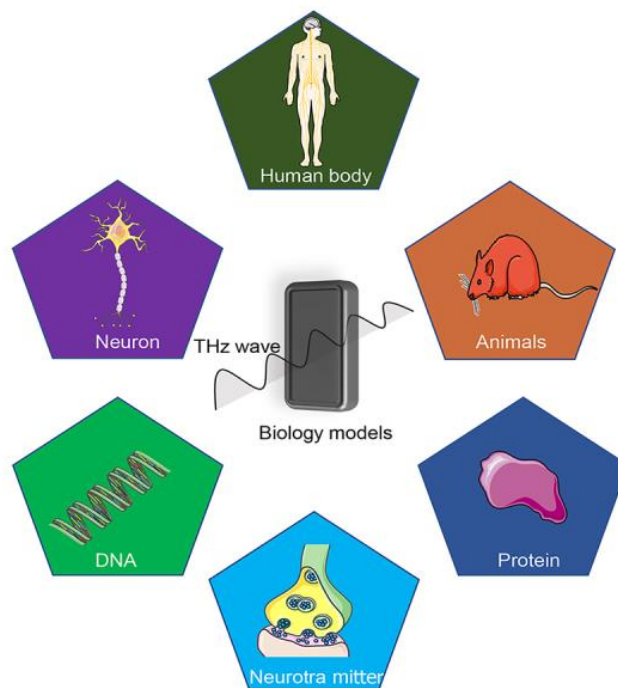


APLGO Product Q & A – MLS
With Mary Esther Gilbert, MSc HN, BSc NSP and Associate Ruth Mayne
December 9, 2024

1. The biggest burning question is how does our pendant help with the lozenges!

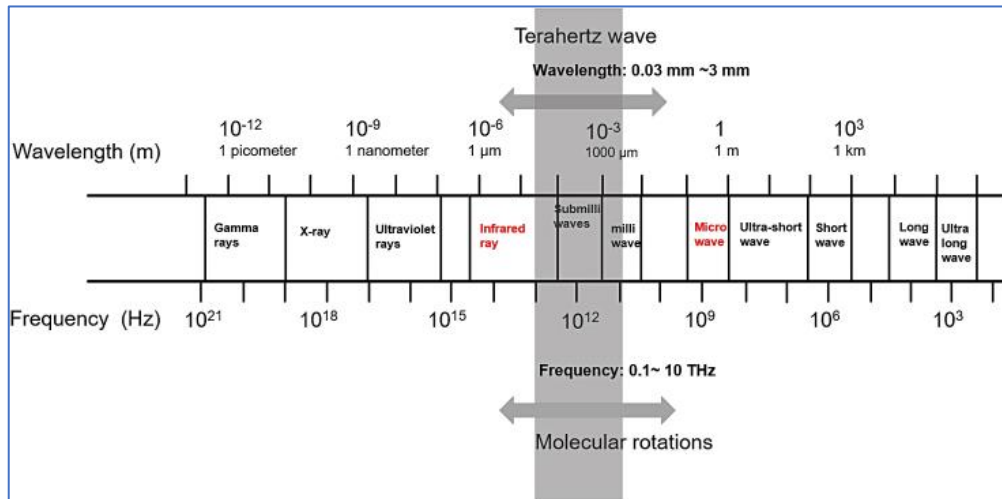
- **Terahertz photon units of light** have been shown to help align the body's electrical systems for better impulse communication transmissions of the nerves and brain [*similar to how negatively charged ions in the drops neutralize free radicals in the body*].
- The **volcanic ash** as part of the composition of the pendant, is found to have conductivity and store energy as electrical potential.
- Terahertz photons have low harmless energy frequencies that do not cause tissue damage.
- THz photons research shows they are ideal for detecting tumors since water content in tumors greatly differ from normal tissues.
- Research is showing increasing evidence that THz frequencies are beneficial in functions of the nervous system, and to ameliorate acute ischemia stroke when therapy was applied using infrared radiation modulated by THz frequencies.
- *"THz therapy can be used under various neurological conditions to either ameliorate disease symptoms or rescue disease pathologies, in the same way, that physical therapy does."* (Peltek, et. al., 2021)
- **Beeswax** has low thermal conductivity but high thermal storage, such as wax on a paper cup.

Applications of terahertz technology in neuroscience



Zang, et. al., 2021

Terahertz (THz) wave is an electromagnetic wave with a Frequency range of 0.1–10 THz (1 THz = 10^{12} Hz) and a wavelength of 0.03–3 mm



Zang, et al., 2021

<https://pmc.ncbi.nlm.nih.gov/articles/PMC8683584/>

- Research on bacteria showed exposure to THz frequencies impaired their cells ability to proliferate and showed abnormal morphology or ability to properly replicate (Peltek, 2021).

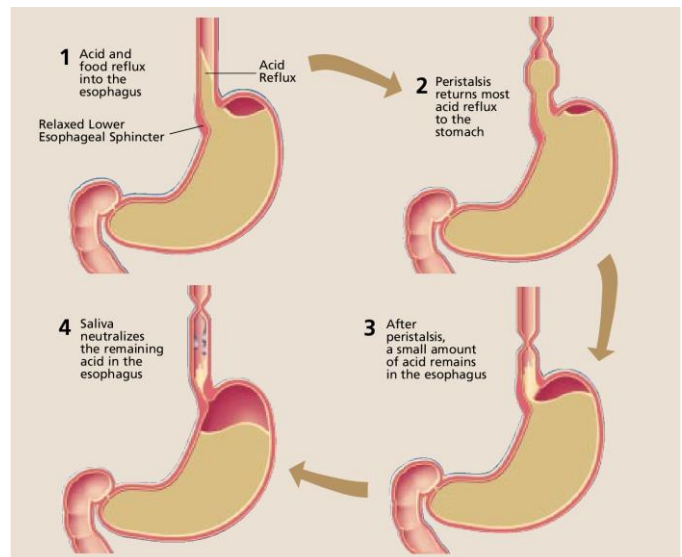
2. Given the blend of ingredients in MLS, and the pollutants in our food water and air, would you suggest that everyone including children take MLS daily? Yes. Every body can benefit from the proven nutrient factors in MLS.

3. For people that worry about parasites. We know how important MLS is in fighting parasites does it work better paired with HPR. MLS contains a great array of anti-parasitic compounds. HPR focuses on keeping the liver clear of toxins and provides what it needs to maintain all of its functions. The liver:

- Filters (cleanses) the blood, removing toxins and waste for elimination through urine and feces.
- Secretes alkaline bile fluid, decreasing acidic conditions.
- Produces the enzyme, lipase, for digesting and breaking down fats into fatty acids.
- Converts excess glucose in the blood into glycogen and stores it in the liver.
- Converts ammonia byproducts into urea, the end product after breaking down protein and excreted via the urine.

4. Is MLS beneficial for people with GERD or any other autoimmune disorder and if so how?

- Pectin (in the black currant)** is a soluble fiber important in heart health and blood vessel strength, preventing colon and prostate cancer, and helping to manage diabetes.
- Shown to improve the biological mechanisms that result in GERD (gastroesophageal reflux disease) (Kahrilas, 2003).



