

WHOLE LIFE EXPO 2017

**Help for Crohn's, Colitis, Celiac, Candida --
Healing the Gut Naturally**

Hippocrates, the Greek physician who is considered the ‘father of modern medicine’ (460 – 380BC), famously stated that: “All disease begins in the gut

**Somers, Suzanne. *Tox-Sick: from toxic to not sick*.
New York, Harmony Crown, 2015, pp.97**

WHAT IS THE MICROBIOME?

Your microbiome is made up of the total community of microorganisms that live in your body, and the vast majority reside in the gut. Current research estimates that over 10 trillion bacteria reside in the gut, and like fingerprints the makeup of the microbiome is unique to each individual. Many of these organisms are harmless (known as commensals), and the majority are beneficial (known as symbionts).

***“Gut Feelings are Very Real .” UB Centre of Excellence in Generative Medicine, 7 Apr. 2017,
generativemedicine.org/portal/gut-feelings-are-very-real/.
Accessed 31 Aug. 2017.***

WHAT IS THE MICROBIOME?

A microbiome is the 'ecological community of commensal, symbiotic and pathogenic microorganisms that share our body space.

**Somers, Suzanne. *Tox-Sick: from toxic to not sick*.
New York, Harmony Crown, 2015, pp.238**



THE 'MILIEU IS EVERYTHING' (BERNARD)

“Bacteria only develop according to the milieu...A milieu unsuitable for bacteria doesn't allow specific bacteria cultures to thrive. “

The SANUM Therapy Prescription Book, 3rd Edition, Konrad Werthmann MD

WHAT DETERMINES THE MILIEU?

- Dietary Factors (Excesses and Deficiencies ex. too much protein or carbohydrates; The S.A.D Diet)
- Stress
- Toxicity (Heavy Metals, DDT, PCBs, Pesticides, Fungicides, Herbicides)
- Emotional Burden
- Environmental Factors (Toxicity vs. Harmonic Environment)
- Defence Mechanisms (ex. A Weak vs. Strong Immune System)
- Elimination Channels (Lymph organs, kidneys, respiratory organs, skin, digestive system)

WHAT IS PLEOMORPHISM?

The research of Dr. Pierre Bechamp, followed by Dr. Claude Bernard, and culminated with the work of German researcher Dr. Enderlein form an overall theory known as pleomorphism. This theory posits that under toxic conditions, otherwise harmless components living within a cell can transform and be restructured into viruses, pathogenic bacteria, mould and fungus.

Cousens, Gabriel. *Spiritual nutrition: six foundations for spiritual life and the awakening of kundalini*. Berkeley, California, North Atlantic Books, 2005, pp.112

WHAT IS PLEOMORPHISM?

In Enderlein's theory, the micro-world of bacteria are understood as symbionts (otherwise harmless and co-existing symbiotically with the other micro-organisms comprising the human microbiome) and only when the mileu changes do they develop into pathogenic forms.

**The SANUM Therapy Prescription Book, 3rd
Edition, Konrad Werthmann MD**

LEAKY GUT SYNDROME

INTESTINAL HEALTH



Healthy Function

Healthful bacteria that coat and protect the intestinal wall, along with other factors obtained from food or from natural intestinal secretions, may help inhibit unhealthful bacteria and contribute to maintaining bacterial balance and optimal intestinal health.

Lactoperoxidase:
An enzyme that may damage unhealthful bacteria.

Globulin Proteins: Proteins that may prevent unhealthful bacteria from adhering to the intestine wall.

Lactoferrin: A protein that traps iron and blocks its use by unhealthful bacteria, thus starving them.



Unhealthy Function

With healthful bacteria and other protective factors missing, unhealthful bacteria, yeast, parasites and toxins may accumulate, causing damage to the intestinal wall and producing poor intestinal health.

