



"Cannabis As A Global Solution" TM

Dr. Uma Dhanabalan, MD MPH FAAFP MRO CMS

Kansas City, Missouri

June 9-11, 2022

Dr. Uma Dhanabalan, MD MPH FAAFP MRO CMS

- New Jersey Medical School-UMDNJ (Newark New Jersey)
 - Medical Degree
- Medical University of South Carolina (Charleston South Carolina)
 - Residency Family Medicine
- Harvard School of Public Health (Boston Massachusetts)
 - Masters in Public Health
 - Residency Occupational & Environmental Medicine
 - Fellowship in Heavy Metals
- Medical Review Officer Council
 - Certified Medical Review Officer
- American Academy of Cannabinoid Medicine
 - Diplomat Cannabinoid Medicine Specialist



Disclosures

Founder/CEO

Global Health & Hygiene Solutions, LLC (2006)

Promote Wellness & Prevent Illness™

Uplifting Health & Wellness (2014)

• Educate Embrace Empower™

Registered Trademarks®

- Cannabis The Exit Drug®
- Dr. Uma Says®

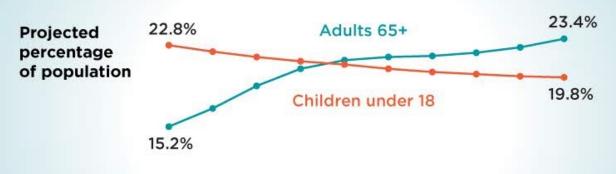


Objectives

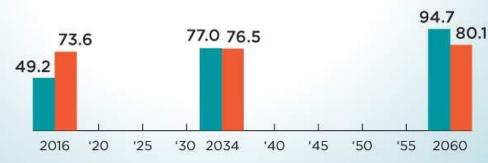
- What Are The Global Issues?
- What Is Cannabis, Difference Between Hemp & Marijuana?
- What Is The History Of Cannabis?
- What Is The Endocannabinoid System (ECS)?
- How Does Cannabis Works With The ECS?
- What Are Dr. Uma's 5 P's?



For the First Time in U.S. History Older Adults Are Projected to Outnumber Children by 2034







Note: 2016 data are estimates not projections.



U.S. Department of Commerce U.S. CENSUS BUREAU census.gov

Source: National Population Projections, 2017 www.census.gov/programs-surveys /popproj.html

Common Chronic Conditions for Adults 65+



80% have have at least 1 chronic condition



68% have 2 or more chronic conditions







High Cholesterol 47%



Arthritis 31%

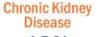


Ischemic Heart Disease (or Coronary Heart Disease) 29%



Diabetes 27%





18%



Heart Failure 14%



Depression 14%



Alzheimer's Disease and Dementia 11%



Chronic Obstructive **Pulmonary Disease**

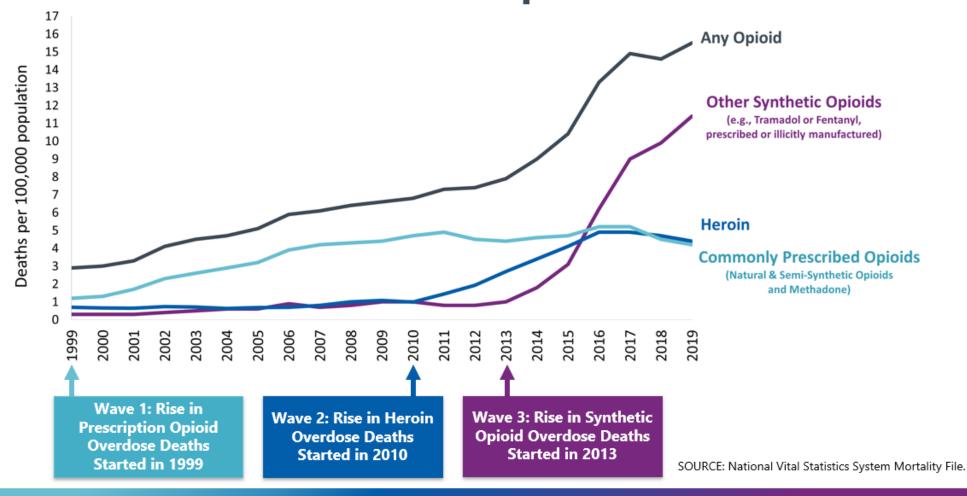
11%



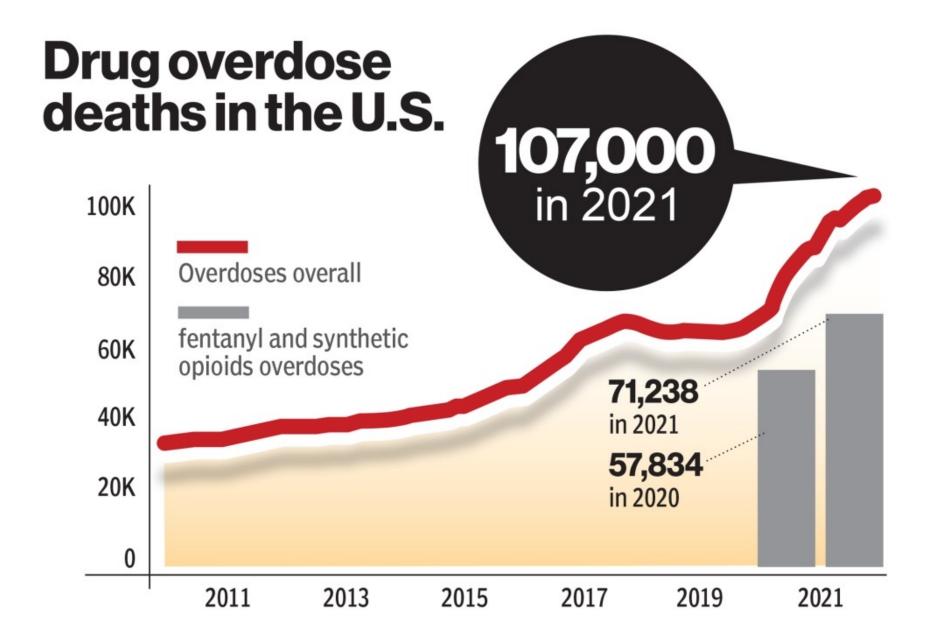
ncoa.org
© 2017 National Council on Aging, Inc. All rights reserved. Unautherized use prohibited.



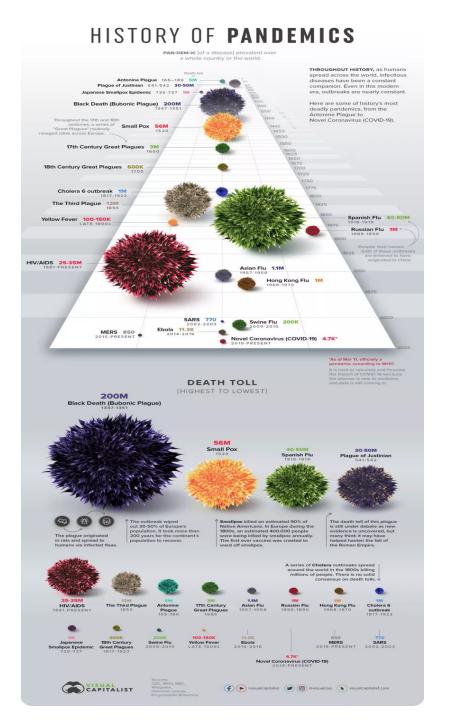
Three Waves of the Rise in Opioid Overdose Deaths

