

Are you ever too young or old to learn something new??

CCS Church Challenge, Health Platform Workshop Series ~ Module 3

Please carefully consider the Common Sense of what is presented here $oldsymbol{\downarrow}$

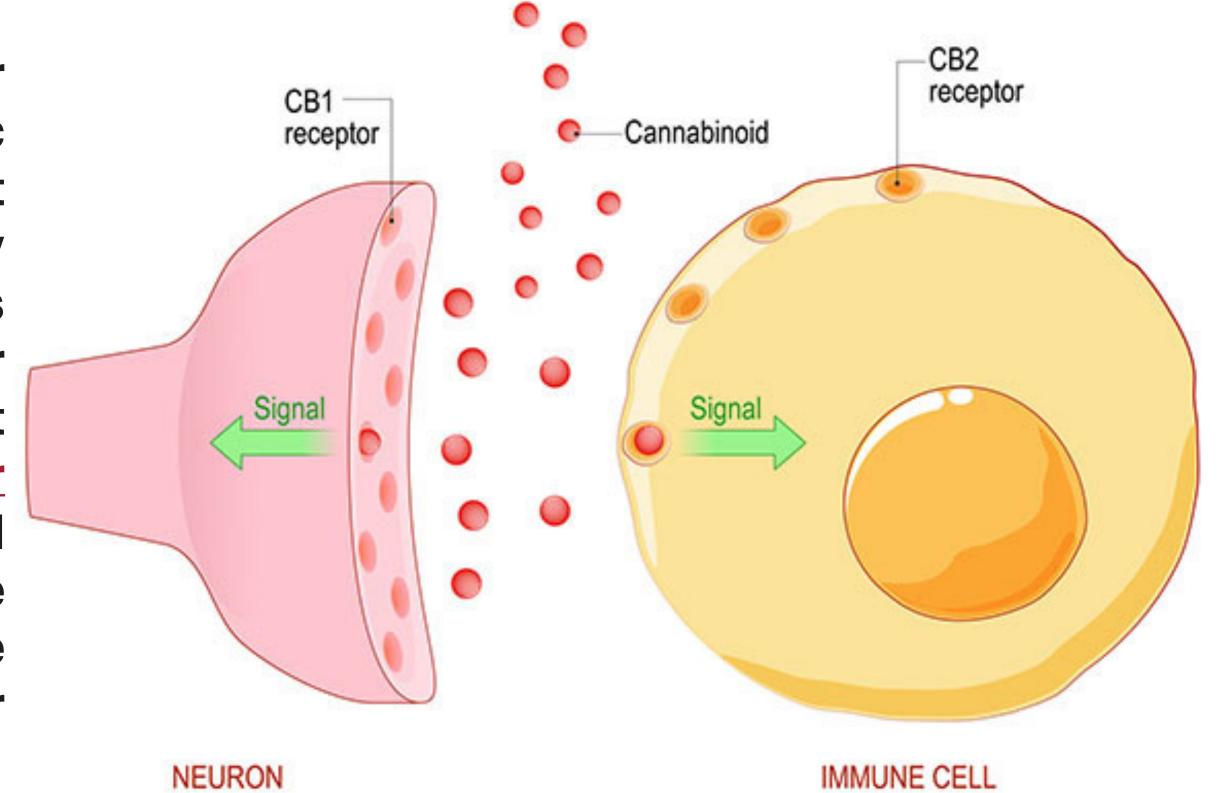
ChurchofCommonSense.Life/ChurchChallenge

Created by: Pastor Steve 'GodMed' ~ Messenger of Common Sense

The EndoCannabinoid System: Essential and Mysterious

What is the ECS?

Many of us have heard of some of the transmitter systems within our bodies, such as the sympathetic nervous system, which gives us our fight-or-flight response. Fewer have heard of the more recently discovered endocannabinoid system (ECS), which is amazing when you consider that the ECS is critical for almost every aspect of our moment-to-moment functioning. The ECS regulates and controls many of our most critical bodily functions such as learning and memory, emotional processing, sleep, temperature control, pain control, inflammatory and immune responses, and eating. The ECS is currently at the center of renewed international research and drug development.