Botanicals	Phytonutrients
<p style="text-align: center;">Artichoke Leaf (<i>Cynara folia</i>)</p> <ul style="list-style-type: none"> Improves insulin secretion, energy and glucose metabolism. Improves cholesterol metabolism when carbohydrates and fatty foods are ingested. Cleanses liver, improves skin conditions, protects liver from free radical damage. Prevents formation of liver cancer cells. Aids digestion. Helps immune system against illness-causing microorganisms. 	<ul style="list-style-type: none"> Inulin – helps establish healthy microbiota in intestines. Tsinarin – improves bile flow in the liver during fats digestion.

Our Immune Cells Constantly Search the Body for Foreign Substances and Health-Threatening Microbials

Killer T-Cell Attacking and Engulfing Cancer Cell



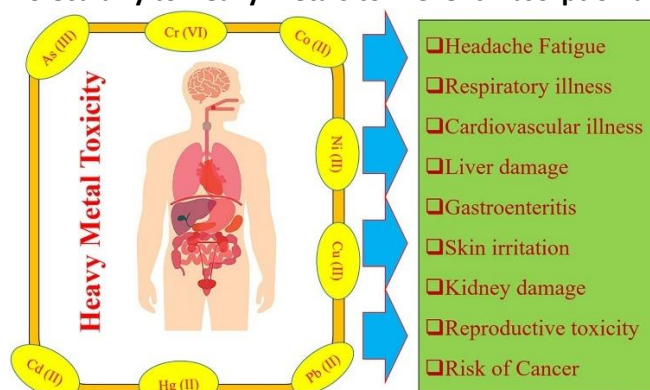
Killer T-Cell and Cytotoxic Granules Destroying Cancer Cell



Killer-T-Cell-The Cancer Assassin – Cambridge University 2015
<https://youtu.be/ntk8XsxVDi0?si=Su5FykEEXWYNDaBd>

<p style="text-align: center;">Carnation, Seed (Clove) (<i>Syzygium aromaticum</i>)</p> <ul style="list-style-type: none"> Improves digestion, stimulates appetite. Strengthens liver functions. Improves circulation, memory. Antimicrobial. Neutralizes reactive oxygen species' (ROS) cell-damaging effects. Prevents damage to DNA, prevents oxidation of proteins, lipids, sugars in cell environment. 	<ul style="list-style-type: none"> Phenolics – antibacterial, antiviral, antifungal, anti-yeast, help eliminate toxic metals aluminum, lead. Organic acids – anti-inflammatory, antioxidants, anti-free radicals.
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Phenolic Compounds Bind Molecularly to Heavy Metals to Prevent Absorption and Retention in Body Tissues



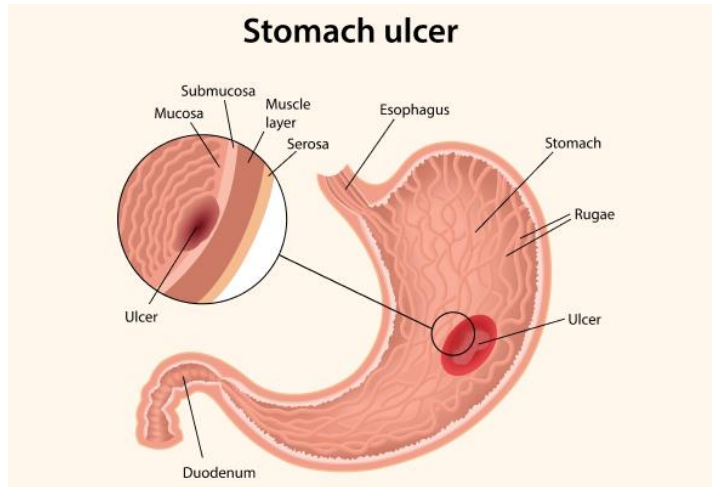
Xu, et al. *Green Chemistry Letters and Reviews*, 17(1). 2024
<https://doi.org/10.1080/17518253.2024.2404235>

Chamomile, German, Flower (*Matricaria recutita*)

- Anti-inflammatory, antispasmodic.
- Improves liver, urinary bladder, kidney, gallbladder, digestive functions.
- Improves hypertension.
- Contains glycine, amino acid known to have a calming effect on nerves.
- Repairs ulcers, effective wound healing, skin lesions.
- Lowers cholesterol.

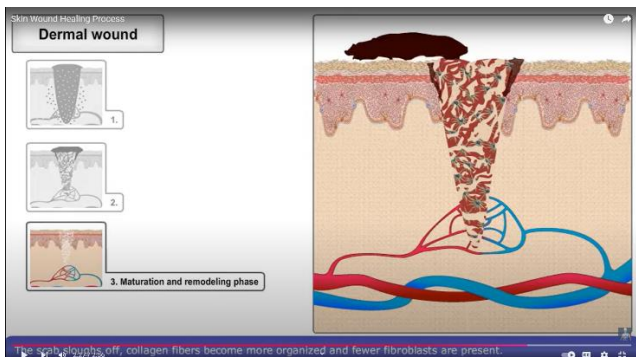
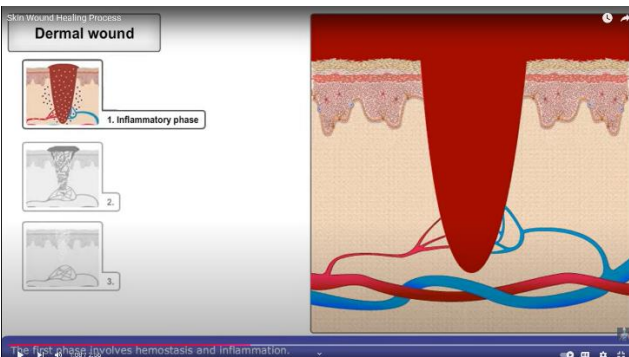
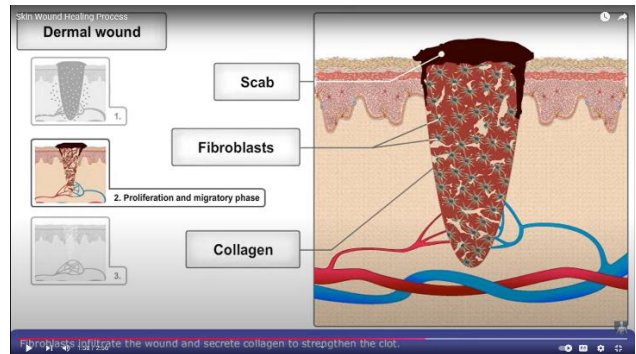
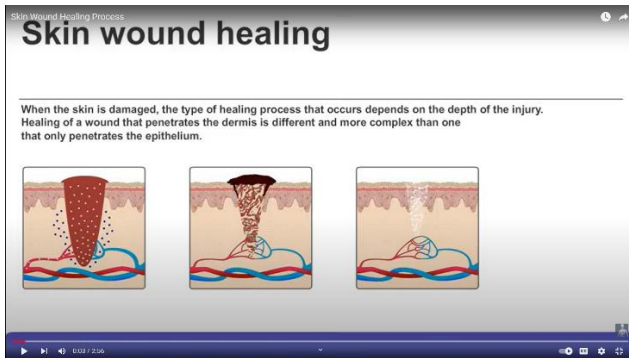
- Phenolics – anti-infection properties; improve immune system functions, anti-allergies.
- Flavonoids - anti-mutagenic, antiangiogenic (stopping tumors from growing).
- Terpenoids – antioxidant, antimicrobial, anti-allergic, anticancer, anti-hypertensive.