Yeast

Intestinal Deterioration

Toxins

Parasites

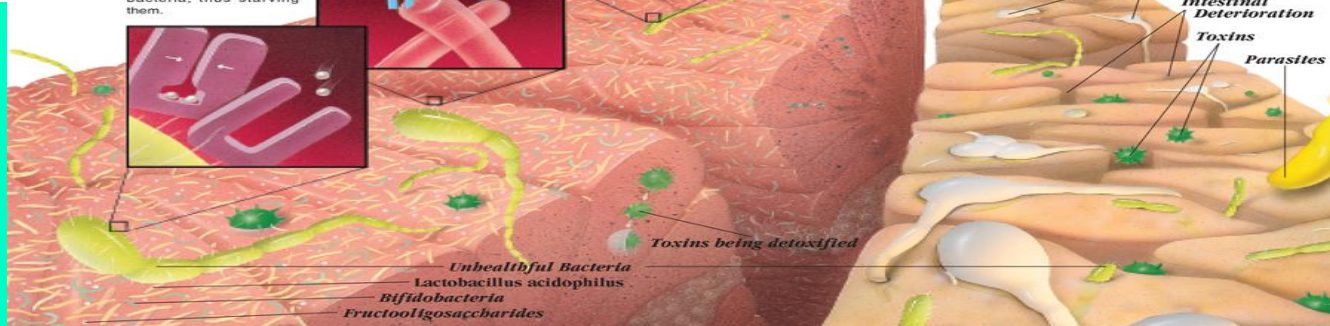
Toxins being detoxified

Unhealthful Bacteria

Lactobacillus acidophilus

Bifidobacteria

Fructooligosaccharides

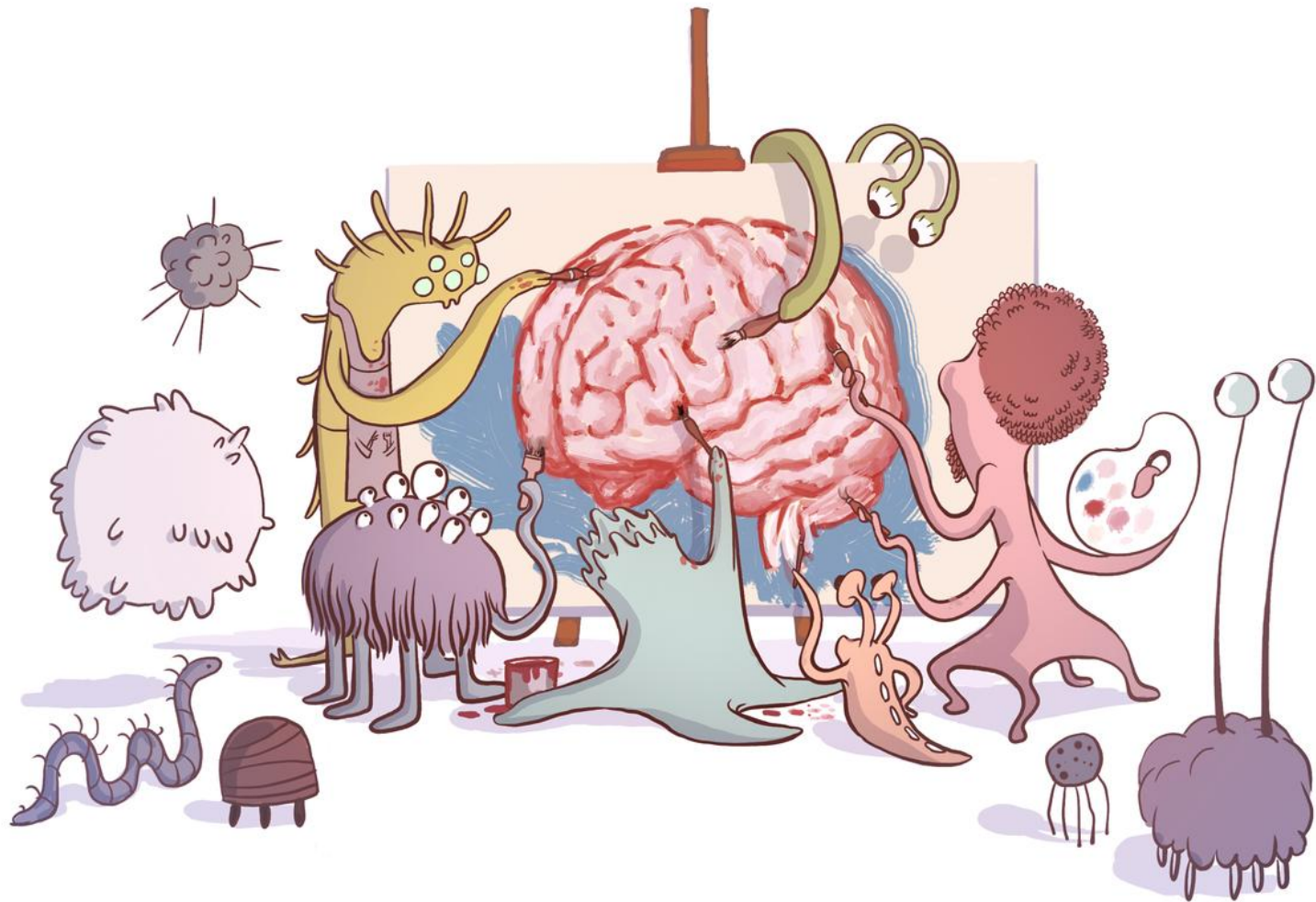


WHAT ARE THE EFFECTS OF LEAKY GUT?

- Mood Effects
- Hormone Imbalance: Toxins leaking into the bloodstream that find their way to the thyroid or hypothalamus in the brain (Central Command along with the Pituitary for all other hormones)
- Autoimmunity (Crohn's)
- Chemical and Food Sensitivities
- Environmental and Food Allergies
- Inflammatory Bowel Disease (IBD)

**Somers, Suzanne. *Tox-Sick: from toxic to not sick*.
New York, Harmony Crown, 2015, pp.182**

HOW GUT HEALTH AFFECTS MENTAL HEALTH



- **Mycotoxins**
- **Excitotoxins leaking directly into the bloodstream**
- **B12 Synthesis & Absorption (plus all the other B-Complex Vitamins and Micronutrients responsible for neurotransmitter Synthesis)**
- **Poor Absorption of Serotonin and other neurotransmitters manufactured in the gut (70%+ Serotonin manufactured in the gut)**

PROBIOTICS

PART 2

I WAS TALKING
ABOUT INTESTINAL
FLORA, BILLY!

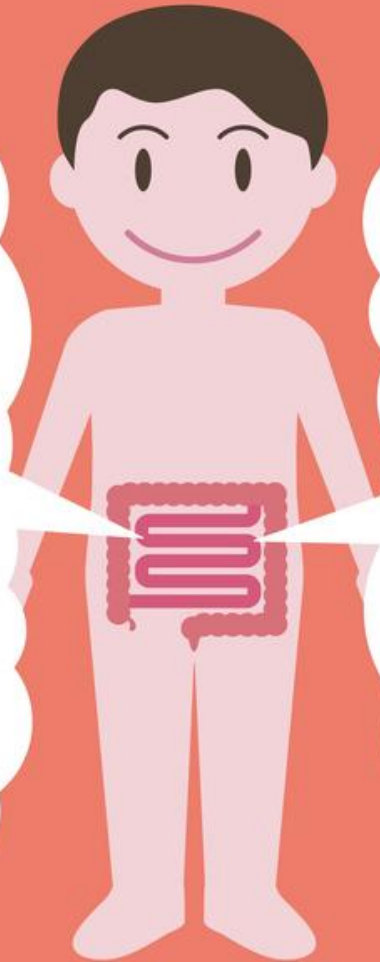
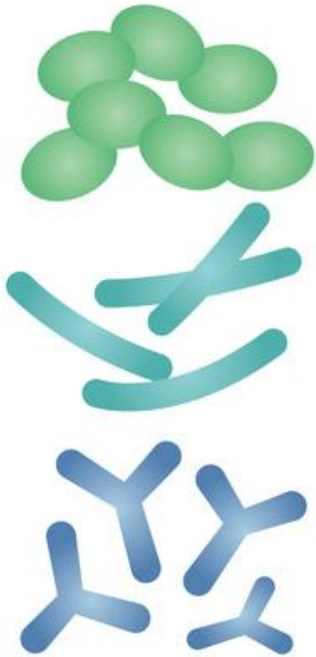
WELL *MY*
INTESTINAL FLORA
ARE LOOKING
RATHER ROSEY!



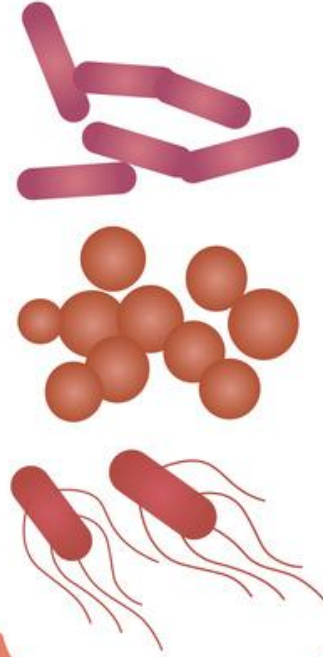
WHAT ARE THE CAUSES OF IMBALANCED GUT FLORA?

- **Antibiotics**
- **Birth Control Pill (feeds yeast in the gut)**
- **Sugar (feeds yeast in the gut)**
- **Caffeine & Alcohol**
- **Chlorinated Water**
- **Parasites, Mold, Yeast and Fungal Overgrowth**
- **Stress**
- **Low Fibre Western Diet**

Good Bacteria



Bad Bacteria



ANTIBIOTICS

“The CDC warns that 90 percent of upper respiratory infections, including children’s ear infections, are viral, and antibiotics don't treat viral infection. More than 40 percent of about 50 million prescriptions for antibiotics each year in physicians’ offices were inappropriate.”

Death by Modern Medicine, Dr. Carolyn Dean, pp.334

ANTIBIOTICS

“..And using antibiotics, when not needed, can lead to the development of deadly strains of bacteria that are resistant to drugs and cause more than 88,000 deaths due to hospital-acquired infections.”

WHAT IS THE RESULT OF OVERPRESCRIBING?

- Increased Incidents of Staph infection outbreaks in hospitals
- Increased incidents of Chronic Inflammatory Bowel Disease
- E. Coli outbreaks, MRSA Super Bug, C. Difficile Outbreaks
- Candida Yeast Overgrowth

escherichia

CONJUGATION

does pili size
matter?

16 NEW
Antibiotic
Resistances
for this summer!

special

does your host
really love you?

SEXY FLAGELLA
in only 10 days!



TOP 10
Animal Guts
to colonize!