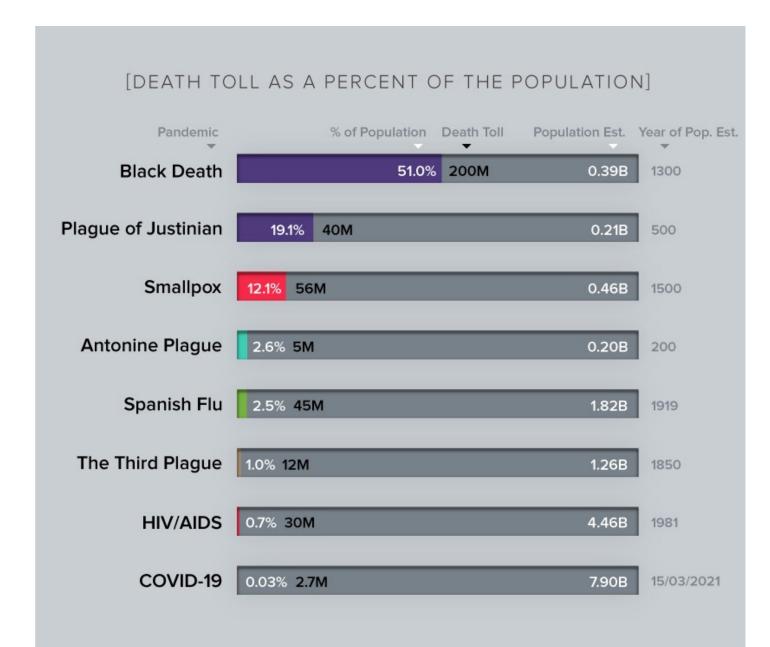










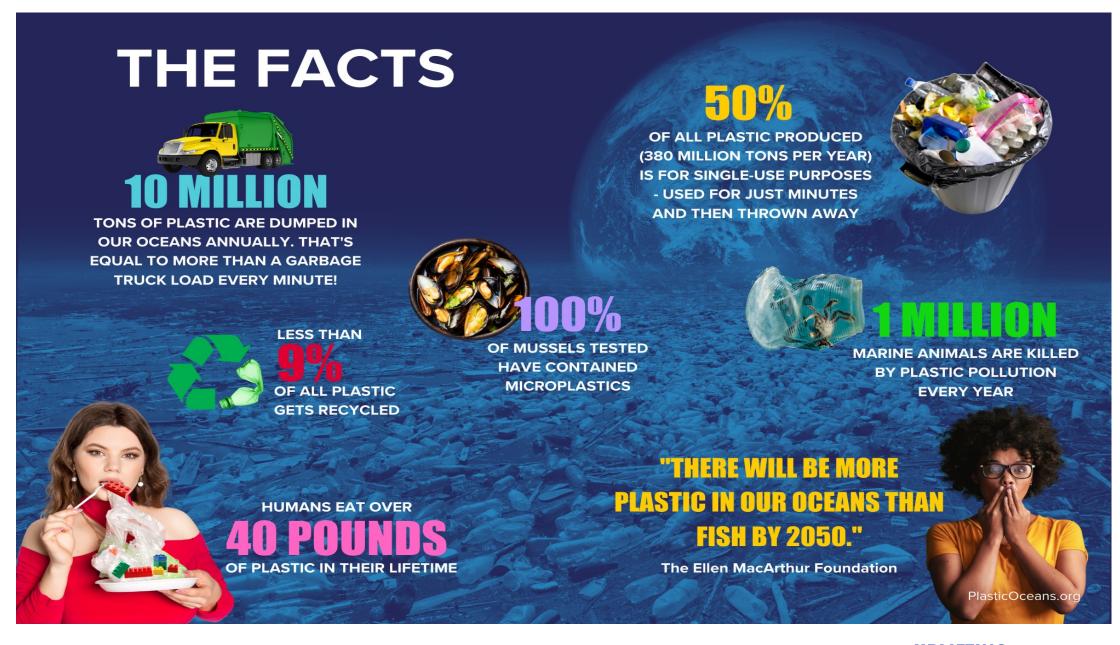


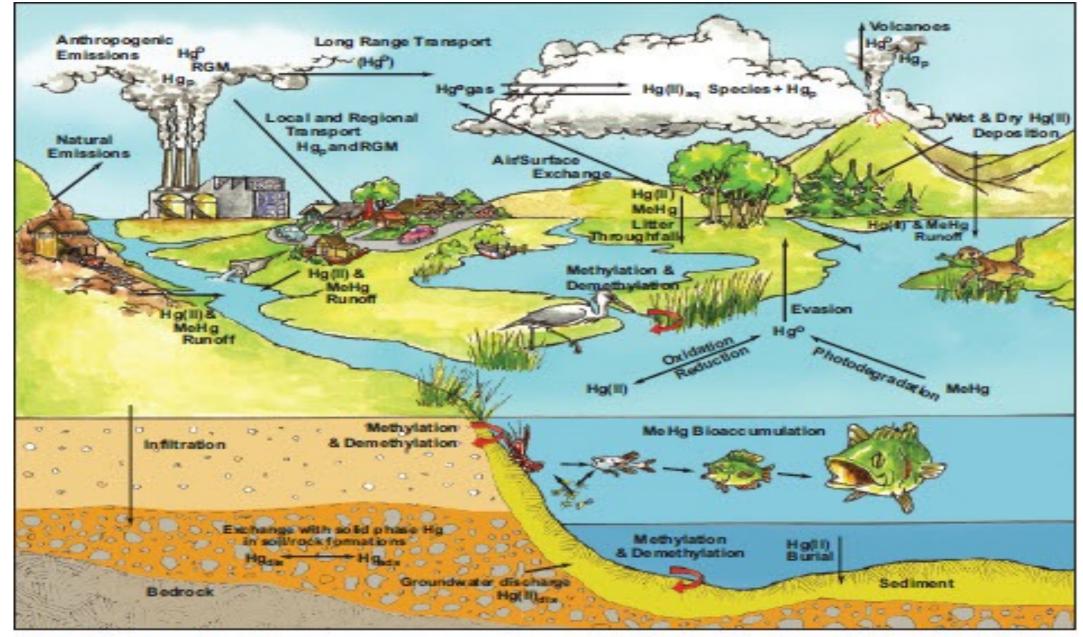


"The Earth, our home, is beginning to look like an immense pile of filth." Pope Francis