Phenolics, Flavonoids and Terpenoids in German Chamomile Are Effective in Healing Wounds



Care Hospitals 2024

<https://www.carehospitals.com/blog-detail/stomach-ulcer/>

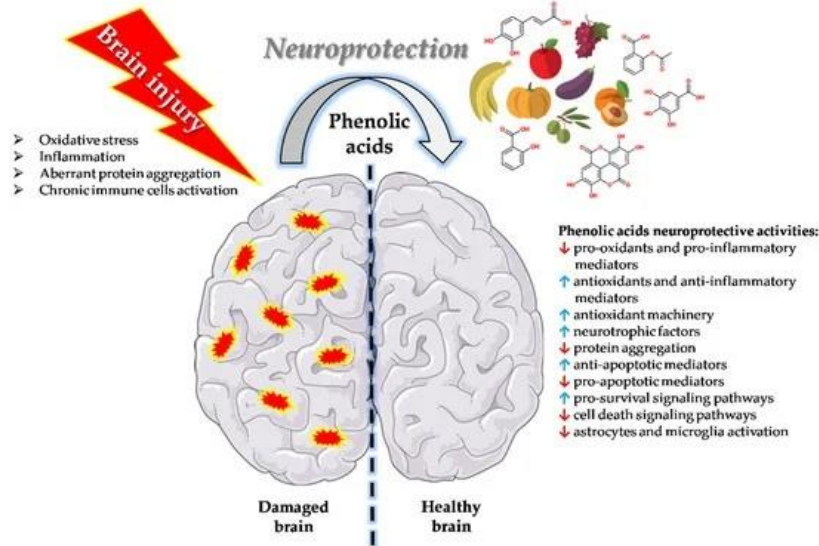


Medical Animations - Skin Wound Healing Process

<https://youtu.be/MsQV6M7bHqQ?si=wKRR0aNuPDklmrz8>

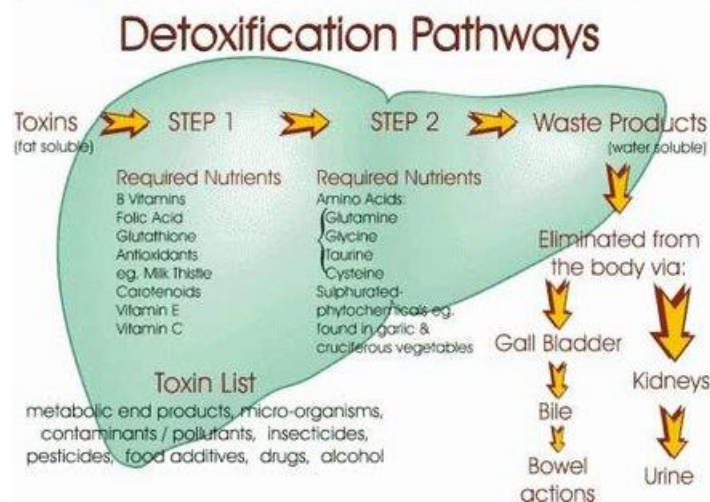
Cinnamon Bark	
<ul style="list-style-type: none"> • Improves circulatory system. • Pain relief. • Antimicrobial (larvicidal, antifungal, anti-yeast, antibacterial, antiviral) • Antioxidant, prevents tissue necrosis (death). • Suppresses neurodegenerative diseases (COX2 inhibitor) • Prevents plaques on nerve cells impairing brain functioning. 	<ul style="list-style-type: none"> • Cinnamaldehydes – prevent cancer cell proliferation. • Proanthocyanidins, catechins, flavonoids – destroy damaging free radical molecules. • Polyphenols – Insulin-like, lowers blood glucose and cholesterol.

Cinnamaldehydes, Proanthocyanidins, Catechins, Flavonoids, Polyphenols Aid Immune Protection Actions



Coriander Seed	
<ul style="list-style-type: none"> • Stimulates bile flow for fats digestion. • Essential oils important for growth, proper brain functioning. • Antioxidant, anti-free radicals. • Anti-diabetic, anti-hyperglycemic, improved insulin production. • Reduces fats accumulations in blood vessels. • Anti-anxiety. • Expels parasitic worms. • Relieves nausea. 	<ul style="list-style-type: none"> • Terpenes, Sesquiterpenes – destroys food-borne illness bacteria (<i>Salmonella</i>, <i>Listeria</i>, <i>Staphylococcus</i>, <i>Serratia</i>, <i>Enterobacter</i>, <i>Klebsiella</i>, <i>Pseudomonas</i>, <i>Escherichia</i>). • Carboxylic acids – detox toxic metals (mercury, lead). • Limonenes essential oils – antioxidant, antimicrobial, brain functioning

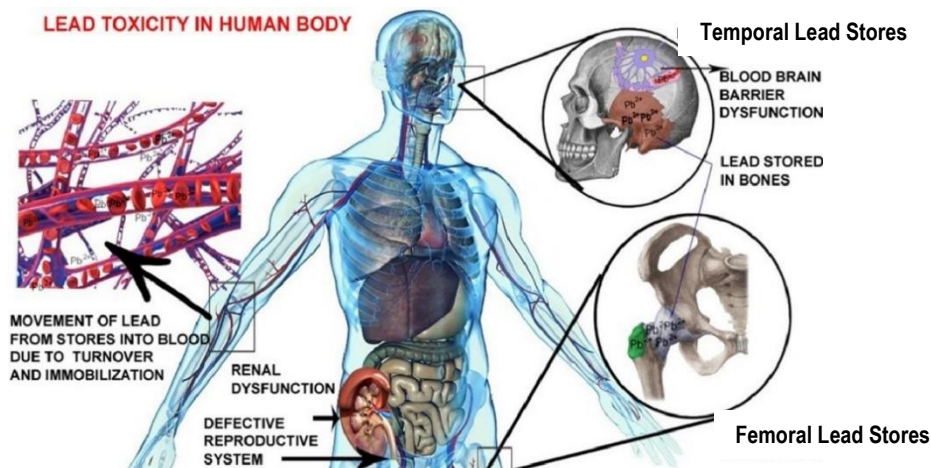
THE LIVER DETOX PATHWAYS AND ESSENTIAL NUTRIENTS



Cranberry

- Protects kidney functions, genitourinary tract, anti-inflammatory.
- Anti-bacterial - prevents *E. coli* adhesion to uroepithelial cells in urinary tract.
- Prevents ulcerative *H. pylori* bacteria adhesion to stomach lining.
- Helps excrete radioactive substances, and heavy metals (lead, cobalt, cesium, strontium).
- Lowers cholesterol.
- Corrects immune system modulation of inflammatory enzyme COX-2.

- Phenolic acids, flavonoids, proanthocyanidins, anthocyanins – powerful anti-inflammatories.
- Resveratrol – suppresses spread or proliferation of breast, colon, lung, prostate, leukemia tumors.