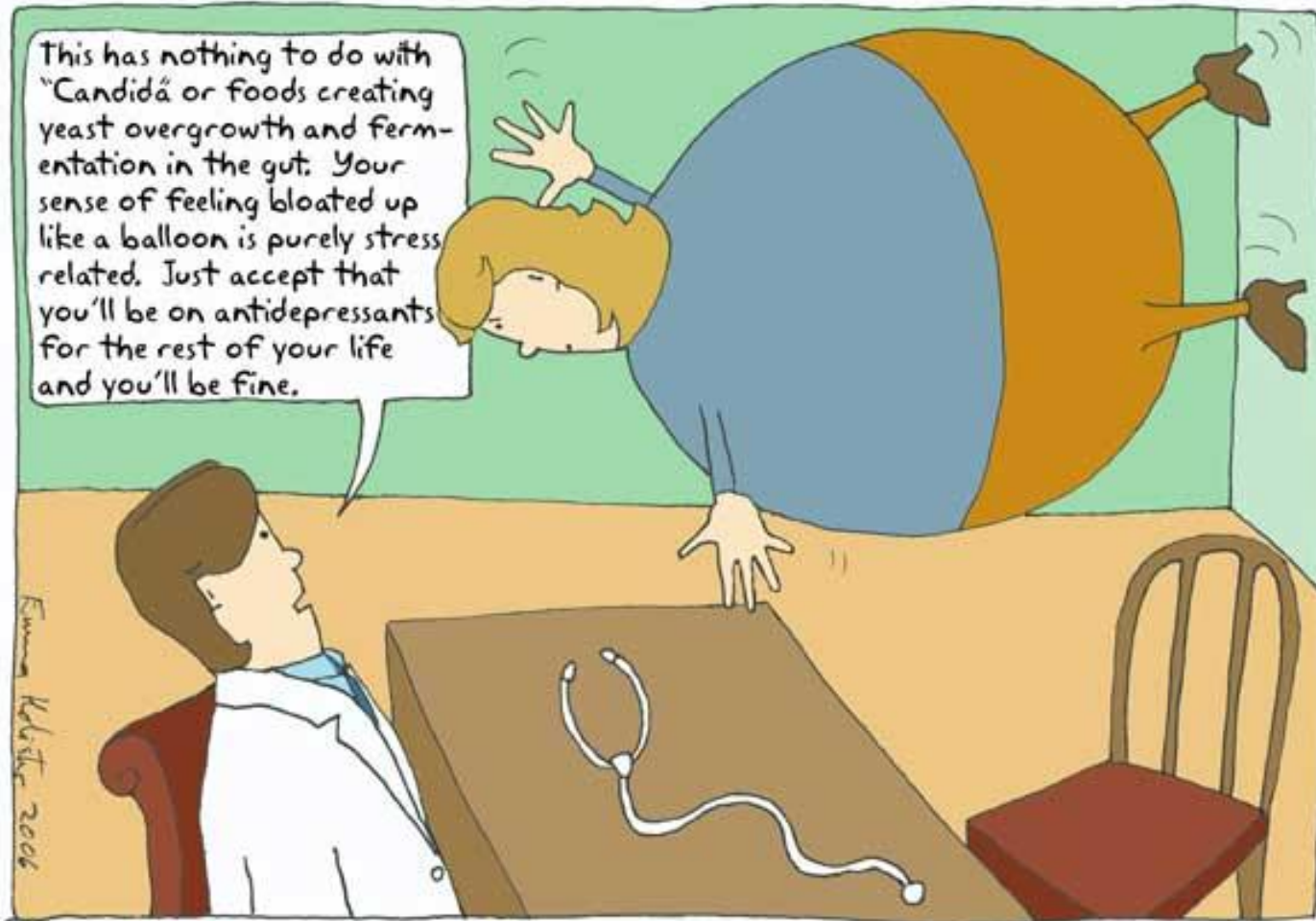
CANDIDA

The genus Candida includes around 154 species. Among these, four are most frequently isolated in human infections.

Candida albicans is the most abundant and significant species.

This has nothing to do with "Candida" or foods creating yeast overgrowth and fermentation in the gut. Your sense of feeling bloated up like a balloon is purely stress related. Just accept that you'll be on antidepressants for the rest of your life and you'll be fine.

Emma Keltie 2006

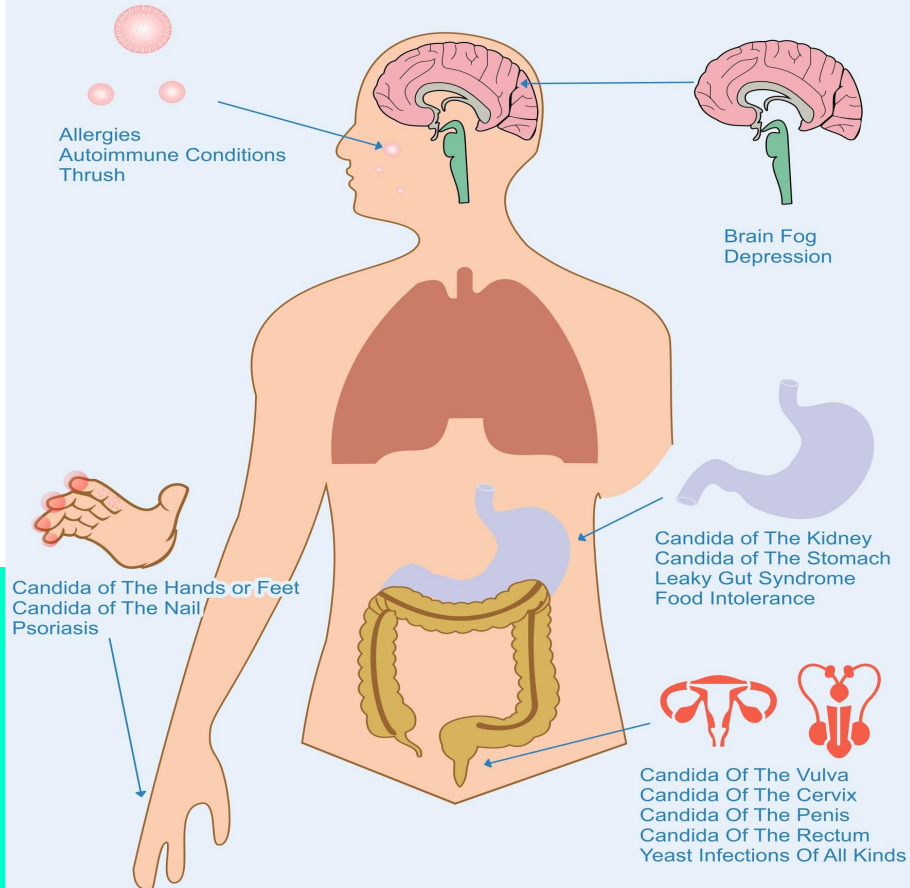


CANDIDA

“The...by-products of Candida...can have a neurotoxic effect and cause symptoms of brain fog, fatigue, etc.:

Death by Modern Medicine, Carolyn Dean, pp.250

Candida Overgrowth Symptoms



CANDIDA

“Candida overgrows and overworks the immune system, allowing viral and parasitic organisms to infect the body.”

