dosage can be increased to 4 capsules per day for severe intestinal complaints.

RECOMMENDED DURATION OF INTAKE:
12-16 weeks, followed by a new laboratory test



INDICATION:
Bartonella OPTION 2

BACTERIA

DIETARY SUPPLEMENT	DOSAGE	INTAKE	COMMENTS
Pathogens			
Indian morning star, lapacho bark, cistus, sarsaparilla root, sweet wood root, garlic, neem leaves, grapefruit, clove, beardedlichen PhytoBox 8	1 cps 1 cps 1 cps	Morning with breakfast Noon with a meal Evening with a meal	
NAC, Berberine, Serrapeptase, Lipase BioDisrupt	1 cps 1 cps	Morning Evening	1 hour before a meal or 2 hours after
Triplaris peruviana Tangarana	30 drops 30 drops	Morning in 200 ml of water Evening in 200 ml of water	30 min before a meal; Additional possible in severe pathologies
Support of the cellular immune response - Specially focused on Bartonella			
Transfer Factors Transfer Factor L+	2 cps	30 min before a meal or 2 hours after	1 capsule per day in the first week, 2 capsules per day from the second week onwards
Natural Killer Cell Function			
Ginseng root, vitamin C, maitake, cordyceps, spirulina, shiitake, reishi PhytoBox 10	1 cps 1 cps	Morning with breakfast Noon with a meal	
Transfer Factors Multi-Messenger	3 cps	1 hour before a meal or 2 hours after	
Oxidative Stress - Detoxification / Herxheimer reactions			
Chlorella, Nettle, Blueberry, Cranberry, Arctchoke, Sage leaves, Wild Garlic PhytoBox 3	2 cps 2 cps	Morning with breakfast Evening with a meal	
Liposomal L-Glutathione Tri-Fortify	1 teaspoon	1 hour before a meal or 2 hours after	contains Vitamin C
Inflammation / Neuroinflammation			
OPC, Curcuma, Rutin, Resveratrol PhytoBox 4	1 (+1) cps 1 (+1) cps	Morning with breakfast Evening with a meal	Higher dosage for severe physiological symptoms
Omega 3 Fatty Acids Omegaform 300 dha Concentrate	2 - 6 cps	Before bedtime	



Usage of PhytoBox



RECOMMENDED DURATION OF INTAKE:
8-10 weeks, followed by a new laboratory test



INDICATION:
Enteroviruses
(Coxsackie/ Echo Virus)
OPTION 1

VIRUS



INDICATION:
Herpes viruses
(HSV1 / HSV2 / EBV / VZV /
CMV / HHV6 / HHV7) OPTION 1

VIRUS

RECOMMENDED DURATION OF INTAKE:
8-10 weeks, followed by a new laboratory test
Repeat protocol if needed

DIETARY SUPPLEMENT	DOSAGE	INTAKE	COMMENTS
Pathogens			
Baikal skullcap, Monolaurine PhytoBox 1	2 cps 2 cps	Morning with breakfast Evening with a meal	
Elderflower, Rhodiola roses, Astragalus membranaceus, Barberry, Oregano, Tibetan mint, Ginkgo biloba, St. John's wort PhytoBox 11	1 cps 1 cps 1 cps	Morning with breakfast Noon with a meal Evening with a meal	
Natural Killer Cell Function			
Ginseng root, vitamin C, maitake, cordyceps, spirulina, shiitake, reishi PhytoBox 10	1 cps 1 cps	Morning with breakfast Noon with a meal	
Transfer Factors Multi-Messenger	3 cps	1 hour before a meal or 2 hours after	
Oxidative Stress - Detoxification / Herxheimer reactions			
Astaxanthin, liquorice, shiitake, Baikal helmet herb, black cumin PhytoBox 7	1 (+1) cps 1 (+1) cps	Morning with breakfast Evening with a meal	
Liposomal L-Glutathione Tri-Fortify	1 teaspoon	1 hour before a meal or 2 hours after	contains Vitamin C