Collin, et. al. Journal Of Hazardous Materials 2022

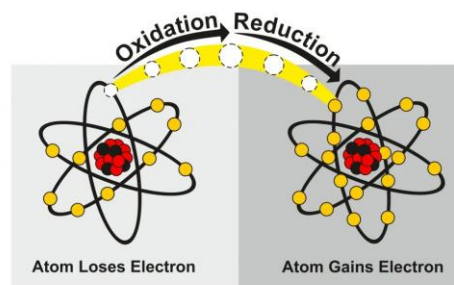
<https://www.sciencedirect.com/science/article/pii/S277241662200050X>

Currant, Black

- Natural antibiotic, antibacterial actions.
- Anti-amoebic, anti-fungal.
- Improves cognitive performance, slows cognitive decline in aging.
- Antioxidant, protects against oxidative stressors (free radicals).
- Protects against cardiovascular disease.
- Helps prevent elevated glucose and lipid levels.
- Corrects intestinal malfunctions.
- Helps restore or improve liver functioning.
- Helps improve respiratory tract conditions.

- Pectins – normalizes cholesterol.
- Phytoncides – antibacterial, destroys *Staphylococcus aureus*, *cornebacterium diphtheriae*, *Shigella*. Destroys *Entamoeba histolytica*, amoeba that causes dysentery.
- Anthocyanins, flavonoids – protect blood vessel and other cell walls from oxidative damage.

Anthocyanins, Flavonoids, and Pectins Protect Against Oxidative Damage: Oxidative Stress: A Relative Dominance of Free Radicals Over Protective Antioxidants.



Oxidation is the loss of electrons or an increase in oxidation state by an atom, molecule, or ion.

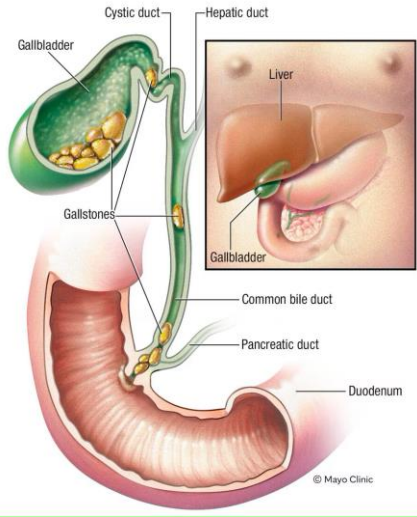
Reduction is the gain of electrons or a decrease in oxidation state by an atom, molecule, or ion.

Science ABC - Udaix-Shutterstock 2024

<https://www.scienceabc.com/pure-sciences/what-is-oxidation.html>

<p style="text-align: center;">Dandelion Root (<i>Tarxacum officinale</i>)</p> <ul style="list-style-type: none"> • Anti-viral, antifungal. • Antituberculosis. • Anti-carcinogenic. • Anti-arthritis • Helps maintain gallbladder functions. • Gastrointestinal/digestive, insulin stimulant. • Anti-inflammation. • Modulates immune system. • Protects gall bladder, kidney functions. 	<ul style="list-style-type: none"> • Lutein, zeaxanthin – anti-atherosclerosis, liver detoxification, anti-cirrhosis, anti-inflammatory.
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Gallstones - Hardened Deposits of Bile (Digestive Fluid Produced in the Liver and Stored in the Gallbladder). During Digestion the Gallbladder Secretes Bile Into the Small Intestine (Duodenum).



Mayo Clinic 2024

<https://www.mayoclinic.org/diseases-conditions/gallstones/symptoms-causes/syc-20354214>

<p style="text-align: center;">Fenugreek</p> <ul style="list-style-type: none"> • Carminative – reduces flatulence, eases constipation. • Aids respiratory system against congestion, inflammation, infections, expectorating properties, clears congestion, relieves coughing, bronchitis, allergies. • Assists in utilization of oxygen. • Helps control blood sugar in both types of diabetes. • Improves pancreatic function increasing insulin receptors in erythrocytes (red blood cells). • Protects brain and nerve functions. 	<ul style="list-style-type: none"> • Saponins, coumarins, genugreekine, - are anti-inflammatory superoxide scavengers that prevent cancer. • Plant steroidal saponins – can reverse atherosclerosis, lower cholesterol, triglycerides. • Trigonelline – stimulates renewal of brain cells, improves nervous system functions.
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The Brain Can Change Its Structure, Reorganize Itself (Neuroplasticity) Utilizing Phytonutrients Like Trigonelline

HOW THE BRAIN CHANGES

NEUROGENESIS	NEW SYNAPSES	STRENGTHENED SYNAPSES	WEAKENED SYNAPSES
Continuous generation of new neurons in certain brain regions.	New skills and experience create new neural connections.	Repetition and practice strengthens neural connections.	Connections in the brain that aren't used become weak.

Jockers. <https://drjockers.com/brain-regeneration/>

Ginger Root	
<ul style="list-style-type: none"> • Protects stomach lining, prevents intestinal parasites. • Prevents fatty liver. • Destroys bacteria, viruses, fungi, parasites. • Anti-inflammatory, analgesic (pain relief), anti-arthritis, reduces swelling. • Contributes essential fatty acids for cell membrane maintenance. • Analgesic (pain killer). • Rids respiratory system of phlegm, infections, colds, flu. • Antioxidant, detoxifier of accumulated toxic wastes. • Anticarcinogenic, chemopreventive. 	<ul style="list-style-type: none"> • Asparagines – a component of many proteins the body produces. • Choline – supports nerve, brain, muscle functions. • Caprylic acid – antimicrobial • Silica – essential for bones, tendons, aorta, kidneys, liver, hair, skin, nails.

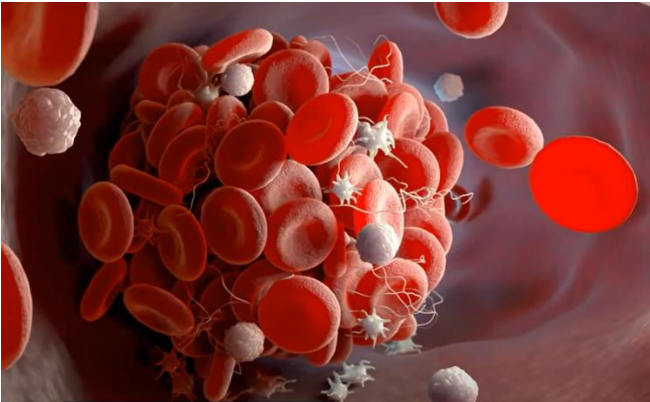
Ginger Contains Choline, a Neurotransmitter



Learn biology With Musawir - 2024
<https://www.youtube.com/shorts/hxUH4ars4MQ>

Grapefruit	
<ul style="list-style-type: none"> • Antifungal, antibacterial, antiprotozoal, antiviral. • Helps prevent strokes or heart attack; helps prevent clots or thrombi (mobilized clots). • Antioxidant anti-inflammatory. • Improves insulin resistance in metabolic syndrome health conditions. 	<ul style="list-style-type: none"> • Flavonoids – aids in glucose metabolism, pancreatic insulin function, antithrombotic. • Flavonone -Actions are similar to insulin. • Naringin – prevents oxidative free radical scavenging molecules.