The ECS comprises a vast network of chemical signals and cellular receptors that are densely packed throughout our brains and bodies. The "cannabinoid" receptors in the brain — the CB1 receptors — outnumber many of the other receptor types on the brain. They act like traffic cops to control the levels and activity of most of the other neurotransmitters. This is how they regulate things: by immediate feedback, turning up or down the activity of whichever system needs to be adjusted, whether that is hunger, temperature, or alertness. https://www.health.harvard.edu/blog/the-endocannabinoid-system-essential-and-mysterious-202108112569

To stimulate these receptors, our bodies produce molecules called endocannabinoids, which have a structural similarity to molecules in the cannabis plant. The first endocannabinoid that was discovered was named anandamide after the Sanskrit word *ananda* for bliss. All of us have tiny cannabis-like molecules floating around in our brains. The cannabis plant, which humans have been using for about 5,000 years, essentially works its effect by hijacking this ancient cellular machinery.



The ECS is a biological system that plays diverse roles in regulating various aspects of health. ECS actions on the central and peripheral nervous systems are numerous, such as helping to moderate stress responses and pain sensations, supporting mood and memory, and performing immunomodulatory functions like reducing inflammation, to name a few.

Vertebrate EndoCannabinoid System

Arguably the most important system in our Bodies!!!

[The role of the endocannabinoid system in the regulation of endocrine function and in the control of energy balance in humans]

The endocannabinoid system has been recently recognized as an important modulatory system in the function of brain, endocrine, and immune tissues. It appears to play a very important regulatory role in the secretion of hormones related to reproductive functions and response to stress. The important elements of this system are: EndoCannabinoid Receptors (types CB1 and CB2), their endogenous ligands (Narachidonoylethanolamide, 2-arachidonoyl glycerol), enzymes involved in their synthesis and degradation, as well as Cannabinoid antagonists. In humans this system also controls energy Homeostasis and mainly influences the function of the food intake centers of the central nervous system and gastrointestinal tract activity. The endocannabinoid system regulates not only the central and peripheral mechanisms of food intake, but also lipids synthesis and turnover in the liver and adipose tissue as well as glucose metabolism in muscle cells. Rimonabant, a new and selective central and peripheral Cannabinoid-1 receptor (CB1) blocker, has been shown to reduce body weight and improve cardiovascular risk factor (metabolic syndrome) in obese patients by increasing HDL-cholesterol and adiponectin blood levels as well as decreasing LDL-cholesterol, leptin, and C-reactive protein (a proinflammatory marker) concentrations. It is therefore possible to speculate about a future clinical use of CB1 antagonists, as a means of improving gonadotrophin pulsatility and fertilization capacity as well as the prevention of cardiovasculary disease and type 2 diabetes mellitus. Drugs acting as agonists of CB1 receptors (Dronabinol, Dexanabinol) are currently proposed for evaluation as drugs to treat neurodegenerative disorders (Alzheimer's and Parkinson's diseases), epilepsy, anxiety, and stroke. <u>pubmed.ncbi.nlm.nih.gov/17369778</u> ~ Several similar articles here

Apoptosis: What is it and what is the role of Cannabinoids?

- How Cannabis Causes Cancer Cells to Die
- What is Apoptosis?
- Cannabis Affects Cancer Apoptosis in Many Ways
- How CBD Affects Programmed Cancer Cell Death
- How THC Kills Cancer Cells
- CBD, THC and Phytonutrients in Cannabis Work Together to Fight Cancer

unitedpatientsgroup.com/blog/apoptosis-cancer-cannabinoids/#How Cannabis Causes Cancer Cells to Die

Apoptosis can be thought of as the "clean" means of cell death. Between 50 and 70 billion cells in your body die each day as a result of apoptosis—