Death by Modern Medicine, Carolyn Dean, pp.250



PROBIOTIC BASICS

- **Not all strains have the same properties**
- **Even strains within the same species can have different properties and thus different health benefits**
- **Most Probiotics are either Lactobacilli or Bifidobacteria**
- **Benefits include increased immunity, the synthesis of certain micronutrients including K2 and B12, the creation of certain short-chain fatty acids, increased bowel function & elimination**
- **Probiotics are able to inhibit, displace and compete with pathogens**

WHAT DO WE LOOK FOR IN A PROBIOTIC?

- **Strain-identified Species**
- **Broad Spectrum**
- **High Potency (60 Billion-100 Billion for intensive care or more)**
- **Ideally dairy-free, gluten-free & non-irradiated**
- **With L-Glutamine added when possible**

Danisco. “Technical Memorandum: Lactobacillus acidophilus NCFM – a probiotic with proven efficacy.”

WHAT DO WE LOOK FOR IN A PROBIOTIC?

- Strains must be able to resist acid and bile
- Strains must be proven safe (requires identification by proven molecular techniques)
- Strains that are supported by human clinical trials (such as NCFM) are ideal

Danisco. “Technical Memorandum: Lactobacillus acidophilus NCFM – a probiotic with proven efficacy.”

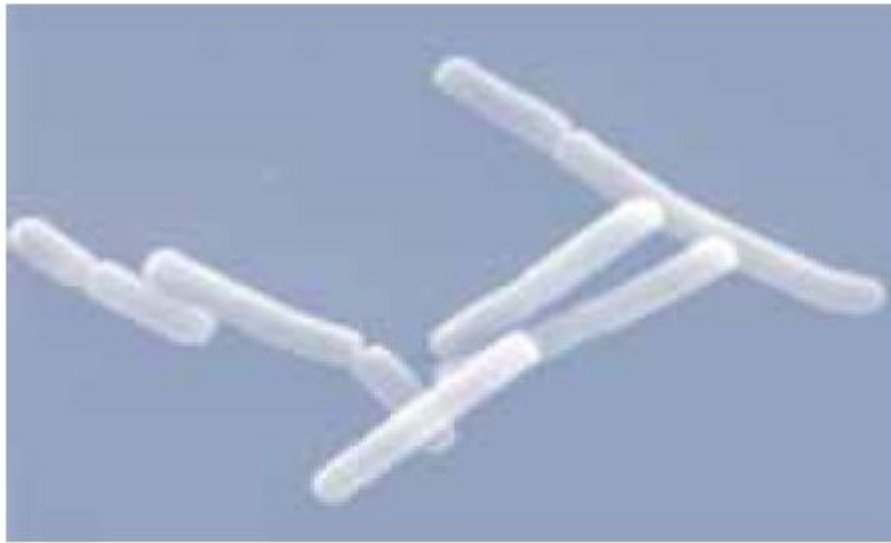


Figure 1. Scanning electron micrograph of *L. acidophilus* NCFM®.

Danisco. “Technical Memorandum: Lactobacillus acidophilus NCFM – a probiotic with proven efficacy.”

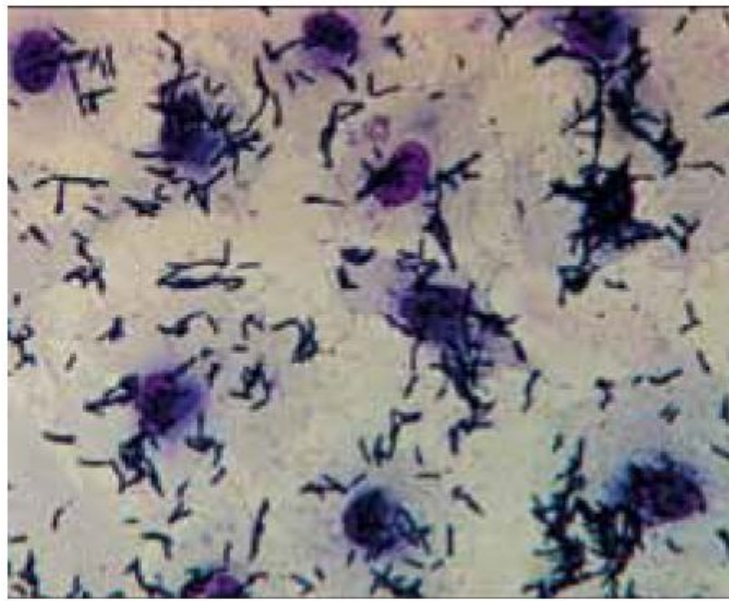


Figure 3. *L. acidophilus* NCFM® shows strong adherence to human fetal intestinal epithelial cells in a Ca^{2+} mediated system [27].

Danisco. “Technical Memorandum: Lactobacillus acidophilus NCFM – a probiotic with proven efficacy.”

L.ACIDOPHILIS NCMF STRAIN

- One of the strongly researched strain identified probiotics
- Capable of surviving stomach acidity
- Morphine-Like Effects (induces expression of cannabinoid and opioid receptors in the intestinal tract)
- Outperforms many species of acidophilus in the fight against candida

Danisco. “Technical Memorandum: Lactobacillus acidophilus NCFM – a probiotic with proven efficacy.”

L.ACIDOPHILIS NCFM STRAIN

Immune-compromised mice were protected from experimental *Candida albicans* infection when treated prophylactically with viable *L. acidophilus* NCFM® [41]. More limited protection was demonstrated with heat-killed *L. acidophilus* NCFM® [42].

Danisco. “Technical Memorandum: Lactobacillus acidophilus NCFM – a probiotic with proven efficacy.”

L.ACIDOPHILIS NCFM STRAIN

L. acidophilus NCFM® provided better protection against systemic (disseminated) candidiasis of endogenous origin than the other *L. acidophilus* strain.

Both *L. acidophilus* strains prolonged the survival of mice after colonisation with *C. albicans* (compared to *C. albicans*-monoassociated mice). However, the best protection was provided by *L. acidophilus* NCFM®.

Danisco. “Technical Memorandum: Lactobacillus acidophilus NCFM – a probiotic with proven efficacy.”

L.ACIDOPHILIS NCFM STRAIN

Compared with germ-free mice, mice monoassociated with *L. acidophilus* had increased serum IgG and IgM. *C. albicans*-monoassociated mice had more IgG, IgA and IgM, although the increase in these three immunoglobulins was even higher in mice diassociated with *L. acidophilus* NCFM® and *C. albicans*. The latter data suggests that mice diassociated with either *L. acidophilus* strain and *C. albicans* developed fewer antibodies than *C. albicans*- monoassociated mice.

Danisco. “Technical Memorandum: Lactobacillus acidophilus NCFM – a probiotic with proven efficacy.”