DIETARY SUPPLEMENT	DOSAGE	INTAKE	COMMENTS
Pathogens			
Baikal skullcap, Monolaurine PhytoBox 1	2 cps 2 cps	Morning with breakfast Evening with a meal	
Ginger, triphala, pomegranate, thyme, zinc, propolis, balm, green tea PhytoBox 6	1 cps 1 cps 1 cps	Morning with breakfast Noon with a meal Evening with a meal	
L-lysine Lysiniform 500+	2 cps 2 cps 2 cps	Morning Noon Evening	at least 1 hour before a meal and 2 hours after; Intake for 6 weeks, then 4 weeks break
Support of the cellular immune response - Specially focused on opportunistic, viral pathogens			
Transfer Factors Messenger n° 1	2 cps	30 min before a meal or 2 hours after	1 capsule per day in the first week; 2 capsules per day from the second week onwards
Natural Killer Cell Function			
Ginseng root, vitamin C, maitake, cordyceps, spirulina, shiitake, reishi PhytoBox 10	1 cps 1 cps	Morning with breakfast Noon with a meal	
Transfer Factors Multi-Messenger	3 cps	1 hour before a meal or 2 hours after	
Oxidative Stress - Detoxification / Herxheimer reactions			
Astaxanthin, liquorice, shiitake, Baikal helmet herb, black cumin PhytoBox 7	1 (+1) cps 1 (+1) cps	Morning with breakfast Evening with a meal	
Liposomal L-Glutathione Tri-Fortify	1 teaspoon	1 hour before a meal or 2 hours after	contains Vitamin C
Optional / Symptomatic			
OPC, Curcuma, Rutin, Resveratrol PhytoBox 4	1 (+1) cps 1 (+1) cps	Morning with breakfast Evening with a meal	Higher dosage for severe physiological symptoms
NADH NADH Pur	1 cps 1 cps	Morning with breakfast Evening with a meal	
Syrbiotic, Acacia fiber, biotin, riboflavin, nicotinamide PhytoBox 5	1 cps 1 cps	Morning 30 min before breakfast or 1 hour after Evening 30 min before a meal or 1 hour after	Dosage can be increased to 4 capsules per day for severe intestinal complaints





What makes us special

- » Combine different solutions to find for every individual patient his individual way of support and treatment
- » Possible to take as stand-alone treatment or in combination with school medical as well as other alternative treatment options
- » Exact dosages through the use of a capsule based principle
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- » Pureness and Quality
- » Short transportation times of raw ingredients
- » Constant laboratory controls on mycotoxins, heavy metals and other toxic metals, such as aluminum
- » Never stop evolving

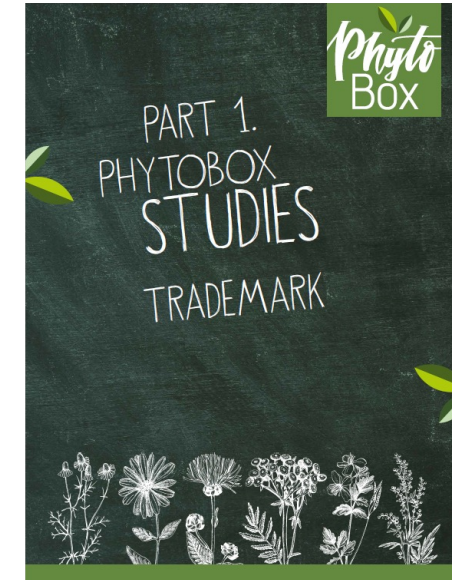
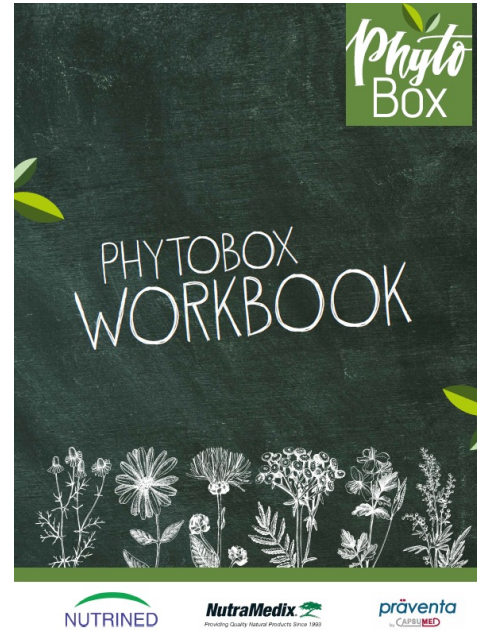




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