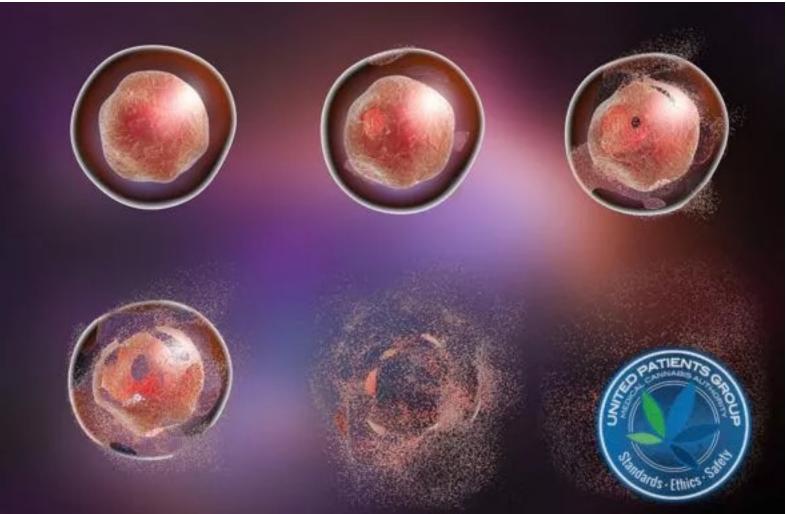
and this is a good thing. The process of Apoptosis leads to cell Regeneration, Cellular Morphogenesis, the

Maintenance of Healthy Tissue and the Elimination of Harmful Cells.

Apoptosis is a process that happens to all healthy cells. Just like all living beings, cells are meant to be born, live their life and then expire. Healthy cells die in two ways: through necrosis and through apoptosis. In necrosis, a cell is

damaged by an external force such as an injury, a poison, an infection or a drastic cutting off of blood supply. When

necrosis happens, it causes much strain on the body through accompanying inflammatory responses.



While healthy cells succumb to Apoptosis by the billions every day, <u>cancer cells</u> are a whole other story. What makes cancer so unique (and scary) is that the mechanisms of Apoptosis have mutated and have basically been turned off in cancer cells. Because of this, malignant cells do not die. Instead, they continue to multiply and spread indefinitely.

There are dozens of natural substances out there that have the ability to effect Apoptosis in cancer cells. Phytonutrients such as <u>curcumin</u> in turmeric, <u>sulphoraphane</u> in broccoli sprouts and <u>oleocanthal</u> in olive oil are just three well-studied examples.





The Awesome Health Benefits Of Raw Cannabis Explained

From a Nutritional Perspective, Cannabis should be included in the list of Superfoods along with Spinach, Kale, and Broccoli.

Dr. William Courtney, MD, a member of International Cannabinoid Research Society, the International Association of Cannabis as Medicine, and the Society of Clinical Cannabis and the American Academy of Cannabinoid Medicine, says that he doesn't want to refer to marijuana as a medicine, but as a dietary essential. Dr. Courtney's reasons, why raw cannabis is good: One can make the best use of the therapeutic properties of marijuana, through ingestion. Raw cannabis activates the brain's cannabinoid system, more effectively, which in turn, triggers the release of antioxidants. These antioxidants will effectively get rid of the damaged cells in the body, and this is something that dried cannabis, can do. Raw cannabis consumption makes the cells in the body, more efficient.

Raw Cannabis Consumption: A Better Step Towards Health https://thefreshtoast.com/advice/health-benefits-of-raw-marijuana/

Loaded with proteins, minerals, vitamins, fibers, and antioxidants, raw cannabis is rich in digestible globular proteins, and the balanced proportions of essential amino acids (the amino acids that cannot be synthesized in our body). Raw marijuana has an ideal ratio of omega-3 fatty acids and omega-6 fatty acids, with antioxidant properties. Antioxidants are very much important for the overall well-being, as these preserve health, boost the immune system, reduce the risk of heart diseases, address diabetes complications, and most importantly, lower the risk of cancer development.