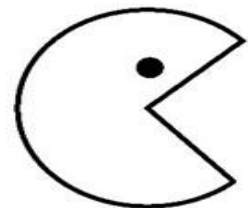
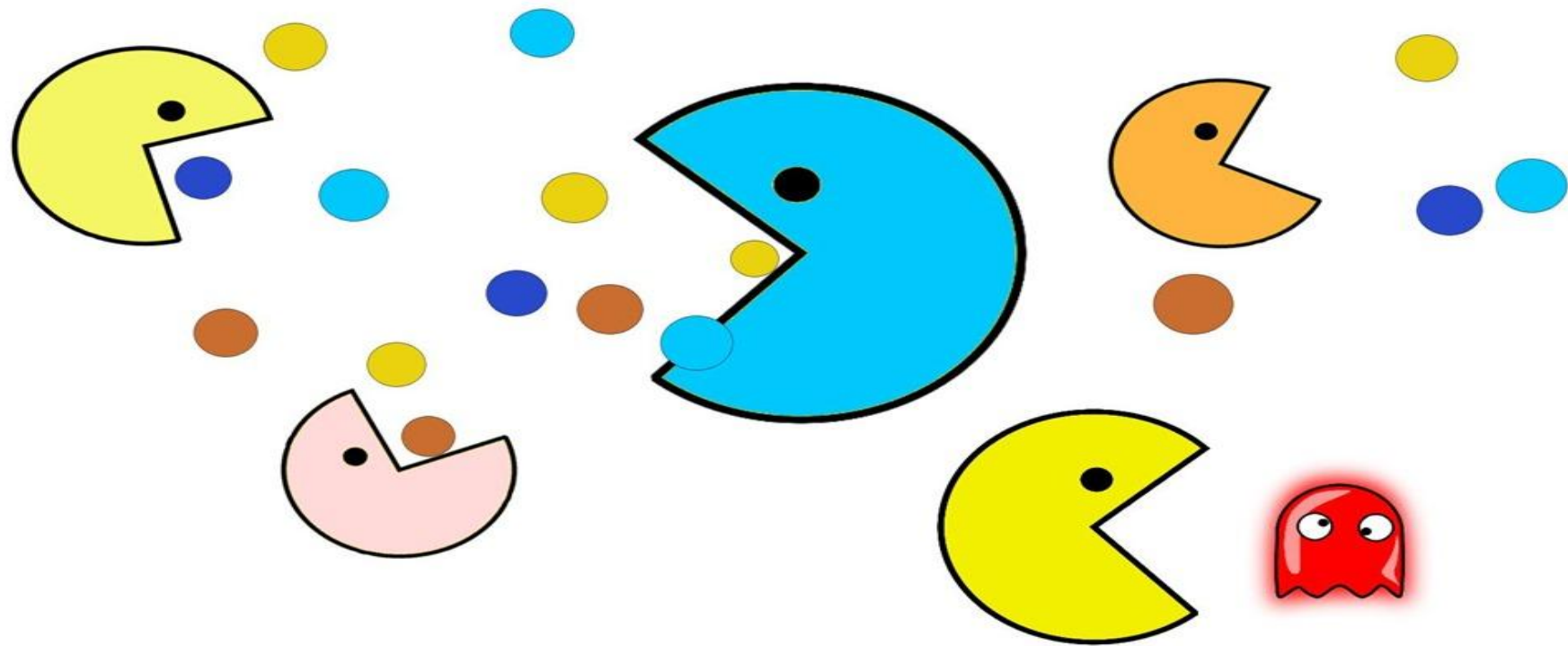
WHAT ARE PREBIOTICS?

Prebiotics are nondigestible plant fibres

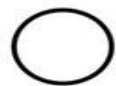
Somers, Suzanne. *Tox-Sick: from toxic to not sick*.
New York, Harmony Crown, 2015, pp.237

WHAT ARE PREBIOTICS?

- F.O.S.
- Inulin Fibre
- Food for Healthy Flora



Probiotic



Prebiotic



Bad Bacteria

ALTERNATIVES TO ANTIBIOTICS

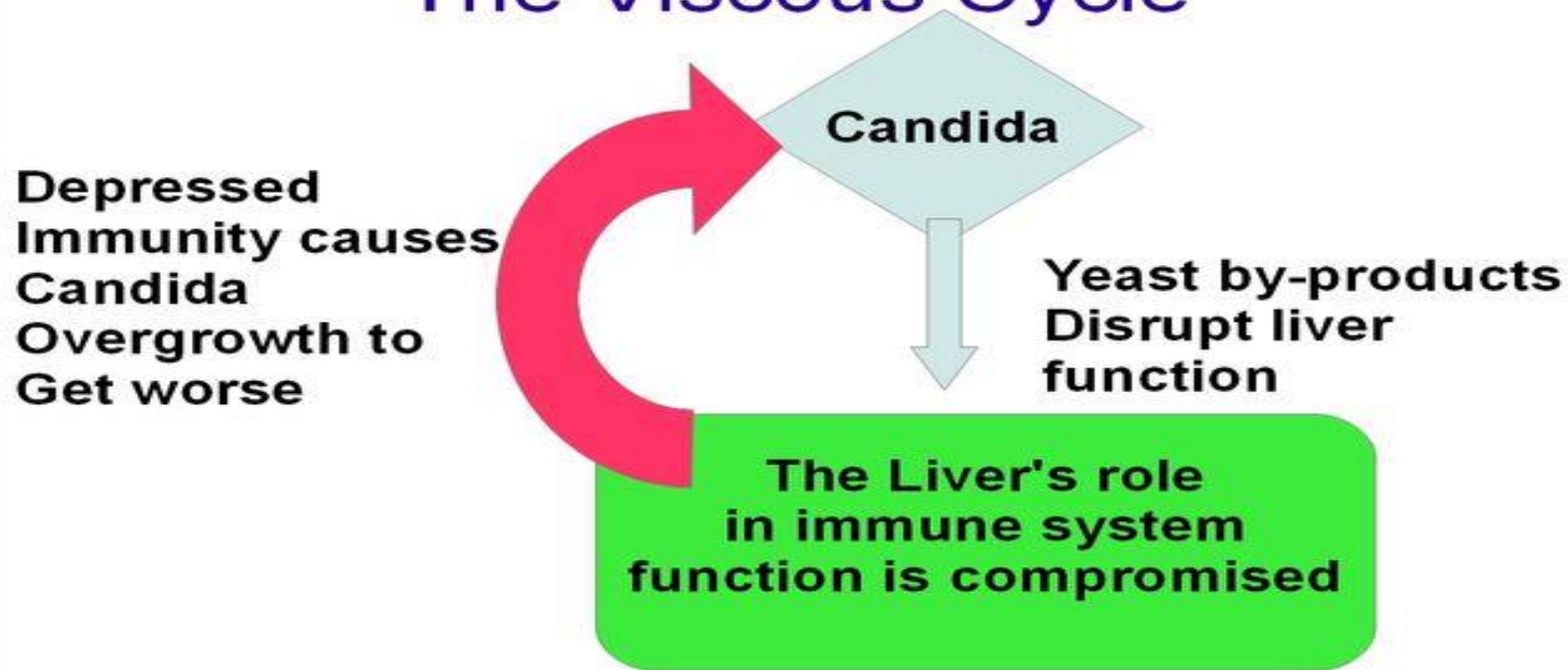
- Olive Leaf Extract (Antimicrobial)
- Black Walnut hull, wormwood, cloves, quassia bark
 - Wild Oregano Oil, Black Cumin Seed Oil
 - Oscilloccoccinum (Homeopathic)
- Medicinal Mushrooms (Reishi, Maitake, Shaitake)
- Alo Vera Gel (Herb of Immortality by The Egyptians)

MILK THISTLE & THE GUT

“In ‘The Liver, Laboratory of Living,’ Dr. Leo Roy states: “No disease, especially degenerative diseases..., could survive longer than a few weeks in the presence of a healthy liver.”