Grapefruit Contains Naringin, Which Helps Prevent Arterial Damage That May Result in Blood Clots, Creating Blockages

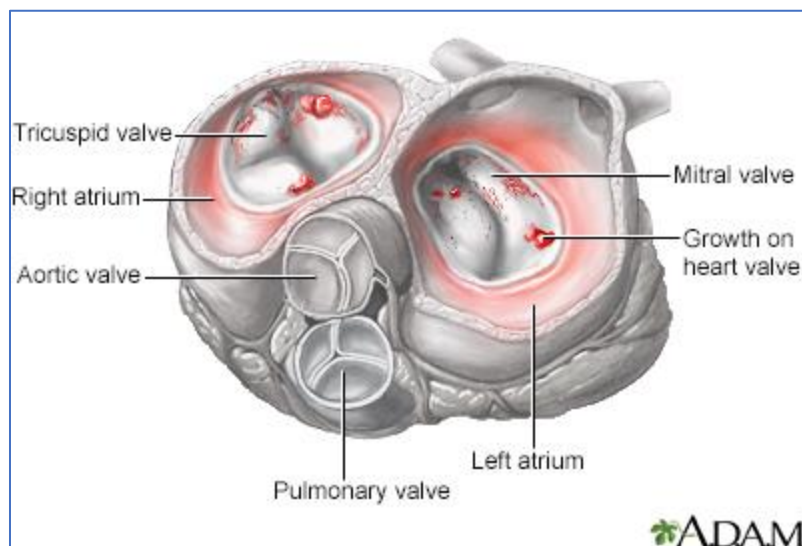


Blood Clot Symptoms & Signs - Michigan Foot Doctors - 2022
<https://www.youtube.com/watch?v=n9mk86ItNr4>

Licorice Root

- Improves resistance to infectious diseases.
 - Works to inhibit viruses: hepatitis C, HIV, viral myocarditis, influenza virus, herpes simplex type 1, rotavirus, syncytial virus.
 - Help destroy: *Candida albicans* yeast, antibiotic Methicillin-resistant bacteria *Staphylococcus aureus*.
 - Antitumor.
 - Anti-inflammatory.
 - Helps regulate, modulate immune system actions.
 - Reduces toxins by life-threatening bacteria (pneumonia, skin infections).
- Triterpenoids, flavonoids – immunomodulatory.
 - Saponins – Antiviral, antibacterial, anti-fungal.
 - Isoflavones – help control diabetes.
 - Liquiritigenin – reduces Staph bacteria exotoxin associated with endocarditis infection of the inner lining of heart chambers or valves.

In Endocarditis, an Infection of Heart Chambers and Valves, the Phytochemical Liquiritigenin in Black Currant Reduces Populations of Various Bacteria: *Staphylococcus aureus*; *Enterococcus*; *Streptococcus viridans*; and the Fungus, *Candida*

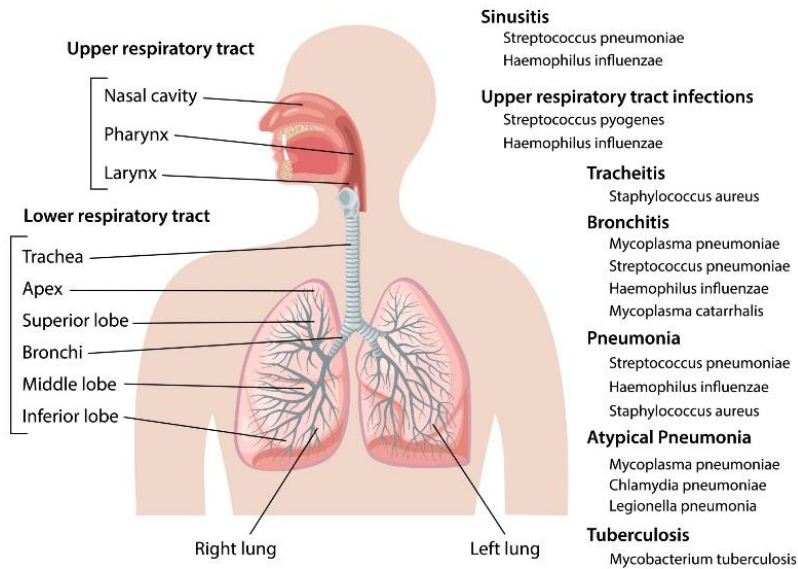


Penn Medicine 2024

<https://www.pennmedicine.org/for-patients-and-visitors/patient-information/conditions-treated-a-to-z/endocarditis>

<p style="text-align: center;">Mandarin</p> <ul style="list-style-type: none"> • Softens secretions in upper respiratory tract and bronchi. • Lowers risk of cancers of the gastrointestinal tract. • Lowers risk of stroke, improves blood lipids. • Antifungal, antiviral, antibacterial. • Prevents nerve spasms in muscle contractions. • Helps remove toxins via colon and kidneys. • Helps maintain proper acid/alkaline balance in stomach, prevents ulcers. • Aids digestion. • Aids the immune system. 	<ul style="list-style-type: none"> • Flavonoids – potent antioxidants that improve lifespan in the elderly. • Limonene essential oils – relieve stress, elevate mood, aid nerve, brain functions; aid hormone production. • Plant sterols – hormone precursors. • Carotenoids – protect against free radicals.
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Respiratory Tract Infections
Flavonoids, a Major Source of Antimicrobial Agents,
Inhibit, Suppress, and Block Those Infectious Substances' Access to Our Cells

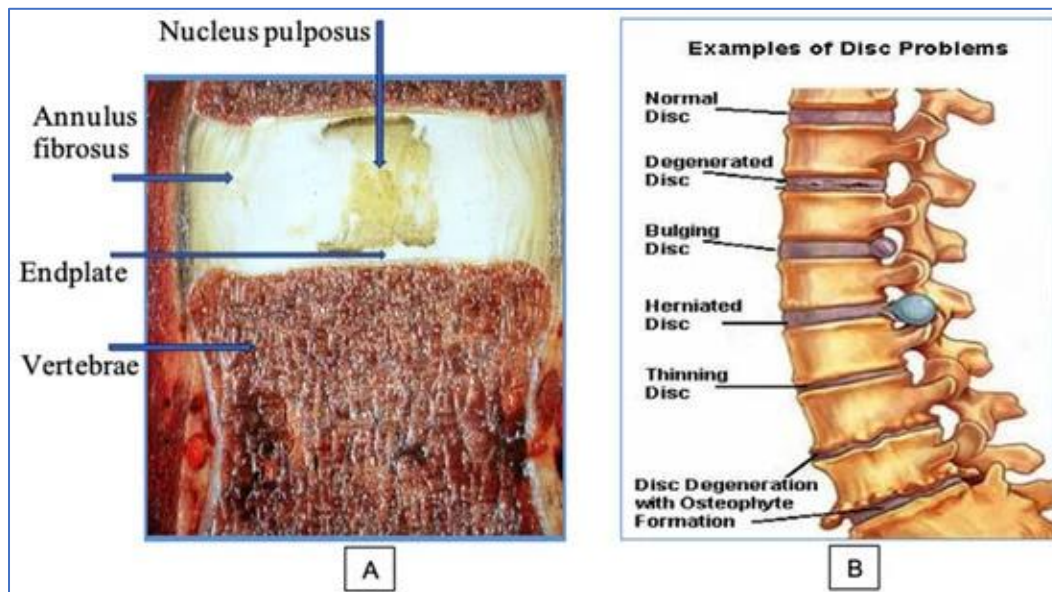


Patrick Daly, 2023

<https://docwirenews.com/post/predicting-respiratory-tract-infection-after-immune-thrombocytopenia-diagnosis>