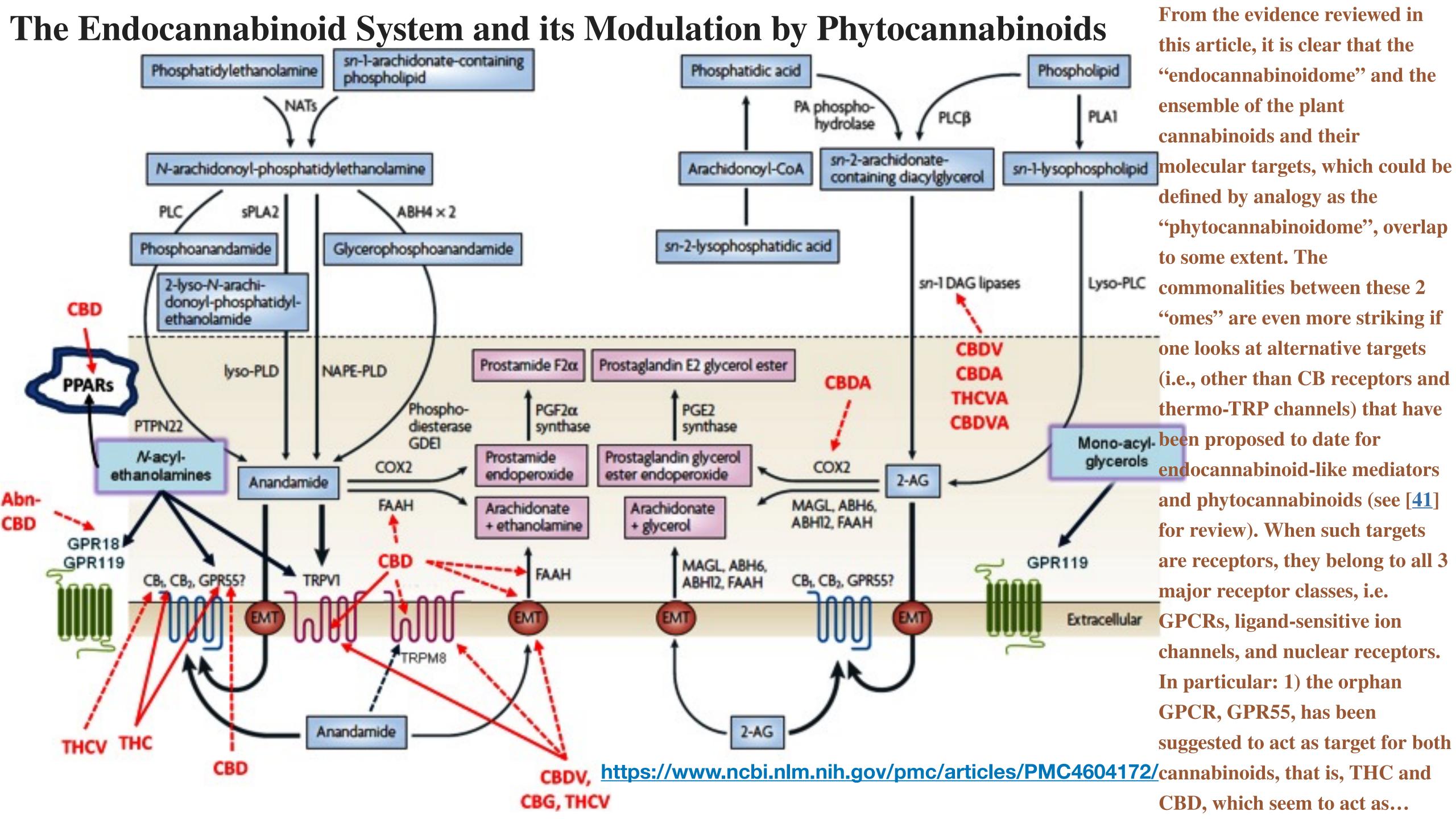
During the normal drying and curing process of marijuana, the chlorophyll pigment from the herb is lost; however, it is this component that has loads of dietary benefits. Chlorophyll has the ability to rejuvenate the body, at the cellular level. With its structure similar to that of hemoglobin, chlorophyll has plenty of benefits such as it prevents DNA damage, promotes overall cleansing or detoxification within the body, encourages healing, treats inflammation, improves the iron content absorption, etc.