**Somers, Suzanne. *Tox-Sick: from toxic to not sick*.
New York, Harmony Crown, 2015, pp.237**

Candida, Immunity & Liver Function; The Viscous Cycle



THE LIVER

- Produces chemicals to combat viruses and bacteria
- Supports phagocytosis (cell-eating)
- Produces antihistamines to neutralize carcinogens
- Considered 'the gateway to disease' (Dr. Kasper Blond, The Liver and Cancer)
- Key for Detoxification
- Contains Lymphatic tissues for detox & immunity
- Processes nutrients coming in from the intestines and neutralizes toxins from food

DANGERS OF A CONGESTED LIVER

An overloaded liver causes a backup of toxins (ex. Mercury, PCBS, DDT, Pesticides, metabolic waste, mycotoxins, xenoestrogens) into the portal vein which leads from the intestinal tract directly into the liver. Rather than toxins being excreted they wind back up in the intestinal tract creating an increased toxic burden within the GI tract.

Somers, Suzanne. *Tox-Sick: from toxic to not sick*. New York, Harmony Crown, 2015, pp.92

DANGERS OF A CONGESTED LIVER

- Constipation (excess fecal matter in the bowel) leads to reabsorption of toxins into the bloodstream
- Optimized Liver Function is vital for Bile production and Flow to keep bowels moving and elimination channels clear

MILK THISTLE

- One of the most studied herbs for liver health, which is also recommended for healing the gut, is milk thistle.
- Milk thistle's most active constituent is silymarin.
- Milk thistle and its extract silymarin come in tablet, capsule, powder, and liquid form.
- In addition to generating new healthy liver cells, and stimulating bile production, silymarin has the ability to increase glutathione levels in the liver by as much as 35%

Ziff, Sam, et al. *Dental mercury detox*. Orlando, FL, Bio-Probe, Inc., 2001, pp.43

PANCREATIC ENZYMES

PANCREATIC ENZYMES

“[P]ancreatic enzymes were first identified around 1858 in Europe and were known as essential for normal digestion.”

**Somers, Suzanne. *Tox-Sick: from toxic to not sick*.
New York, Harmony Crown, 2015, pp.182**

SERRAPEPTASE



500px

500px.com/m0004/32602125

SERRAPEPTASE

According to Dr. Zoltan Rona, in his interview about serrapeptase (posted on YouTube), the ideal and most effective proteolytic (protein-digesting) enzyme is serrapeptase (made by silkworms)

***YouTube, 29 Nov. 2011, youtu.be/PcI60tW2B1M.
Accessed 22 Sept. 2017.***

SERRAPEPTASE

- Breaks down biofilms secreted by pathogenic microorganisms present in disease states of GI Tract origin
- Eats up undigested food sitting in the GI Tract fermenting and putrefying (powerful proteolytic enzyme)
- Fights inflammation of the intestinal mucosa relieving pain

***YouTube, 29 Nov. 2011, youtu.be/PcI60tW2B1M.
Accessed 22 Sept. 2017.***

SERRAPEPTASE

- Serrapeptase's ability to break down scar tissue is significant and can assist those who've had bowel resection surgeries
- The presence of scar tissue in the bowel can block the flow of energy, blood and nutrients to the tissues of the gastrointestinal tract

***YouTube, 29 Nov. 2011, youtu.be/PcI60tW2B1M.
Accessed 22 Sept. 2017.***

SERRAPEPTASE

- In a complete gut-healing protocol, there is much research to support the use of serrapeptase to heal and control inflammation.
- Dr. Rona recommends two to three capsules, 3X daily, on an empty stomach away from food.

***YouTube, 29 Nov. 2011, youtu.be/PcI60tW2B1M.
Accessed 22 Sept. 2017.***

L-GLUTAMINE

L-GLUTAMINE

- During stress, the body's need for glutamine increases, especially within the digestive tract.
- This amino acid is the number 1 fuel source for the intestinal cells and is crucial for normal gastrointestinal permeability
- Take 250mg-2grams daily

**Somers, Suzanne. *Tox-Sick: from toxic to not sick*.
New York, Harmony Crown, 2015, pp.182**

COLLOIDAL SILICEA GEL



COLLOIDAL SILICEA GEL

- Absorbs toxic debris in the bowel like a sponge
- Heals intestinal mucosa restoring healthy tissues
- Hydrates the colon

COLLOIDAL SILICEA GEL

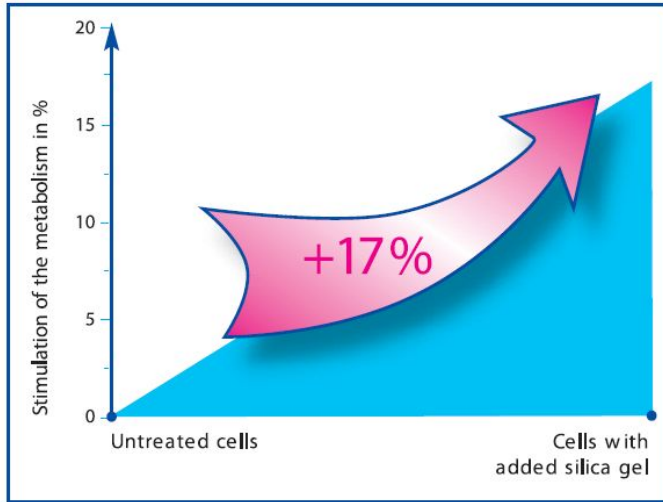
- The Peyer's patches of the small and large intestines have a high silicon content
- The greatest store of silicon found in the human body is in the glands, where silica is required to activate phagocytosis
- Heals mucous membrane inflammations of the GI tract
- Stimulates connective tissue regeneration through the synthesis of collagen throughout the body

**Silica The Amazing Gel: Second Expanded Edition by
Klaus Kaufmann with forward by Zoltan Rona MD MSc, p.69**

COLLOIDAL SILICEA GEL

- Look for Colloidal Gel Form
- Look for 196mg or more dose
- Ensure the product is Excipient, Preservative & Additive Free

17% increased cell activity after just 30 minutes

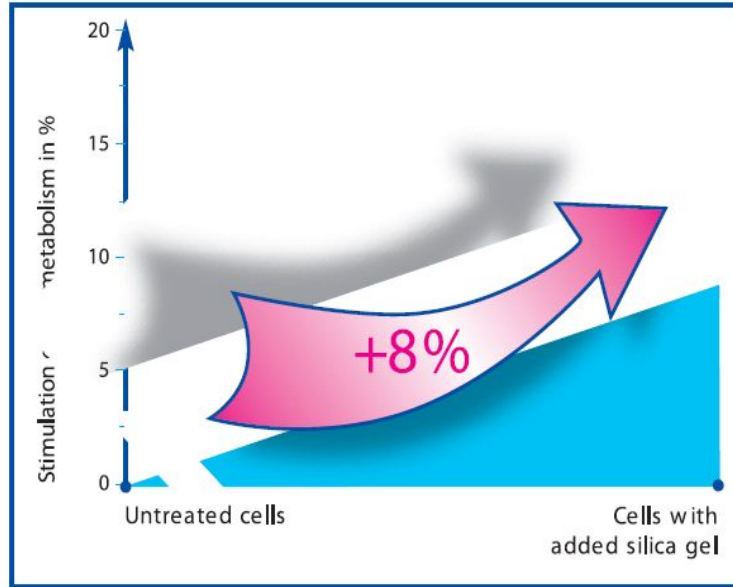


Enhanced performance!