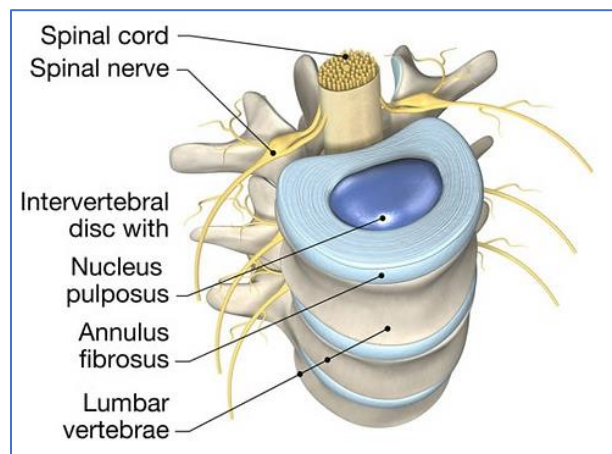
Papaya	
<ul style="list-style-type: none"> • Helps regenerate vertebral disc connective tissues. • Destroys intestinal parasites, antiviral, antifungal. • Prevents high blood pressure (anti-hypertensive). • Aids in wound healing, , normalizes blood clotting, reduces likelihood of scars. • Helps detoxify the liver. • Anti-inflammatory. • Helps prevent histamine reactions in the immune response. • Heals great variety of skin conditions. • Excellent digestive aid. 	<ul style="list-style-type: none"> • Papain – enzyme that breaks down protein (proteolytic enzyme). • A great variety of antioxidant compounds – antimicrobial, antitumoral, protecting against cardiovascular events, anti-free radical.

Papaya's Anti-inflammatory Proteolytic Enzyme Papain Breaks Down Abnormal Protein Structures and Reduces Inflammation



Baskov, et. al., 2022

<https://www.mdpi.com/2076-3417/12/2/675>



Body Plus Health, Kane Nurton, 2021

<https://www.bphealth.com.au/post/spinal-disc-s-what-are-they-and-what-do-they-do>

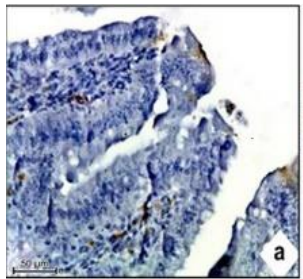
Pumpkin Seed

- Maintains muscle memory and control.
- Aid in cell membrane signaling, lipid transport.
- Important for protein synthesis, collagen formation.
- Aid immune system actions.
- Aids in wound healing.
- Aids in correct cell reproduction in synthesis of DNA and RNA.
- Eliminates parasites.

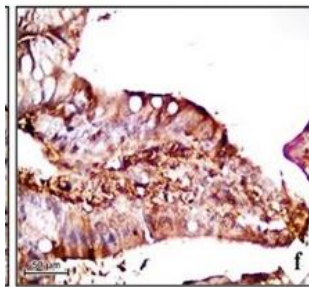
- Curcubitin – eliminates parasites (nontoxic to humans).
- Carotenoids –
- Choline – precursor of neurotransmitter acetylcholine.

Pumpkin Seed's Curcubitin Plant Compound Protects the Small Intestine Epithelial Tissue Linings

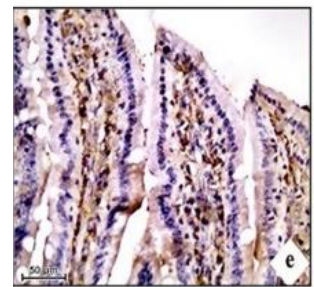
Uninfected



Infected With *Trichinella spiralis*



Parasite Expulsion After Ingesting Pumpkin Seed Mush



Saleh et. al., Pumpkin seeds (*Cucurbita pepo* subsp. *ovifera*) decoction promotes *Trichinella spiralis* expulsion. *Scientific Reports*. 2024
<https://www.nature.com/articles/s41598-024-51616-4>

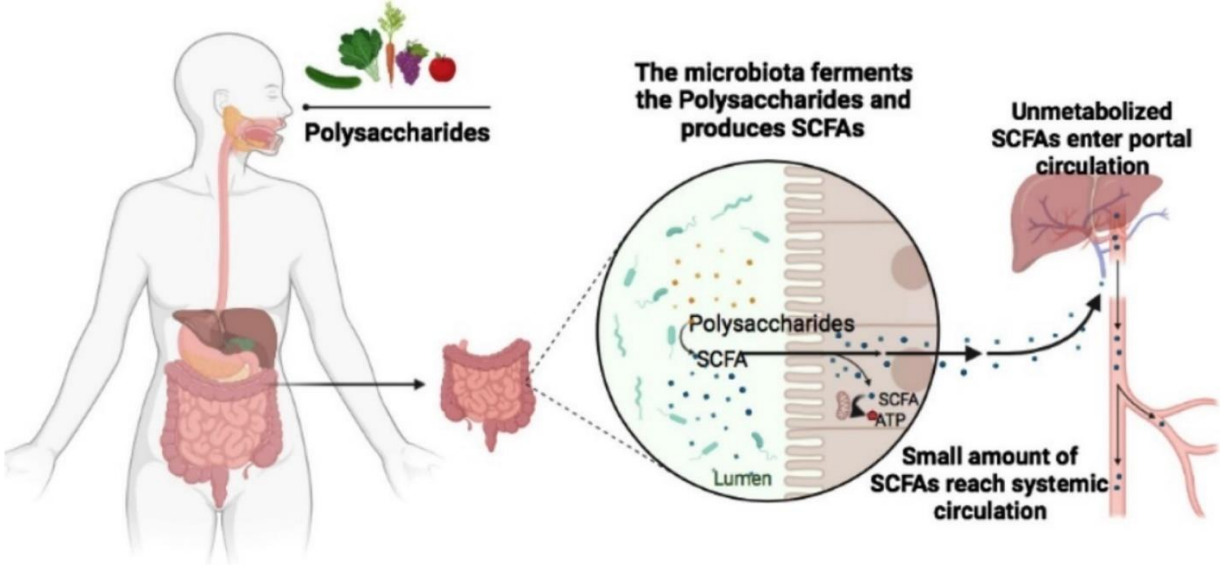
Intestinal *Trichinella spiralis* Infestation



Getty Images-Kateryna Kon Science photo Library
<https://create.vista.com/photos/Trichinella/>

Purple Coneflower (<i>Echinacea</i>)	
<ul style="list-style-type: none"> • Purifies blood, kidneys, liver. • Anti-inflammatory against infections of the respiratory, urinary systems. • Anti-bacterial. • Hormonal-regulating effects. • Maintains proper reactions of pro-inflammatory cytokine proteins in nerve injuries and immediate inactivation of viruses and bacteria. 	<ul style="list-style-type: none"> • Polysaccharides – aid in cell communications, cell membrane structures, and energy storage for fueling a diversity of biochemical processes. • Glycoproteins – protein-carbohydrates that protect nerve cells and their myelin sheath. • Flavonoids - aids in glucose metabolism, pancreatic insulin function, antithrombotic.