Top 8 Health Benefits of Consuming Raw Cannabis

Raw Cannabis/Hemp contains Vital Nutrients, Raw Cannabis/Hemp is non-psychoactive, Raw Cannabis/Hemp provides Essential Fatty Acids, Raw Cannabis/Hemp is loaded with Antioxidants, Raw Cannabis/Hemp Preserves Terpene content, Raw Cannabis/Hemp provides Anti-Inflammatory Properties, Raw Cannabis/Hemp contains every Essential Amino Acid, Raw Cannabis/Hemp supports Optimum Health...

Raw Cannabis/Hemp provides the body with Vital Nutrients, Minerals, and Vitamins that are not present when smoked. In addition, raw Cannabis supplies the body with larger doses of beneficial Cannabinoids. Although these Cannabinoids can be obtained through smoking or eating Cannabis, more Cannabinoids are Ingested when Consumed in Raw Form. This is because when heat is applied, the body is not able to process as many Cannabinoids. Cannabinoids are shown to play a significant role when it comes to our health. Interacting with the body's EndoCannabinoid System, or ECS, Cannabinoids play a vital role in many physiological processes. In 2004, the term Clinical Endocannabinoid Deficiency (CEDC) was coined by Dr. Ethan Russo. CEDC has been linked to the development of various diseases such as immune system disorders, chronic pain, and fatigue. While the research is still developing, it is now believed consuming sufficient doses of cannabinoids can help prevent the development of CEDC. In other words, consuming Cannabinoids can ward off Diseases and support Optimum Health and Functioning. Consuming raw Cannabis/Hemp can provide a number of outstanding health benefits. However, it is important that only quality Cannabis is ingested. Many forms of Cannabis/Hemp on the market contain harmful pesticides or insecticides, which could exacerbate health problems. Always source clean Organic Herbs before consuming raw. https://unitedpatientsgroup.com/blog/top-8-health-benefits-of-consuming-