Up to 17% increased cell activity in the connective tissue, signifying a **clear improvement in cellular energy metabolism.**

The detailed scientific report was published by Prof. Dr. Peter C. Dartsch "Evaluation of beneficial health effects of silicic acid gel on cultured connective tissue fibroblasts" in the magazine "Innovations in Food Technology", 42/ February 2009, pp. 62-64.

8% more cell vitality



Improved cell regeneration!

Up to 8% increased cell vitality in the connective tissue, thereby supporting the cell regeneration.

The results of the latest cell study confirm:

Original Silicea Gel has a positive effect on connective tissue cells.

Silica gel increases metabolic activity and thereby improves cell regeneration as well as the regeneration of connective tissue cells.

Silica gel **improves** the regeneration of existing and new cells

Figures I.+ II.

show an increase in cell density in just 3 days after addition of silica gel.

The red bodies represent the cells and the blue and white areas the intercellular space.

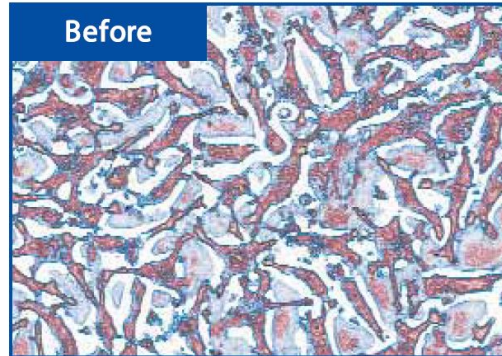


Fig. I.
Loose cell structure
with low cell density before addition

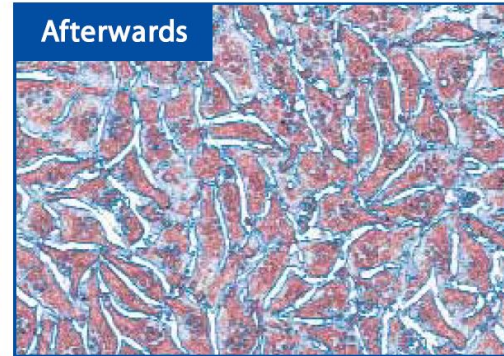


Fig. II.
Compact cell structure
with high cell density after addition

The detailed scientific report was published by Prof. Dr. Peter C. Dartsch "Evaluation of beneficial health effects of silicic acid gel on cultured connective tissue fibroblasts" in the magazine "Innovations in Food Technology", 42/ February 2009, pp. 62-64.

MAGNESIUM

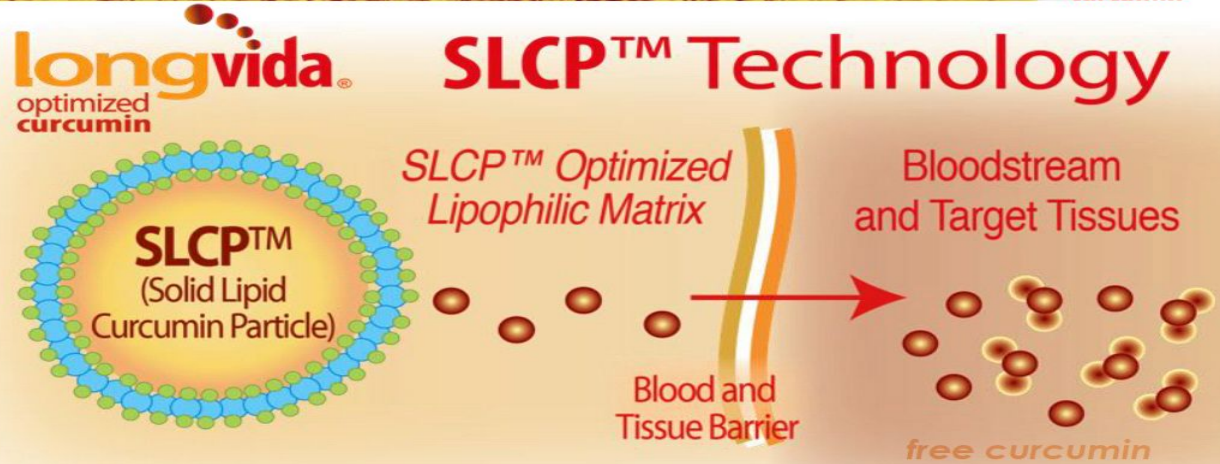
MAGNESIUM

- Soothes the CNS
- Relaxes the muscles of the bowel enabling peristalsis, releasing constipation
 - The Anti-Stress Mineral
- Activates Melatonin Required for Healthy Circadian Rhythms (Rest & Digest Response of the Body)

LONGVIDA CURCUMIN EXTRACT

SLCPTM meeting the critical requirements of:

- **Permeability**
- **Solubility**
- **Stability**



Longvida® (US Patent 9192644, EP Patent 199365; additional patents pending) and Verdure Sciences® are registered trademarks of Verdure Sciences®, Inc. SLP™/SLCPTM are trademarks of Verdure Sciences®, Inc.

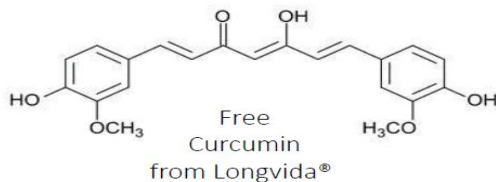


Source: Verdure Sciences

ABSORPTION DIFFERENCES

Different Compounds = Different Activities

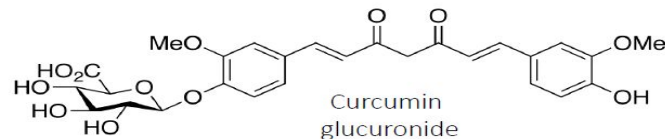
Longvida 1st pass metabolism



Lipid Metabolism
(Long-Chain Triglycerides)

Intestine → Chylomicron → Lymphatic Transport →
Free Curcumin into Blood and Target Tissues →
Followed by Typical Metabolism → → → → →

Longvida 2nd pass metabolism
(95% curcumin's start)



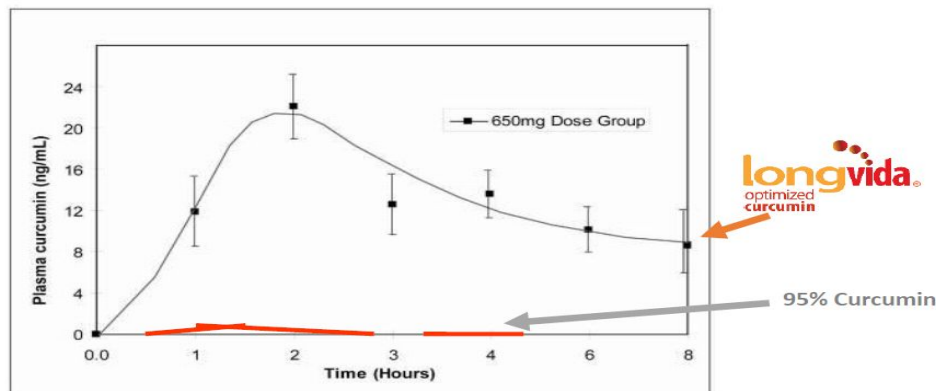
Typical Metabolism
Sugars, Amino Acids
(Short-Medium Chain Lipids)

Intestine → Portal Vein → Liver →
Metabolism and Glucuronidation →
Excretion



Source: Verdure Sciences

ABSORPTION OF LONGVIDA[®]



Acute human bioavailability of Longvida[®]: Gota et al. J Ag Food Chem 2010 58(4): 2095-2099.