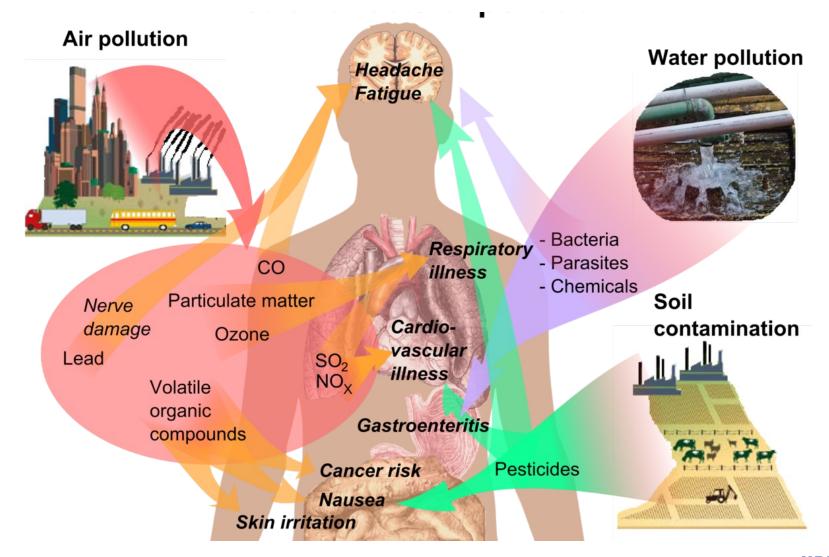




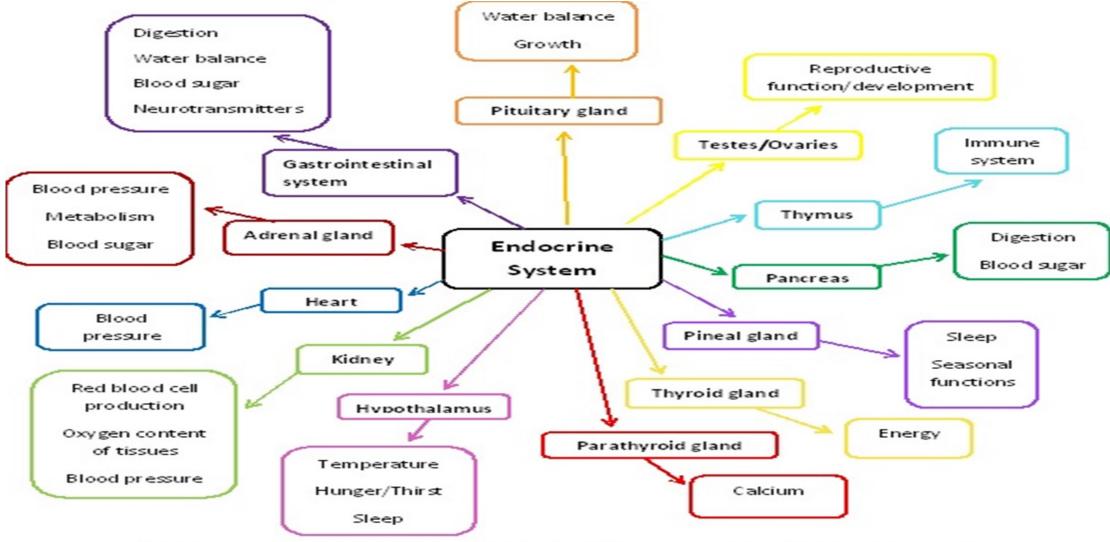




Health Effect of Pollution

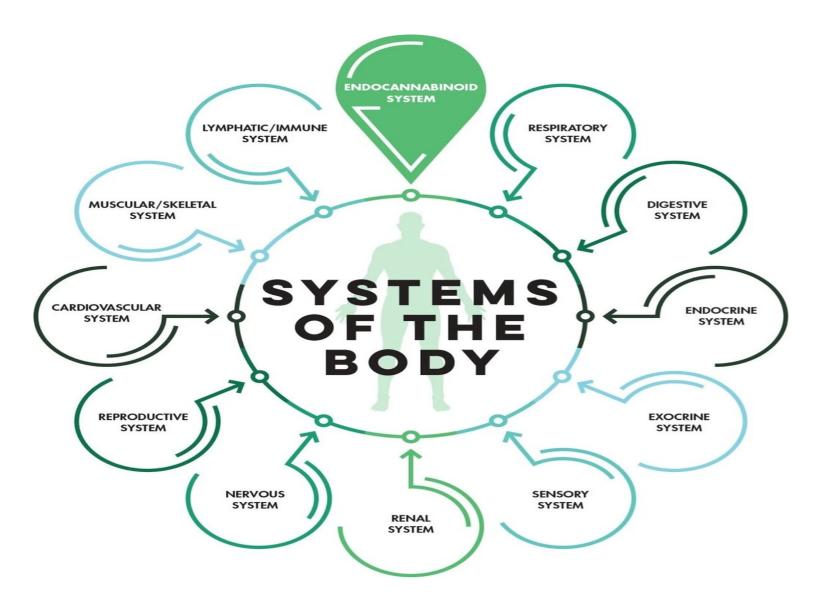




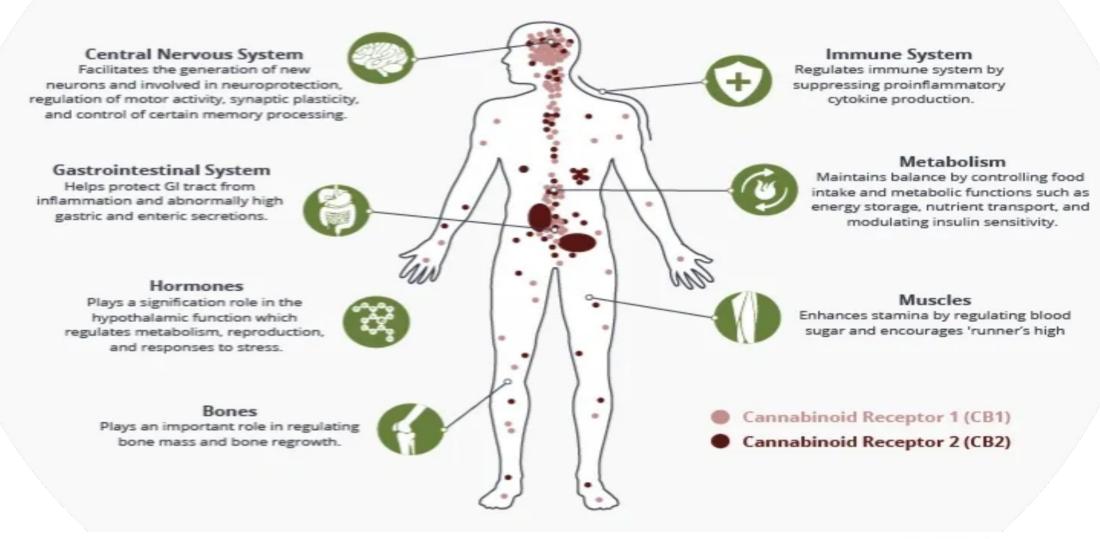


This is a graphic representation of the complicated Endocrine System, demonstrating the varied effects that pesticides can have on the body.





THE BODY'S ENDOCANNABINOID SYSTEM





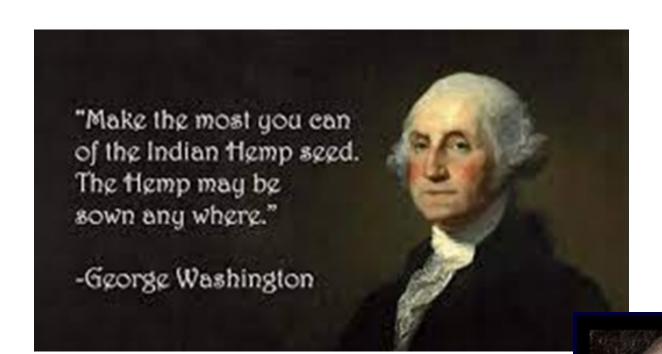
Dr. Raphael Mechoulam

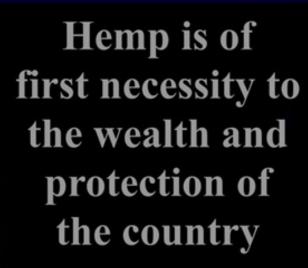
"Grandfather Of Cannabis"

1964, Discovered THC As The Psychoactive Component Of The Cannabis Plant

1992, Discovered The 1st Endocannabinoid "Anandamide" Sanskrit: Eternal Bliss/Supreme Joy

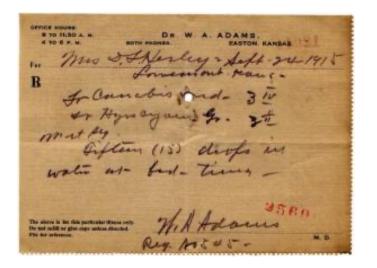




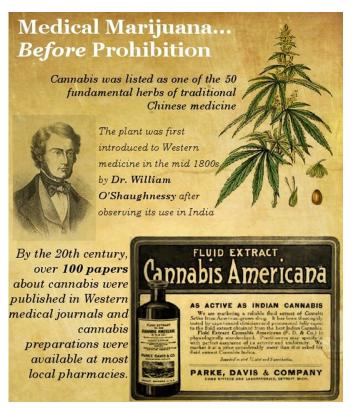


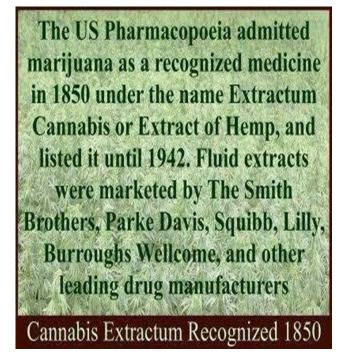
- Thomas Jefferson





Cannabis as treatment for: **neuralgia**, tetanus, typhus, cholera, rabies, dysentery, **alcoholism, opiate addiction,** anthrax, leprosy, incontinence, **gout, convulsive disorders**, tonsillitis, **insanity,** excessive menstrual bleeding, uterine bleeding, and others.







LS00630507B1

Hampson et al.

on Patent No.:

US 6,630,507 B1 Oct. 7, 2003

(50) CONCRINORS AS ANTIOMBANTS AND ALTROPOSTICIONES

(75) Investor: Aidas J. Hampson, Even, CA 1151. Julius Ainhol, Eccloritis, MD (US), Marathe Crimabil, Bellinsto, MD

> good. The United States of America as represented by the Department of Health and Farman barriers.

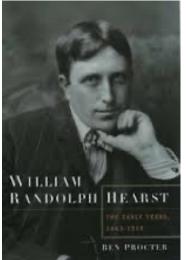
ABTRACT

Cantiabitisedo hava, becar found to hava saraistidada properios, utinidad so MMEA recipior antaquerios. This new Sound property makes cannelationals tande in the manimal and proptiplacie of wish variety of tradation amounted elimentos, suils as radiomia, agreealated, sufferimentos and estimations choices. The cannelmost, and bound to have particular application as econoperationess, for example in limiting meteological damage following between elembranes, no strong and transparents. Some explanation is to be the particular application as econoperationess. For example in limiting meteological damage following between elembraness and transparents and transparents and transparents and transparents and transparents.

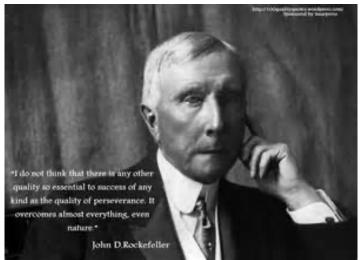
Cannabinoids have been found to have antioxidant properties, ... This new found property makes cannabinoids useful in the treatment... of oxidation associated diseases, such as isohemic, age-related, inflammatory and autoimmune diseases. The cannabinoids are found to have particular application as neuroprotectants, for example in limiting neurological damage following ischemic insults, such as stroke and trauma, or in the treatment of neurodegenerative diseases, such as Alzheimer's disease, Parkinson's disease and HIV dementia. Nonpsychoactive cannabinoids... are particularly advantageous to use because they avoid toxicity...

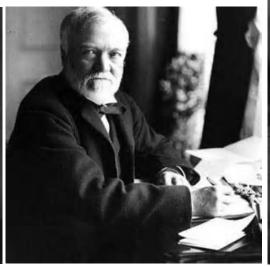
Tobacco	400,000
Alcohol	
Legal Drugs	
Illegal Drugs	
Caffeine	2,000
Aspirin	500
Marijuana Cannabis	



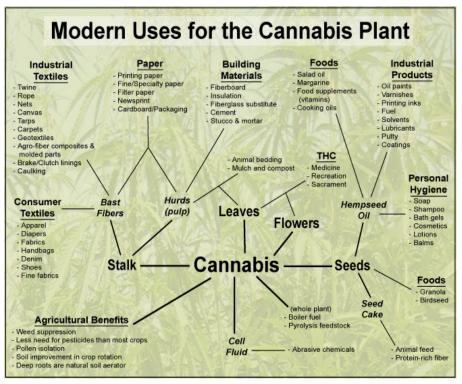


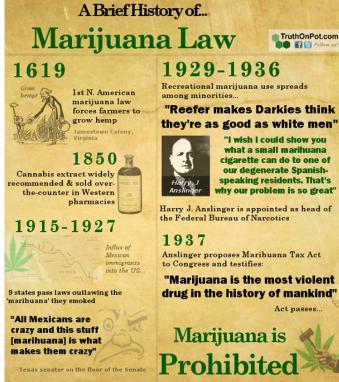


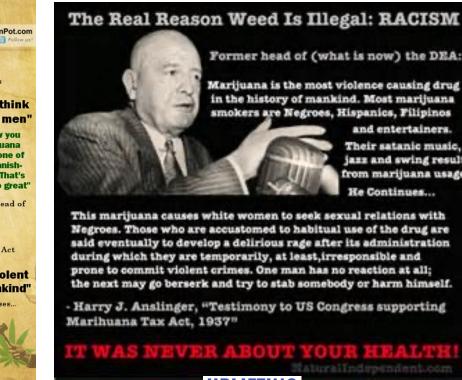


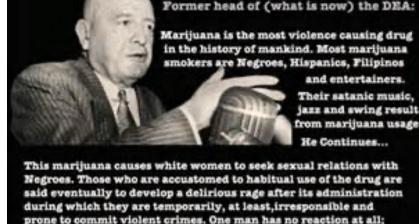












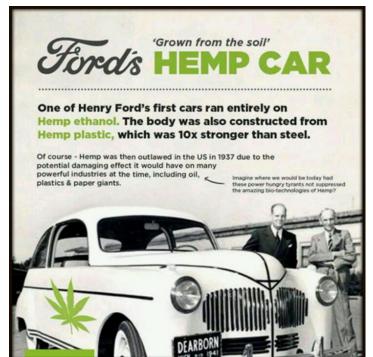
THE U.S. COULD
SAVE AROUND 4
BILLION TREES PER
YEAR IF WE
SWITCHED BACK TO
USING HEMP FOR
PAPER INSTEAD OF
TIMBER.