raw-cannabis/#Raw_cannabis_contains_vital_nutrients



ADD w hyperactivity	ADD	Acute Gastritis	Acute Sinusitis	Adrenal Cortical Cancer	T	Hyperventilation	Cough	Epilepsy	Gastritis	Dysthymic Disorder	Lipomatosis
Amphetamine	ADD	Acute Gastiitis	Arthritis, post	Caricer	R	Insomnia	Sleep Apnea	Spinal Stenosis	Testicular torsion	Tietze's Syndrome	Lymphoma
Depend	Alcohol Abuse		traumatic	Back Sprain	E	Ischemic Heart Disease	Angina pectoris	Arthritis, Degenerative	Charcot-Marie-Tooth	Cerebral Palsy	Melorheostosis
Ankylosis		Nystagmus, Congenital	Osgood-Schlatter	Other spinal cord disease	A	Macular	Glaucoma	Intervertebral Disk Disease	L-S disk disorder sciatic nerve irritation	Limbic Rage	Muscular
Anxiety Disorder	Panic Disorder	Post W.E. Enephalitis	Pulmonary Fibrosis	Psoriasis	T	Degeneration Malignant Melanoma		Polyarteritis Nodosa	Psychogenic Hyperhidrosi	Peripheral enthesopathies	dystrophies Neurasthenia
·	Felty's Syndrome	Hepatitis-non- viral	Intermittent Explosive	Hypoglycemia	3		Migraine,	Menopausal	Obsessive		
	Mucopolysacc haroidosis	Mononeuritis lower limb	Opiate Dependence	Osteogenesis imperfecta	A	Migraine Nail patella	Classical Peutz-Jehgers	syndrome	Compulsive Disorder	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Obesity, morbid Organic Mental
Atrophy Blanche	Alopecia	Arteriosclerotic Heart Disease	Cardiac conduction	Bipolar Disorder	er T	Nightmares Optic neuritis Pain, Ureter Paraplegia	Syndrome Bulemia	Rosacea Chronic Fatigue Syndrome	Spina Bifida Occulta Colon diverticulitis	Sedative Dependence Conjuctivitis	Disorder Patellar chondromalacia
Autoimmune disease	Hemophilia A	Knee, ankle & foot injury	Lyme Disease	Marfan syndrome			Strabismus	Tension Headache	Tic disorder unspecific	Tinnitus	Pemphigus
Bruxism	Stuttering	Thyroiditis	Tremor/Invol Movements	Tourette's Syndrome			Cachexia Paralysis,	Cluster Headaches	Color Blindness	Constipation Psychogenic	Persistent Insomnia Post Cardiotomy
Cervicobrachia I Syndrome	Lumbosacral Back Diseas	Major Depression, Single Episode	Motion Sickness	Nephritis/ nephropathy			unspecific Nonpsychotic	Prostate Cancer	Scleroderma	Pylorospas	Syndrome
	Diabetic Ophthalmic	Fibromyagia/	Grand Mal		S	Post Concussion Sydrome Premenstrual	Organic Brain Disorder	Pneumothorax, Spontaneo	Psoriatic Arthritis	Peptic Ulcer/ Dyspepsia Post Traumatic Stress	Post Polio Syndrome
	Disease	Fibrositis	Seizures	Eczema	1	Syndrome Pylorospasm	Pain, Vaginal Regional Enteri &	Porphyria	Psychogenic Pain	Disorder	Pruritus, pruritic
Syndrome Post	Peritoneal pain	Pschogenic PAT	Senile Dementia	Reiters Syndrome	2	Reflux Raynaud's	Crohns Thromboangiitis		Testicular Cancer	Tic Doloroux	Psychogenic Dysuria
Dupuytens	Muscle Spasm	Other CNS demyelinating	Parkinsons Disease	Pelvic Inflammatory	6	Disease Reflex Sympath	Obliteran	Tobacco Dependence Other arthropod bone		Trichotillomania Paroxysmal Atrial	Quadriplegia
	Asthma, unspecific	Brain Trauma	Chemotherapy Convales	Chronic Sinusitis	4	Dystroph Schizoaffective	Multiple Sclerosis	•	Pancreatitis	Tach	Radiation Therapy
Epidermolysis	Erythma Multiforma	Henoch-	Hemiparesis/ plegia	Huntingtons Disease	A	Disorder	Mania	Mastocytosis	Myeloid leukemia Diabetic Peripheral	Neuropathy Diabetes Insulin	Schizophrenia
Fore Arm/ Wrist/Hand			Major Depression,	Myofacial Pain	L	Spondylolisthesis	Cerebral Aneurism	Epididymitis	Vascular Disease	Dependent	Shoulder Injury
pain	Hip Pain	Lupus	Recurring	Syndrome	I M E N	T.M.J Sydrome Thoracic Outlet Syndrome Urethritis/Cystitis	GastroEsophgeal Reflux Disease (GERD)	Hiccough	Lower Back Pain	IVDD Cerv w Myelopathy	Sturge-Weber Eye Syndrome
Ataxia	Ataxia	Dyslexic Amblyopia	Diabetes Adult Onset	Dermatomyositis			Carpal Tunnel Syndrome	Diabetic Neuropathy	Darier's Disease	Delerium Tremens	Syringomyelia
	AIDS Related Illness	Alcoholism	Amytrophic Lateral Sclerosis	Arthropathy, Degenerative			Prostatitis	Scoliosis	Sturge-Weber Disease	Shingles (Herpes Zoster)	Tenosynovitis
	Cancer, site unspecified	Colitis	Compression of Brain	Cystic Fibrosis	T	Viral B Hepatitis, chronic	Viral C Hepatitis, chronic	Vertebral dislocation	Whiplash	Uterine cancer	Trachoria Growths
	Acquired hypothyroidsm	Agoraphobia	Amyloidosis	Anaphylactic or Reaction	S	Writers' Cramp	Impotence, Psychogenic	Lympho & reticular cancer	Meniere's Disease	Nausea	Ureter spasm calculus

Here's just 22 of over 500 healing molecules within Cannabis and Hemp ~ Phytocannabinoids, their boiling points, & properties 1. Δ-9-TetraHydroCannabinol (THC) Boiling point: 157*C / 314.6 degree Fahrenheit Properties: Euphoriant, Analgesic, Anti-inflammatory, Antioxidant, Antiemetic