Bioavailability Comparasion
to 95% Curcumin

- 67X more using Cmax
- 95X more using AUC
- 285X more using AUC
normalized

Source: Verdure Sciences

LONGVIDA® IN HEALTHY MIDDLE-AGED ADULTS

VASCULAR HEALTH

- reduced blood lipids (triglycerides)
- reduction in CRP
- increased vasodilator/endothelial activity (plasma nitric oxide)
- sICAM
- decrease VEGf

INFLAMMATORY

- reduced inflammatory cytokines (TNF-a)

LIVER

- improved ALT enzyme levels

COGNITIVE HEALTH

- reduction in plasma amyloid-beta
overlapping markers mention

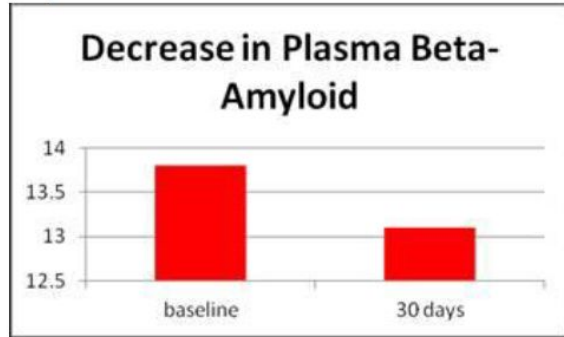
OXIDATIVE STRESS

- Catalase
- Total plasma antioxidant status

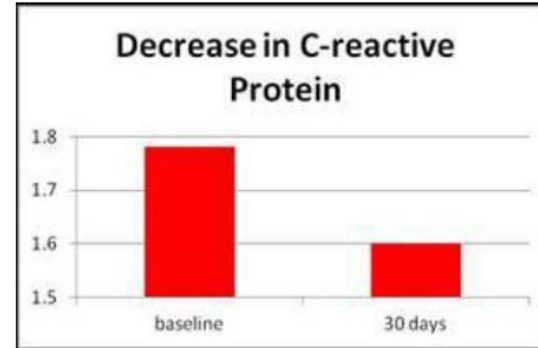
In a randomized placebo-controlled 30-day trial at The Ohio State University, a single capsule (400mg) of Longvida® improved or trended improvement in a number of biomarkers*.

* $p < 0.05$ vs placebo. DiSilvestro et al. *Nutrition Journal* 2012, 11:79

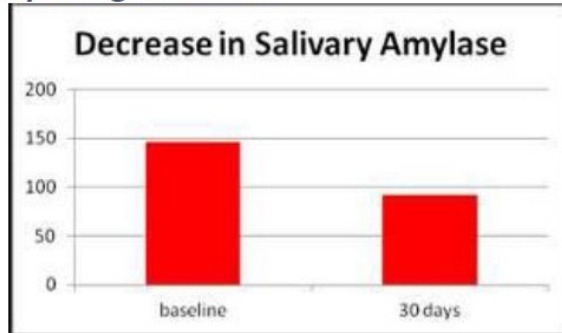
Amyloid-Beta*



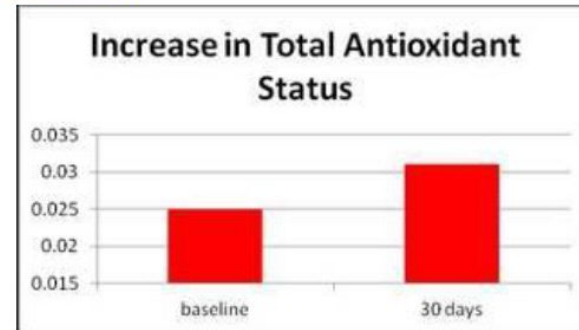
Inflammation



Physiological Stress*



Oxidation*



* $p < 0.05$ vs placebo. DiSilvestro et al. Nutrition Journal 2012, 11:79

REDUCE STRESS

B-COMPLEX WITH ADAPTOGENS

- Increased need for B-Complex vitamins due to elevated stress impacting the CNS and Brain-Bowel Connection
- Coenzyme Form is Ideal
- B-Complex is essential for cellular energy & repair, neurotransmitter synthesis & nervous system function
- Choose High Potency 50-100mg daily

SENSORIL

- **Supported by 10 Clinical Studies**
- **Roots and leaves gives a higher withanolide glycoside content; a patented discovery of Natreon**
- **Prepared by a totally aqueous extraction process with 95% solubility in water**
- **Clinically proven to balance cortisol, leading to an improved stress response, better sleep, and mood.**

SENSORIL

A standardized *Withania somnifera* extract reduces stress related parameters in chronically stressed humans – a double-blind, randomized, placebo-controlled study. Biswajit Auddy, Jayaram Hazara, Achintya Mitra, Bruce Abedon, Shibnath Ghosal. JANA, Vol. II, No. I, 2008, pp. 50-56.

MALABSORPTION

- **Reduced bowel surface areas due to surgeries**
- **Intestinal bleeding interferes with absorption**
- **The Presence of pathogens like candida interfere with absorption**

IRON SUPPLEMENTATION

- Increased need due to intestinal bleeding
- Increased need due to reduced bowel surface area for absorption where surgeries have been applied
- Increased need due to malabsorption syndrome

IRON SUPPLEMENTATION

- Choose Plant Based
 - Choose Liquid
- Ensure it is in a base of B-Complex with Vitamin C
 - 10mL 2 x per day

OTHER SUPPLEMENTS & STRATEGIES

- Slippery Elm Bark
- Get 8-10 Hours of Sleep each night (Rest & Digest, PNS Response)
- Reduce Stress through relaxation practices (20 min-1hr meditation, yoga, develop a spiritual practice, engage in a sangha (spiritual community))

OTHER SUPPLEMENTS & STRATEGIES

- Colonics and Enemas to hydrate the bowel and eliminate impacted fecal matter in the colon (once intestinal lining is restored)
- Reduce alcohol and caffeine intake
- Castor oil backs on abdomen and liver for pain
- Spend time in Nature

DANGERS OF ALLOPATHY

- Opiate drugs are highly addictive
- NSAIDs can further aggravate intestinal bleeding as this is a known side-effect
- Immunosuppressant drugs suppress the immune system and therefore reduces infection fighting capacities allowing candida and other pathogenic organisms to proliferate.

DANGERS OF ALLOPATHY

- Symptoms are relieved but underlying causes remain leading to a worsening of the condition over time
- Because the disease state continues malabsorption can arise and worsen overtime leading to emaciation
- Prescription meds are toxins and suppress the immune system, and tax elimination channels leading to other diseases

DANGERS OF ALLOPATHY

- **Surgical interventions cut out diseased tissue leading to reduced bowel surface area and exacerbating malabsorption syndrome (after many of these a bag may be required)**