EVERYTHING PLASTIC CAN BE MADE FROM HEMP. AND PLASTIC MADE FROM HEMP IS BIO-DEGRADABLE.

BILLION-DOLLAR CROP petition with coolie-produced foreign fiber while paying farmers fifteen dollars a ton for hemp as it comes from the field. From the farmers' point of view, hemp is an easy crop to grow and will yield from three to six tons per acre on any land that will grow corn, wheat, or oats. It has a short growing season, so that it can be planted after other crops are in. It can be grown in any state of the union. The long roots penetrate and break the soil to leave it in perfect condition for the next year's crop. The dense shock of leaves, eight to twelve feet above the ground, chokes out weeds. Two successive crops are enough to reclaim land that has been abandoned because of Canadian thistles or quack grass. Under old methods, hemp

Top, modern version of linen duster made from hamp. Bottom, harvesting hemp

"HEMP is a Super Food"





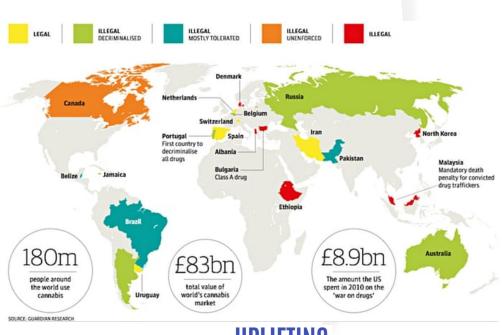


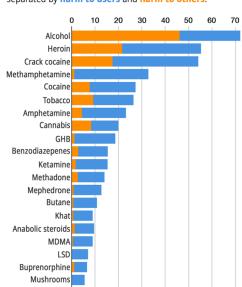
Table I. Schedules of Controlled Substances within the CSA.34		
Schedule	Definitions	Examples
Schedule I	No accepted medical use with a lack of accepted safety and high abuse potential; medications within this schedule may not be prescribed, dispensed, or administered for medical use	Heroin, peyote, ecstasy, lysergic acid diethylamide (LSD)
Schedule II	High abuse potential with severe psychological or physical dependence; however, these medications have an accepted medical use and may be prescribed, dispensed, or administered	Morphine, codeine, hydromorphone, methadone, oxycodone, fentanyl, methylphenidate, amphetamine, pentobarbital, combination products with < 15 mg of hydrocodone per dosage unit (eg, Vicodin)
Schedule III	Abuse potential less than Schedules I or II but more than Schedule IV medications; abuse may lead to moderate or low physical dependence or high psychological dependence	Products with < 90 mg of codeine per dosage unit (eg, Tylenol with codeine), dronabinol, anabolic steroids, ketamine
Schedule IV	Abuse potential less than Schedule III but more than Schedule V medications	Propoxyphene, various benzodiazepines, sibutramine
Schedule V	Medications with the least potential for abuse among the controlled substances	Robitussin AC, Phenergan with codeine, pregabalin



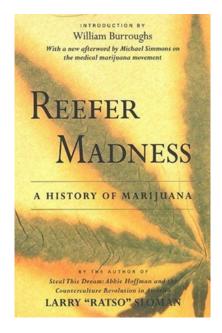


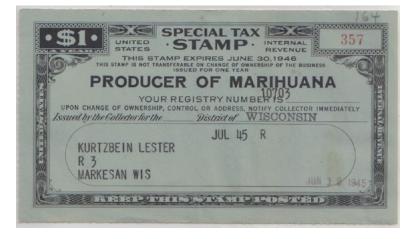
Overall harm of selected drugs

Drugs ordered by their overall harm scores (max score of 100), separated by harm to users and harm to others.









Sir Reynolds writes in the first issue of The Lancet, "When pure and administered carefully, [cannabis] one of the of the most valuable medicines we possess."



WORK THIS OUT		
ALCOHOL	CANNABIS	
ADDICTIVE	NON-ADDICTIVE	
DEPRESSANT	ANTI-DEPRESSANT	
CAUSES CANCER	CURES CANCER	
1 MILLION DEATHS PER ANNUM	ZERO DEATHS IN HISTORY	
COST POLICE & NHS BILLIONS	SAVES POLICE & NHS BILLIONS	
DEATH VIA OD	NO OD	
DESTROYS BRAIN CELLS	GROWS BRAIN CELLS	
LEGAL	ILLEGAL	

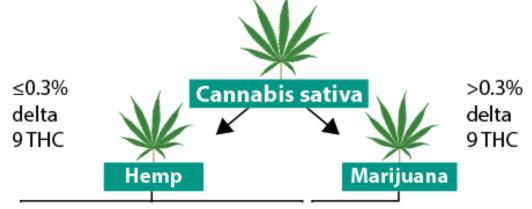


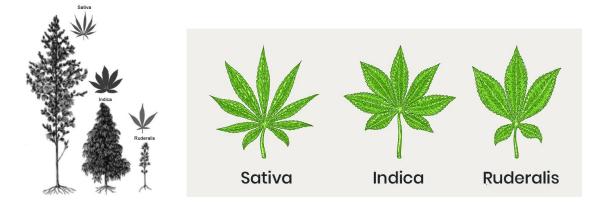
Cannabis Taxonomy





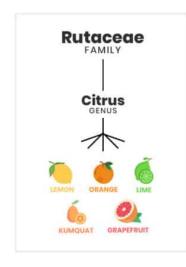
Cannabis: Hemp vs Marijuana

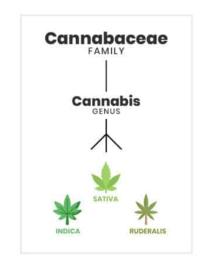




FUNCTIONAL HIERARCHY

BASED ON EACH INDIVIDUAL SPECIES





DYSFUNCTIONAL HIERARCHY

BASED ON A SINGLE CHARACTERSTIC







0.3%THC Cut-Off

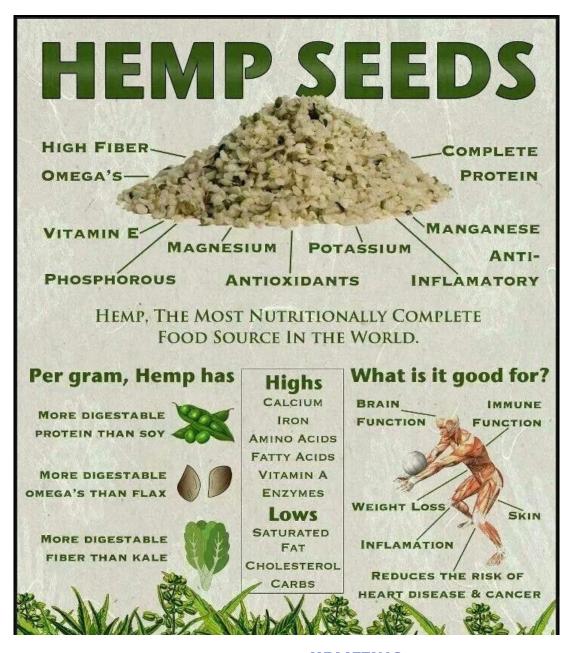
- Dr. Ernest Small, A Canadian Scientist, Initially Defined The 0.3% Threshold In His 1976 Study,
 A Practical And Natural Taxonomy For Cannabis, As A Means Of Distinguishing Higher THC
 containing Cannabis From Those With Lower THC Quantities.
- This Figure Was Based On Many Years Of Real-world Cannabis Plant Use Patterns.
- It Was Not Derived From THC 's Potential For Abuse Or Intoxication.
- USA The 2018 Farm Bill Federally Legalized Hemp That Contains Up To 0.3% THC
- E.U. Maintains A Cap Of 0.2 %
- Switzerland, Which Falls Outside The E.U., Has A 1 % Cap On THC In Its Hemp Market, Along With Many Tropical Countries
- Thailand Mandates That Cannabis Containing 0-3% THC Is Classified As Hemp; 3-9% THC Is Classified As Adult-use, Any Marijuana Products > 9% THC Are Classified As Medical
- The UN Defines Hemp As "CBD:THC Ratio >1