- 2. Cannabidiol (CBD) Boiling point: 160-180*C / 320-356 degree Fahrenheit Properties: Anxiolytic, Analgesic, Antipsychotic, Anti-inflammatory, Antioxidant, Antispasmodic
 3. Cannabinol (CBN) Boiling point: 185*C / 365 degree Fahrenheit Properties: Oxidation, breakdown, product, Sedative, Antibiotic
- 3. Cannabinol (CBN) Boiling point: 185*C / 365 degree Fahrenheit Properties: Oxidation, breakdown, product, Sedative, Antibiotic
- 4. Cannabichromene (CBC) Boiling point: 220*C / 428 degree Fahrenheit Properties: Anti-inflammatory, Antibiotic, Anti-fungal
- 5. Δ-8-TetraHydroCannabinol (Δ-8-THC) Boiling point: 175-178*C / 347-352.4 degree Fahrenheit Properties: Resembles Δ-9-THC, Less psychoactive, More stable Antiemetic
- 6. TetraHydroCannabiVarin (THCV) Boiling point: 220*C / 428 degree Fahrenheit Properties: Analgesic, Euphoriant

Terpenoid essential oils, their boiling points, & properties

- 7. β-myrcene Boiling point: 166-168*C / 330.8-334.4 degree Fahrenheit Properties: Analgesic. Anti-inflammatory, Antibiotic, Anti-mutagenic
- 8. β-caryophyllene Boiling point: 119*C / 246.2 degree Fahrenheit Properties: Anti-inflammatory, Cytoprotective (gastric mucosa), Antimalarial
- 10. linalool Boiling point: 198*C / 388.4 degree Fahrenheit Properties: Sedative, Antidepressant, Anxiolytic, Immune potentiator
- 11. pulegone Boiling point: 224*C / 435.2 degree Fahrenheit Properties: Memory booster, AChE inhibitor, Sedative, Antipyretic
- 12. 1,8-cineole (eucalyptol) Boiling point: 176*C / 348.8 degree Fahrenheit Properties: AChE inhibitor, Increases cerebral, blood flow, Stimulant,
- Antibiotic, Antiviral, Anti-inflammatory, Anti-nociceptive
 13. a-pinene Boiling point: 156*C / 312.8 degree Fahrenheit Properties: Anti-inflammatory, Bronchodilator, Stimulant, Antibiotic, Anti-neoplastic, AChE inhibitor

14. a-terpineol Boiling point: 217-218*C / 422.6-424.4 degree Fahrenheit Properties: Sedative, Antibiotic, AChE inhibitor, Antioxidant, Antimalarial

9. d-limonene Boiling point: 177*C / 350.6 degree Fahrenheit Properties: Cannabinoid agonist?, Immune potentiator, Antidepressant, Anti-mutagenic

- 15. terpineol-4-ol Boiling point: 209*C / 408.2 degree Fahrenheit Properties: AChE inhibitor. Antibiotic
- 16. p-cymene Boiling point: 177*C / 350.6 degree Fahrenheit Properties: Antibiotic, Anti-candidal, AChE inhibitor 17. borneol Boiling point: 210*C / 410 degree Fahrenheit Properties: Antibiotic, Δ-3-carene 0.004% 168 Anti-inflammatory
- 18. Δ-3-carene Boiling point: 168*C / 334.4 degree Fahrenheit Properties: Anti-inflammatory

Flavonoid & Phytosterol components, boiling points, & properties

- 19. apigenin Boiling point: 178*C / 352.4 degree Fahrenheit Properties: Anxiolytic, Anti-inflammatory, Estrogenic
- 20. quercetin Boiling point: 250*C / 482 degree Fahrenheit Properties: Antioxidant, Anti-mutagenic, Antiviral, Anti-neoplastic
- 21. cannflavin A Boiling point: 182*C / 359.6 degree Fahrenheit Properties: COX inhibitor, LO inhibitor
- 22. β-sitosterol Boiling point: 134*C / 273.2 degree Fahrenheit Properties: Anti-inflammatory, 5-α-reductase, inhibitor