Polysaccharides – Complex Carbohydrates Forming Long Chains of Repeating Smaller Units of Saccharides or Sugars



Yu et al 2022

<https://www.sciencedirect.com/science/article/pii/S1756464622002249>

Biology
Online

Polysaccharide

Polysaccharides are carbohydrates formed by long chains of repeating units linked together by glycosidic bonds.

STARCH

CELLULOSE

GLYCOGEN

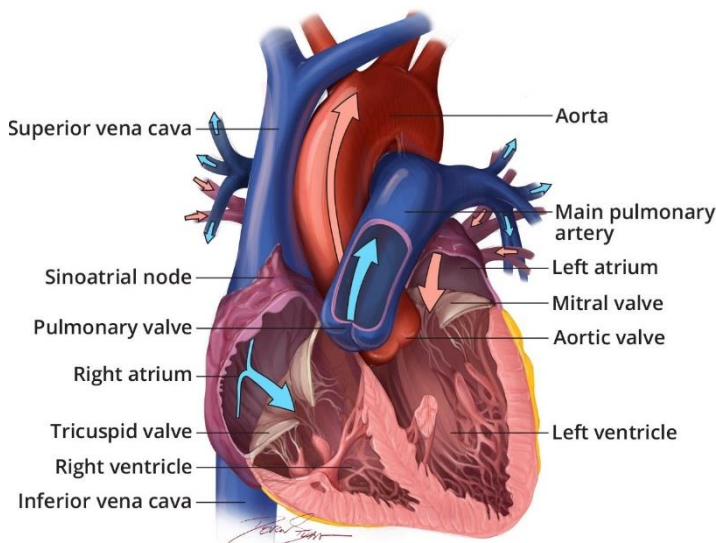
Biology Online

<https://www.biologyonline.com/dictionary/polysaccharide>


<p>Sweetie (Pomelo and White Grapefruit Hybrid)</p> <ul style="list-style-type: none"> • Effective against viral, flu, and respiratory infections. • Boosts the immune system, efficient elimination of infectious organisms (bacteria, viruses). • Normalizes blood pressure, prevents hypertension, swelling. • Improves cardiac function, blood vessel structures. • Digestive aid. • Restores liver and digestive tract functions. • Decreases fibrinogens (micro proteins that form obstructive scarring formed in abnormal blood clotting in anticoagulant actions). • Can lower low-density lipoprotein (LDL) cholesterol levels. 	<ul style="list-style-type: none"> • Polyphenolic flavonoid compounds – antihypertensive effects, reduction in diastolic blood pressure, antioxidants. • Flavonoids – anti-inflammatory
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Polyphenolic Flavonoids and Their Antihypertension Effects on Heart Functions
Systolic and Diastolic – Measuring Blood Pressure

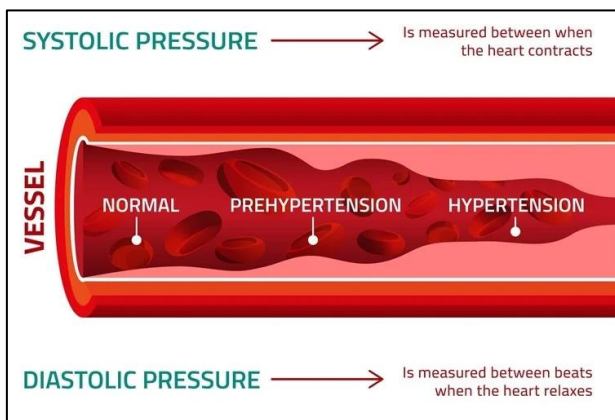
- *Systolic pressure* – maximum blood pressure during heart ventricle contraction.
- *Diastolic pressure* – minimum pressure recorded just before the next contraction after the heart chamber fills with blood again.
- A greater risk of stroke and heart disease are associated with higher systolic pressures compared to higher diastolic pressures.
- “Normal” or healthy variations of measurements depend on age, levels of stress, lifestyle activities, and level of fitness (Brzezinski, 1990).



BLOOD PRESSURE CHART			
BLOOD PRESSURE CATEGORY	MAX	mmHg	MIN
HIGH BLOOD PRESSURE - STAGE 4 HYPERTENSION - STAGE 4	ABOVE 210 ABOVE 120		HYPERSENSITIVE CRISIS
HIGH BLOOD PRESSURE - STAGE 3 HYPERTENSION - STAGE 3	180 110	210 120	
HIGH BLOOD PRESSURE - STAGE 2 HYPERTENSION - STAGE 2	160 100	179 109	
HIGH BLOOD PRESSURE - STAGE 1 HYPERTENSION - STAGE 1	140 90	159 99	
PRE-HIGH BLOOD PRESSURE PRE-HYPERTENSION	130 85	139 89	
HIGH NORMAL BLOOD PRESSURE	121 81	129 84	NORMAL BLOOD PRESSURE
NORMAL BLOOD PRESSURE IDEAL BLOOD PRESSURE	100 65	120 80	
LOW NORMAL BLOOD PRESSURE	90 60	99 64	
LOW BLOOD PRESSURE MODERATE HYPOTENSION	70 40	89 59	
TOO LOW BLOOD PRESSURE SEVERE HYPOTENSION	50 35	69 39	DANGEROUSLY LOW BLOOD PRESSURE
EXTREMELY LOW BLOOD PRESSURE EXTREMELY SEVERE HYPOTENSION	BELOW 50 BELOW 35		


 Jupiter Concierge Family Practice

NIH National Heart, Lung, and Blood Institute 2022
<https://internet-prod.nhlbi.nih.gov/health/heart/anatomy>



Jupiter Concierge Family Practice 2024
<https://www.jupiterfamilypractice.com/what-is-a-good-blood-pressure/>

Thyme Leaf

- Helps normalize blood pressure.
 - Effective against food-borne illness-causing *Pseudomonas*, *Salmonella*, *E. coli*, *Staph bacteria*, and the overgrowth of the yeast, *Candida albicans* (cause of thrush).
 - Kills larvae of mosquito that carries West Nile virus, Yellow fever virus, St. Louis encephalitis, dengue fever, Chikungunya fever.
 - Stimulates cancer cell self-destruction (apoptosis).
 - Antifungal, disinfecting agent.
 - Corrects conditions in gastrointestinal tract.
 - Reduces inflammation in mouth and throat mucous membranes.
- Polyphenols – antioxidants, prevent lipid peroxidation or formation of free radicals.
 - Essential oils – destroy infectious microbials; prevents formation of biofilm: essential oil effective against widespread foodborne pathogens.: *Staphylococcus aureus*, *Salmonella enterica* or *enterica* serovar, Typhimurium and *Bacillus cereus*.