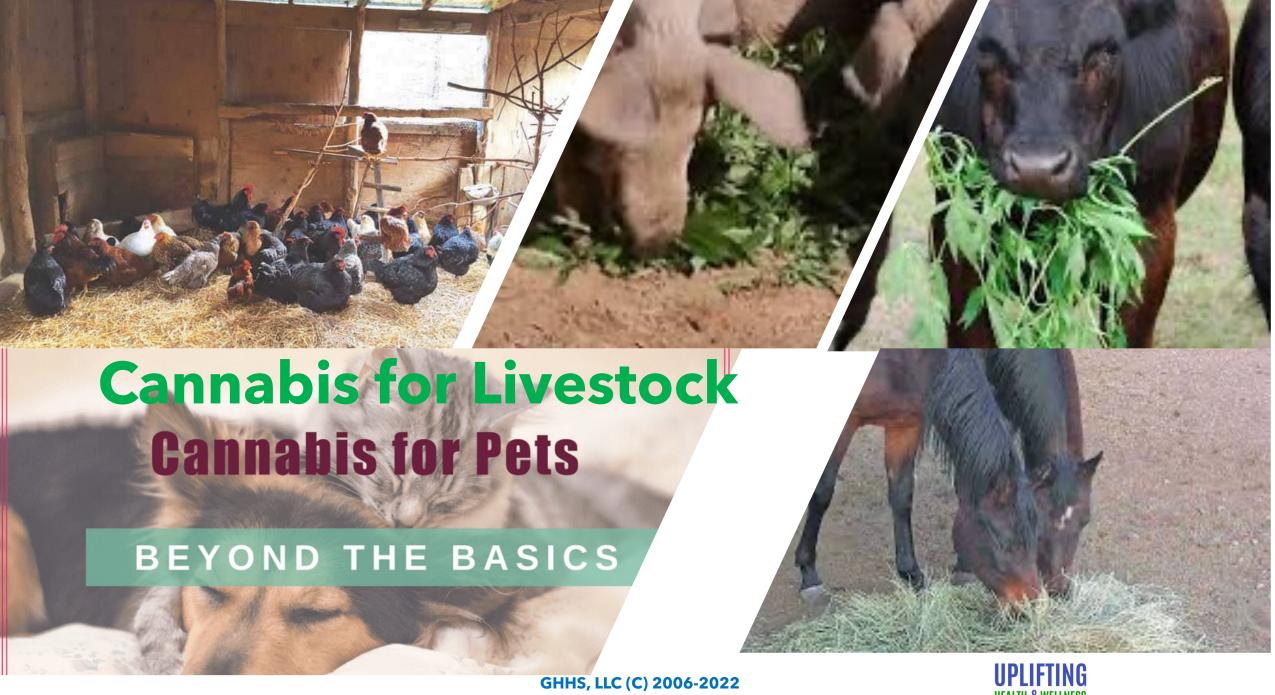
Dr. Uma Says[®] "Food is Medicine, Cannabis is Food & Medicine"TM

- Hemp seed oil contains 80% Essential Fatty Acids (EFA) e.g. Omega 3 6
- Hemp protein contains all 21 known amino acids, including 9 that an adult body cannot naturally produce.
- Hemp protein is a complete protein, and easily absorbable









Why use up the forests which were centuries in the making and the mines which required ages to lay down, if we can get the equivalent of forest and mineral products in the annual growth of the hemp fields? - Henry Ford



Hemp vs Cotton

Requires **no** chemical **pesticides**

Growth cycle goes from 3 to 4 months

Needs very little water to grow Uses 1/4 of the global pesticides

Growth cycle goes from 8 to 9 months

Requires 5x or more water than hemp



Hemp As Construction Material

- "Hempcrete" Hemp Fiber Mixed With Bonding Agent
- "Hemp Bricks" Lighter Than Normal Bricks
- "Hempcrete" Is Fire Retardant
- 1 Cubic Meter Of Hempcrete Wall Will Absorb 165 Kg Of CO2 Overtime
- Hemp Fiber Turned Into Wall Insulations, Not Irritative

Natural Ingredients

Hemp Shivs

The main ingredient in Hempcrete, a 1,200 year old building system from France



MgO Cement

The cement used to build the Great Wall of China; it has 4 to 5 times the strength of Portland cement and is an amazing binder



Together these form a biomass ecomasonry building material that combats global climate change

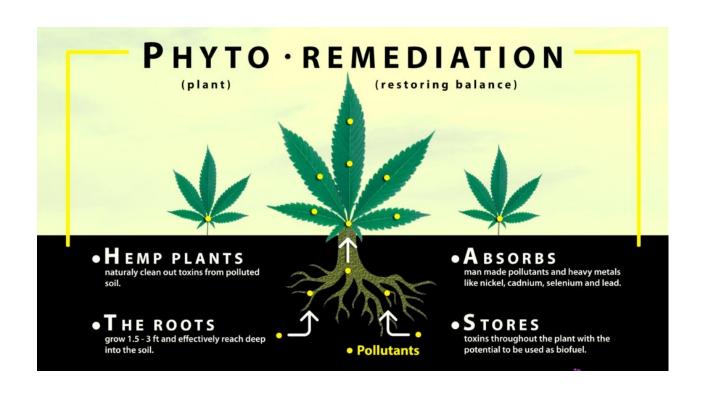








Hemp As Soil & Water Purifier



1 Metric Ton Of Hemp Removes 1.5 Metric Tons Of Carbon

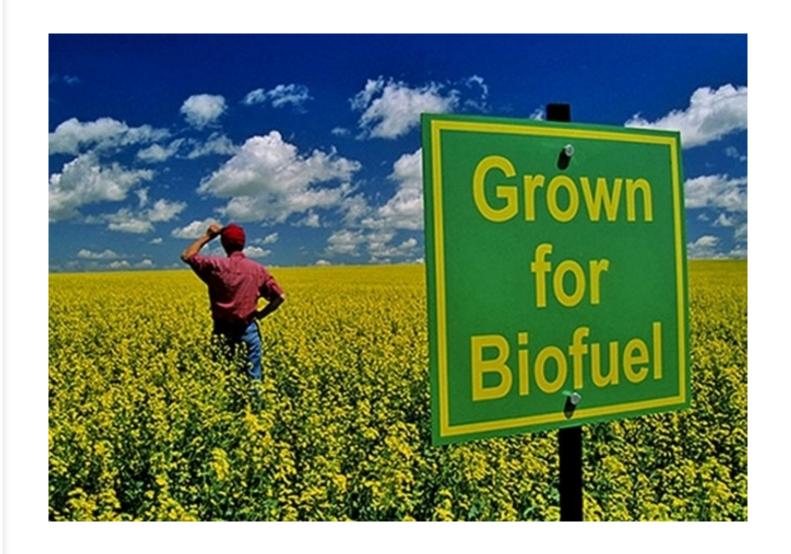
Absorbs Phosphorous On Farmland, Use Of Poultry Fertilizers

Natural & Unique Ability To
Detoxify The Land It Is Planted On

It Can Absorb Other Harmful Substances, ex Chernobyl

Hemp As Biofuel

- Hemp Fuel Burns Clean
- Hemp Has 4X The Biomass, 8X Methanol Potential i.e. Corn
- If Hemp Was Planted In 6% Of America, It Can Sustainably Supply Demand For Gas & Fuel For The Entire Country



Hemp As Plastics

- (2050) 590,000 Million Metric Tons/Year Of Bioplastics
- 500 To 1000 Years? With Plastics Vs 3-6 Months With Hemp to Biodegrade
- Cellulose BPA Vs Plant is 5X Stiffer
 & 3.5 X Stronger
- (2010- 2020) 270 Million Metric Tons To 370 Million Metric Tons
- Car Makers Using Hemp Plastic Mercedes, BMW, Audi, Ford & GM (Mercedes C - Class Cars Contain 20 Kg Hemp)





Hemp Homes

- Durable; No Dry Rot
- Sustainable
- Carbon Sequestration
- Fire Resistance
- Pest Resistant; No Termites
- Mold Resistant

- Passive Self-regulation Of Temperature And Humidity
- Excellent Insulator: Vapor Permeable, Breathable
- Natural Material With No Off Gassing
- Clean Indoor Air



Hemp As Anti-Microbial

- 2 Million American Infected
 During Hospital Stays, 10,000 Die
- MRSA (Antibiotic Resistant Strain Of Staph.)-Hospital Borne Infection
- Hemp's Ability To Kill Surface Bacteria (60% Hemp/40% Rayon)
- Cotton Polyester, Polyethylene Allow Bacteria To Remain Up To Months
- Canvas, Silk Fabrics, Apparel

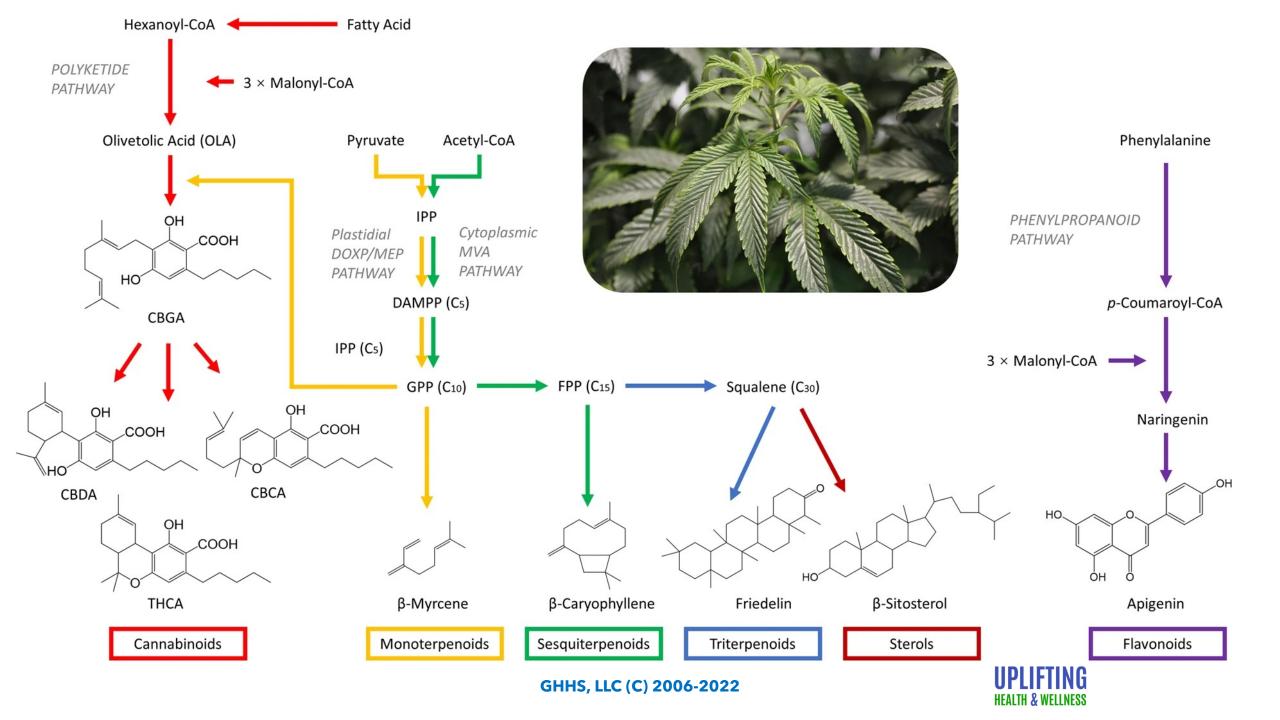




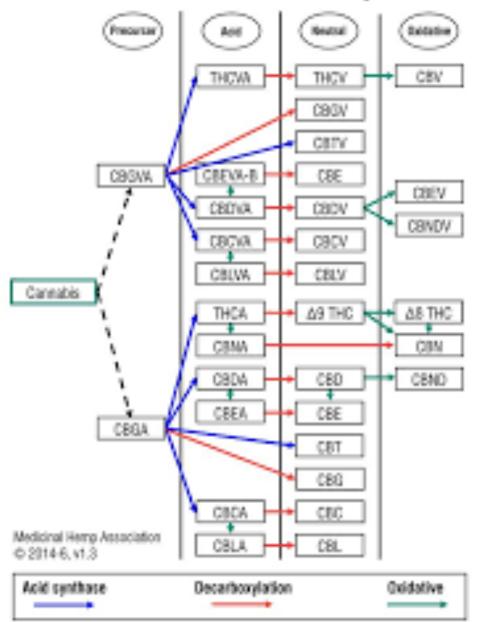
GHHS, LLC (C) 2006-2022

HEALTH & WELLNESS





Cannabinoid Pathway







COMMON CANNABIS TERPENES

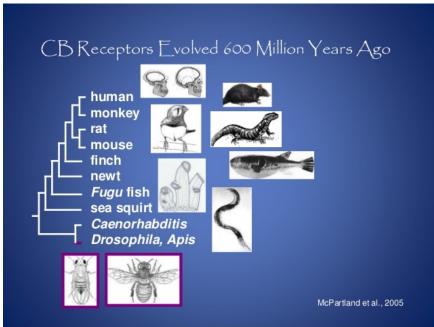


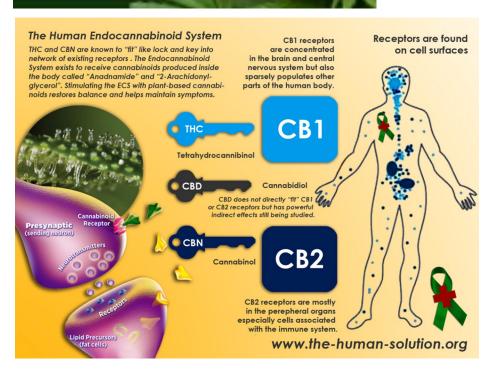
LIMONENE	PINENE	MYRCENE	LINALOOL	CARYOPHYLLENE
CITRUS, LEMON	PINE	MUSKY, EARTHY	FLORAL. SWEET	WOOD, SPICE
STRESS RELIEF, ELEVATED MOOD EFFECTS	CREATIVITY, ALERTNESS, EUPHORIA	SEDATION, BODY HIGH, RELAXATION	CALMING, RELAXATION	NO NOTED EFFECTS
ANTI-ANXIETY. ANTIDEPRESSENT MEDICAL BENEFITS	ASTHMA,	ANTIOXIDENT.	ANTI-ANXIETY,	CHRONIC PAIN.
	ANTIFLAMMATION	INSOMNIA	SEDATING	INSOMNIA
SUPER LEMON HAZE,	TRAINWRECK,	WHITE WIDOW,	SKYWALKER OG,	WHITE WIDOW,
LEMON SKUNK	BUBBA KUSH	BLUE DREAM	HEADBAND	OG KUSH
CITRUS PEPPERMINT ALSO FOUND IN	PINE, PARSLEY,	MANGO, THYME,	LAVENDER,	PEPPER.
	BASIL, ROSEMARY	LEMONGRASS	ROSEWOOD	CLOVE



"I use the words of Dr. DiMarzo*. He stated it so beautifully. He states that the endocannabinoid system is meant for us to relax, eat, sleep, forget and protect. What I say is in one word, if any of those five words are not at ease. We are at dis-ease, which leads to illnesses. Ultimately, I described the endocannabinoid system as life"

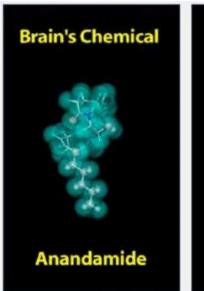
Endocannabinoid vs **Phytocannabinoid** vs **Synthetic Cannabinoids**

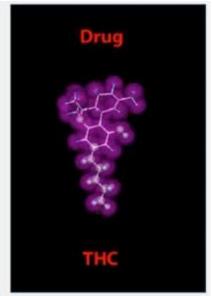




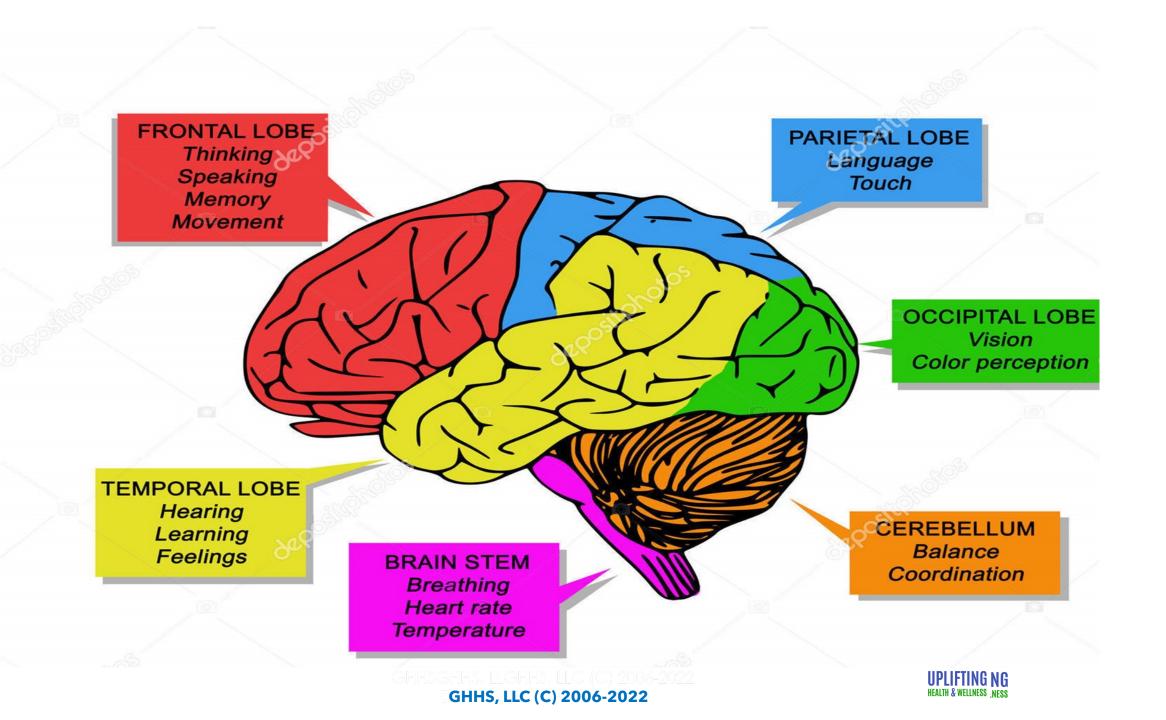












Synthetic Cannabinoids

MarinolTM

CesametTM

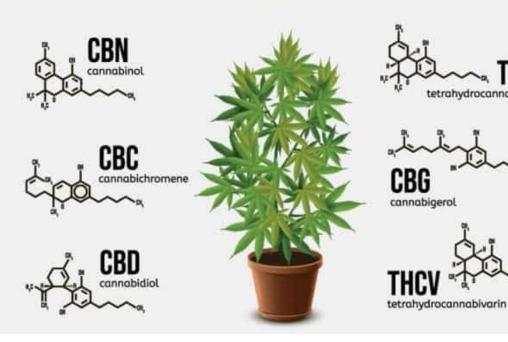
AcompliaTM

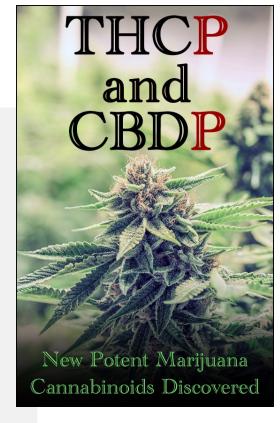
EpidiolexTM

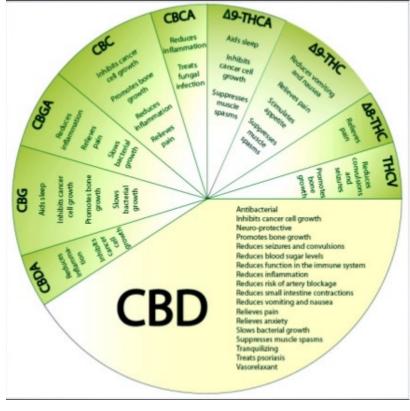


Cannabinoids

THE LIST OF CANNABINOIDS







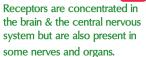


tetrahydrocannabinol

THE ENDOCANNABINOID SYSTEM

HUMAN CANNABINOID RECEPTORS

CB₁



CB₂

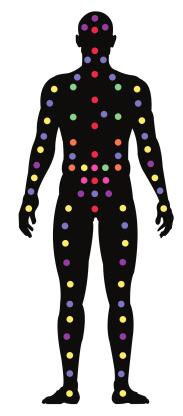
Receptors are mostly in peripheral organs, especially cells associated with the immune system.