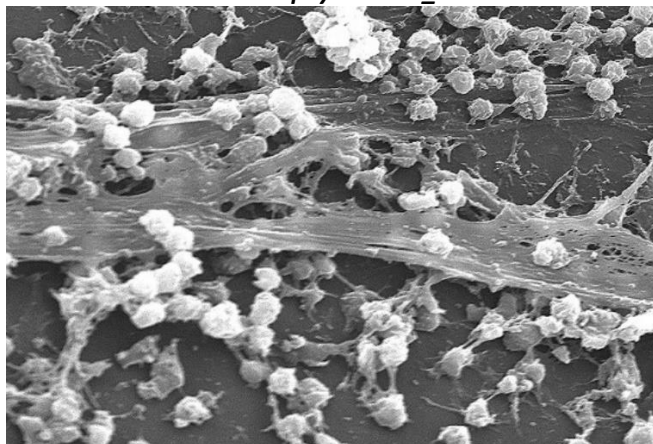
Essential Oils Contain Polyphenols Which Prevent Biofilm, a Slimy, Glue-like Substance That Forms When Bacteria Adhere to Surfaces in Moist Environments



Alfred B. Cunningham – Biofilms - 2010

<https://www.cs.montana.edu/webworks/projects/stevesbook/contents/chapters/chapter001/section002/black/page001.html>

Biofilm - *Staphylococcus aureus*

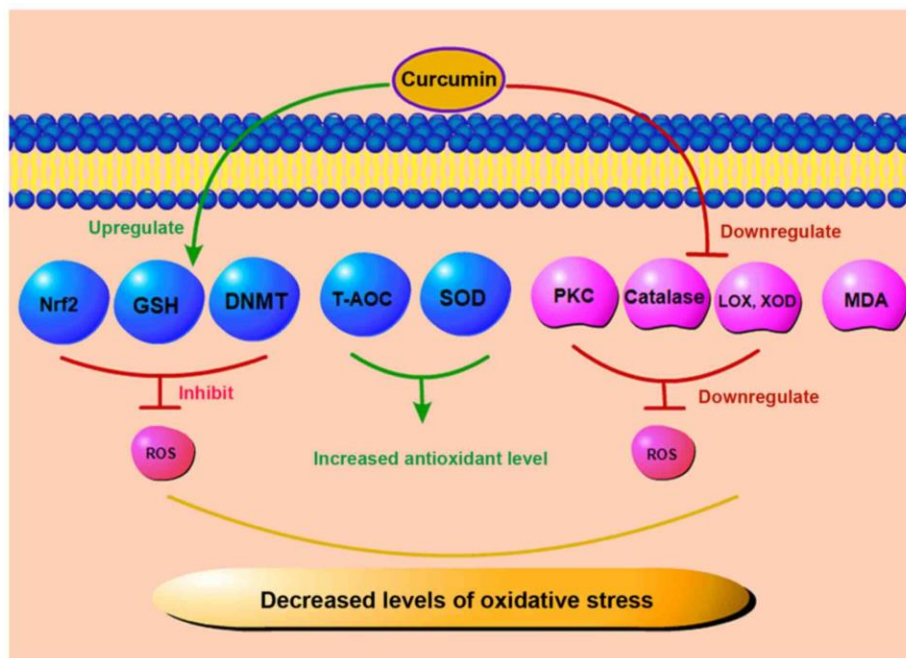


CDC - Rodney M. Donlan, Ph.D., Janice Carr 2005 Wikipedia

Turmeric Root	
<ul style="list-style-type: none"> • Improves fats digestion and liver functions. • Reduces inflammatory cytokines that disrupt glucose metabolism, lessens insulin resistance allowing uptake of glucose out of the bloodstream. • Aids immune system in reducing psychological stress responses. • Reduces inflammation in conditions of osteoarthritis, cardiovascular disease. • Exhibits cardio-protective anti-inflammatory properties preventing cardiac injuries, improving circulatory pathways while destroying/neutralizing free radicals. • Prevents and improves neurodegenerative processes, prevents the formation of plaques in microcirculatory pathways in the brain, prevents shrinking of hippocampus (learning and memory). • Strong antimicrobial. • Blocks enzymes needed for cancer growth, prevents tumor development, destroys cancer cell cultures <i>in vitro</i>. • Found to be effective against serious conditions in every body system. 	<ul style="list-style-type: none"> • Curcuminoids – free radical neutralizers of synthetic agricultural, industrial, and processed food chemicals. • Essential oils and resins – protective of the brain environment, reversing age-related brain conditions

Anti-Inflammatory and Antioxidant Actions of Curcuminoids in Turmeric

- Increased production of antioxidant biochemicals (blue spheres) that inhibit the damaging free radical ROS (reactive oxygen species).
- Decreased ROS free radical biochemical damaging actions by reducing cell responsiveness under conditions of prolonged responses to stressors.



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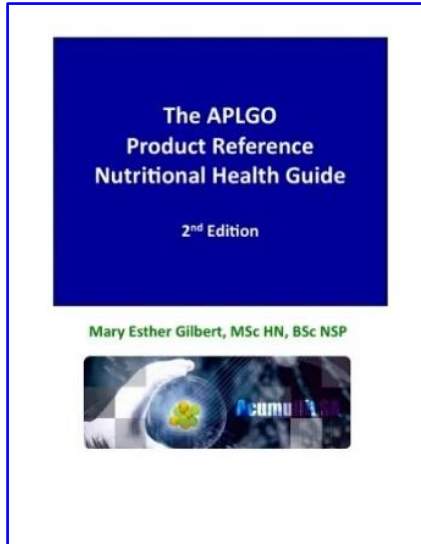
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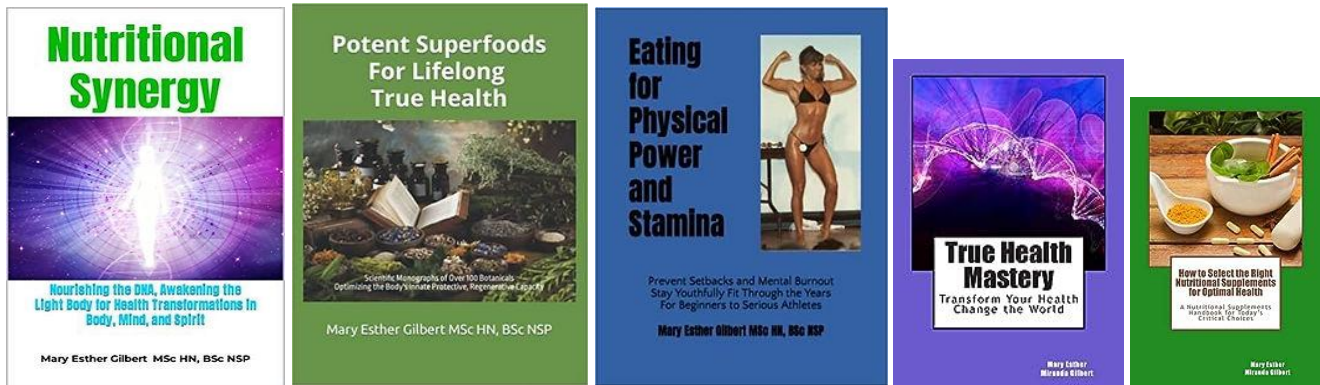
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