TRVP1

Receptors are concentrated in the blood, bone, marrow, tongue, kidney, liver, stomach & overies.

TRPV2

Receptors are concentrated in the skin, muscle, kidney, stomach & lungs.



GPR 18

Receptors can be found primarily in bone marrow, the spleen and lymph nodes, and to a lesser extend the testes

GPR55

Receptors are found in the bones, the brain, particularly the cerebellum, and the Jejunum and lleum.

GPR 119

Receptors are found predominantly in the Pancreas and the intestinal tract, in small amounts



- MCA
- /MCANewzealand
- @MCAwarenes





CBD

- Antibacterial
- Inhibits cancer cell growth
- Neuro-protective
- Promotes bone growth
- Reduces seizures and convulsions
- Reduces blood sugar levels
- Reduces function in the immune system
- Reduces inflammation
- Reduces risk of artery blockage
- Reduces small intestine contractions
- Reduces vomiting and nausea
- Relieves pain
- Relieves anxiety
- Slows bacterial growth
- Suppresses muscle spasms
- Tranquilizing
- Treats psoriasis
- Vasorelaxant

CBDA

- Reduces inflammation
- Inhibits cancer cell growth

THCV

- Reduces seizures and convulsions
- Promotes bone growth

CBGA

- Reduces inflammation
- •Relieves Pain
- Slows bacterial growth

Δ9-ΤΗСΑ

- Aids sleep
- •Inhibits cancer cell growth
- Suppresses muscle spasms

CBCA

- Reduces inflammation
- Treats fungal infection

Δ9-THC

- Reduces vomiting and nausea
- •Relieves pain
- Stimulates appetite
- Suppresses muscle spasms

CBC

- Inhibits cancer cell growth
- Promotes bone growth
- Reduces inflammation
- •Relieves Pain

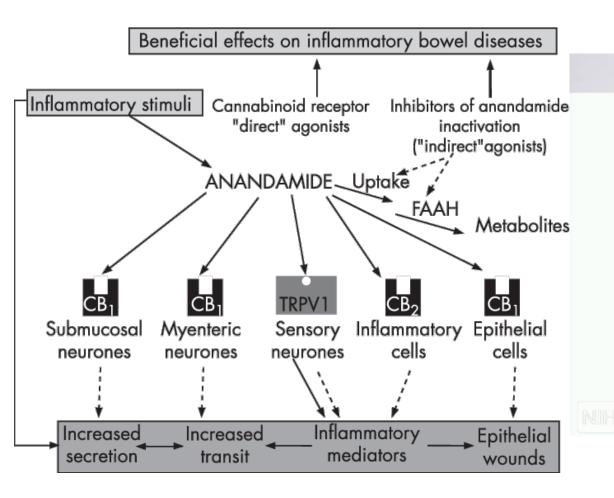
Δ8-THC

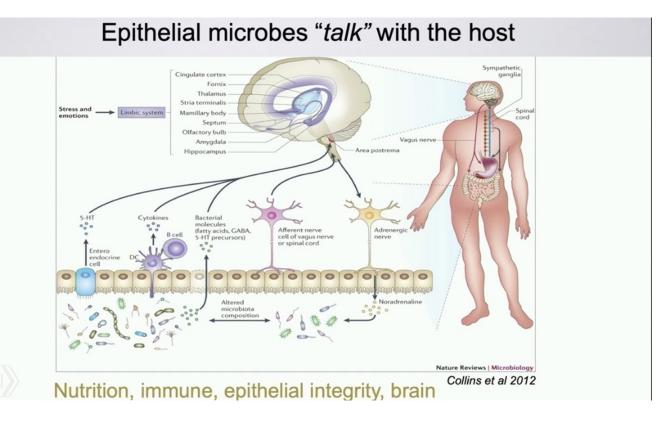
Relieves pain

CBG

- Aids sleep
- Inhibits cancer cell growth
- Promotes bone growth
- Slows bacterial growth







Dr. Uma Says®

The Problem

Opiate Abuse, Dependency and Over Sedation
Morphine, Heroine, Codeine, Oxycodone, Hyrdocone

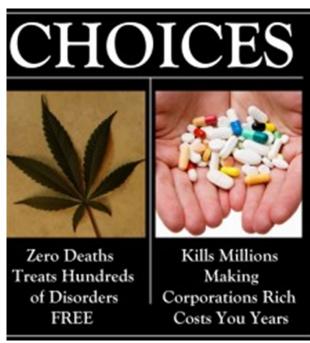
The Solution

Alternative and Complimentary applications of Cannabinoid based products

Cannabidiol (CBD) Cannabigerol (CBG) Tetrahydrocannabinol (THC)

- "Cannabis Is Not For Everyone, YET It Should Be A First Line Option NOT The Last Resort." TM
- "Safety 1st, Do NO Harm"™
- "Open Your Hearts, Open Your Minds, Open Your Doors" ™
- Dr. Uma's Rules "TITRATE" vs Dose ™
 - HYDRATE Before You Medicate™
 - Start out "Low and Slow" (Very Low & Slow) with **FOOD™**
 - JOURNAL™
- Dr. Uma's Model Total Health Care (THC)™
 - Educate Embrace Empower™







Side Effects

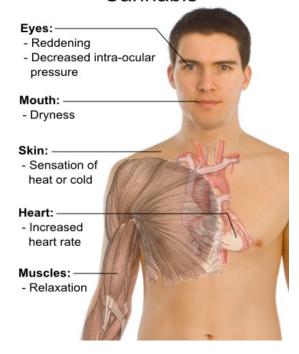
Hyperemesis

Increased Vomiting Nausea Relieved with warm shower

Paranoia Anxiety Overwhelmed Ataxia

NO DEATH! May Cause Happiness

Bodily effects of Cannabis



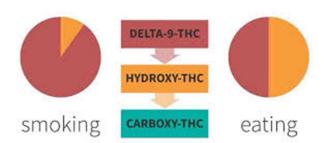
Drug Interactions

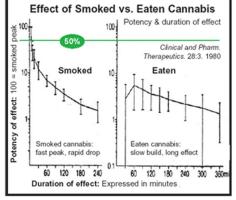
Metabolized By The Liver By The Cytochrome P450 (CYP) Enzyme System

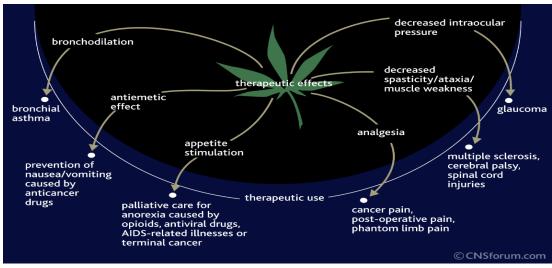
Drugs Either "Ramp Up" Or "Ramp Down" The CYP Metabolic Pathway Which Can Affect CBD/THC and DRUG Concentration In The Blood

That Metabolize Coumadin; Coumadin Blood Levels Elevate Resulting In An

Increased Risk Of Bleeding









Modes of Administration

Inhalation Vapor Or Combust

Quickest Onset

Greater Bioavailability

Topical Lotions/Creams/balms

Transdermal Skin Patch

Suppositories

Oral Sublingual Or Ingestion

Liquid, Strips, Capsules, Tinctures

Edibles Candies/ Food

Longer Duration

Beverages +/- Alcohol

















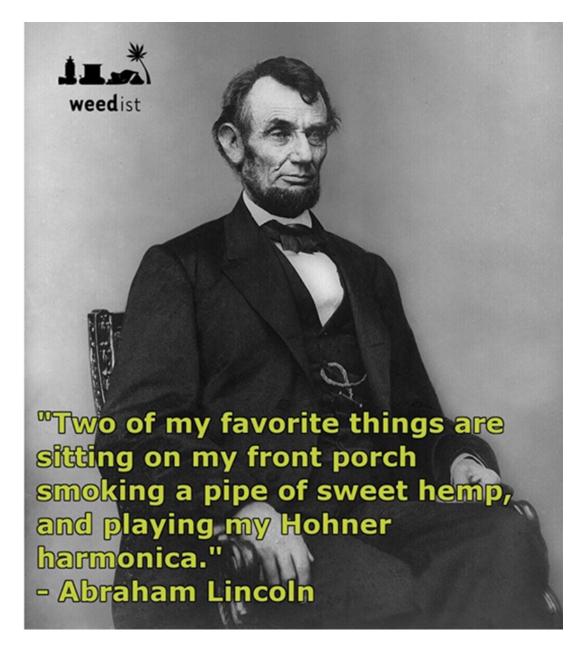








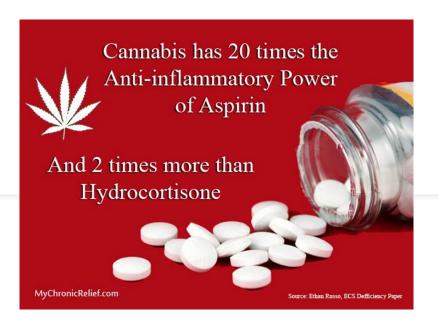




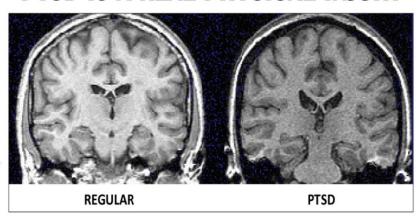


Cannabis & Cancer

- Antiproliferative
- Antimetastatic
- Antiangiogenic
- Apoptosis



PTSD IS A REAL PHYSICAL INJURY



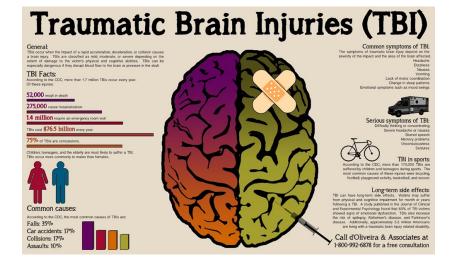
NOT A SOCIAL OR POLITICAL OPINION.

Clinical Endocannabinoid Deficiency

• CONCLUSION: Migraine, Fibromyalgia, IBS and related conditions display common clinical, biochemical and pathophysiological patterns that suggest an underlying clinical endocannabinoid deficiency that may be suitably treated with cannabinoid medicines.

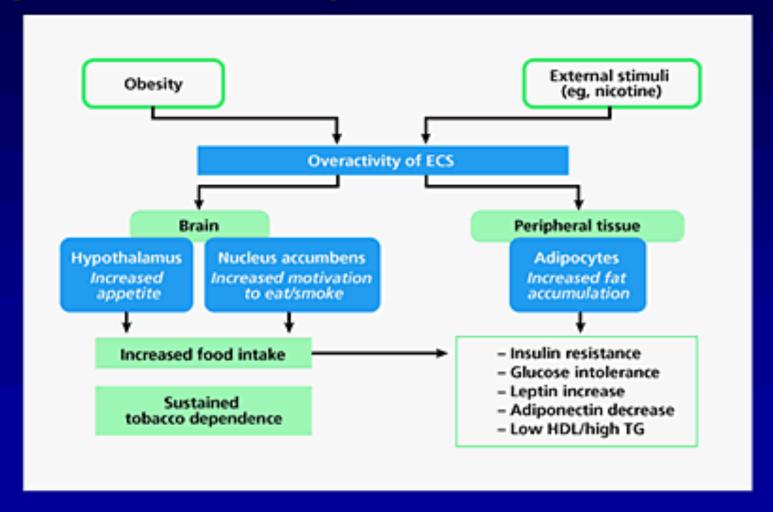
Neuro Endocrinol Lett. 2008 Apr;29(2):192-200. Russo EB







Effects of Endocannabinoid System Overactivity



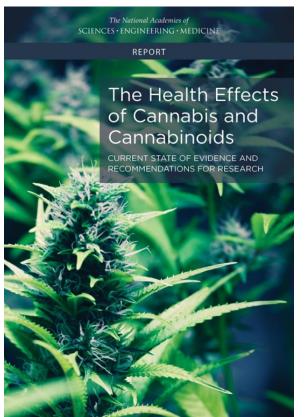


Medical Benefits

- Relief Of Chronic Pain
- Improves Lung Capacity
- Help Lose Weight
- Regulate & Prevent Diabetes
- Fights Cancer
- Helps Treat Depression
- Shows Promise In Autism Treatment
- Regulate Seizures
- Mend Bones
- Helps With ADHD/ADD
- Treatment For Glaucoma

- Alleviate Anxiety
- Slow Development Of Alzheimer's Disease
- Deal With Pain Linked To Arthritis
- Helps With PTSD Symptoms
- Helps Provide Relief To Individuals With Multiple Sclerosis
- Reduces Side Effects Linked To Hepatitis C
 And Increase The Effectiveness Of Treatment
- Treats Inflammatory Bowel Diseases
- Helps With Tremors Associated With Parkinson's Disease
- Helps With Alcoholism
- AUTISM



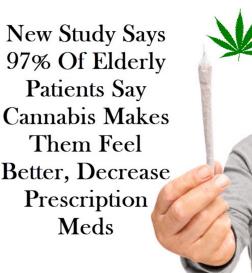


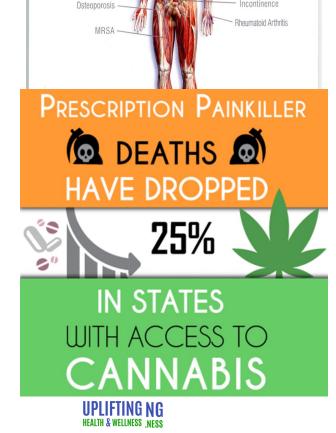


A new study found that nearly 100% of respondents say they would use cannabis as a substitute to their prescription opioid medications if it was available.

WWW.PUBMED.GOV **Google Scholar**

New Study Says 97% Of Elderly Patients Say Cannabis Makes Them Feel Better, Decrease Prescription Meds





EMERGING CLINICAL APPLICATIONS

FOR CANNABIS AND CANNABINOIDS

A Review of the Recent Scientific Literature

EXPANDED AND REVISED EIGHTH EDITION

Alzheimer's

Huntington's Disease

Tourette Syndrome

Hypertension

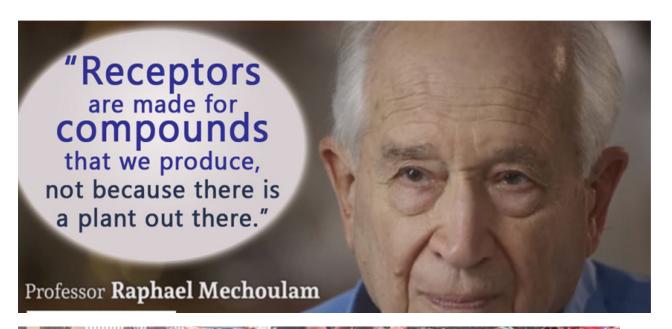
Sleep Apnea

GI Disorders

2022 Jan 10; acs. jnatprod. 1c00946.

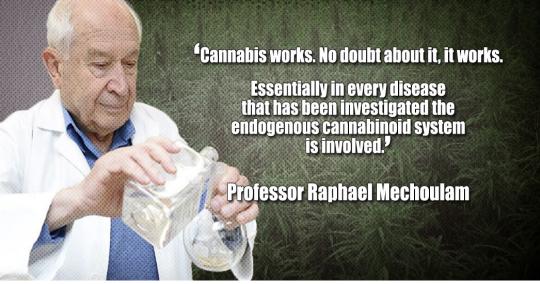
Cannabinoids Block Cellular Entry of SARS-CoV-2 and the Emerging **Variants**

Richard B van Breemen 1, Ruth N Muchiri 1, Timothy A Bates 2, Jules B Weinstein 2, Hans C Leier 2, Scotland Farley², Fikadu G Tafesse²

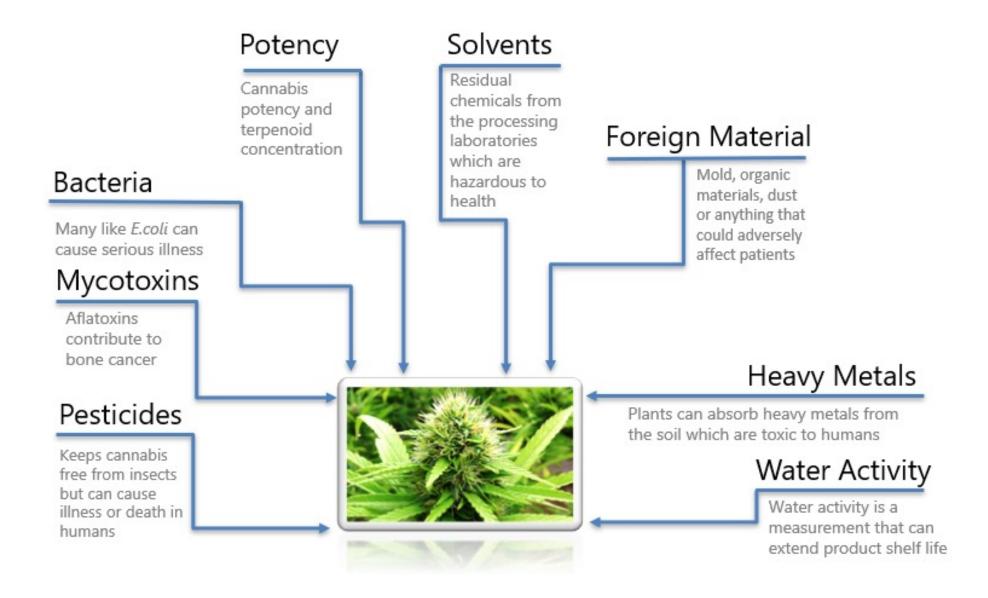




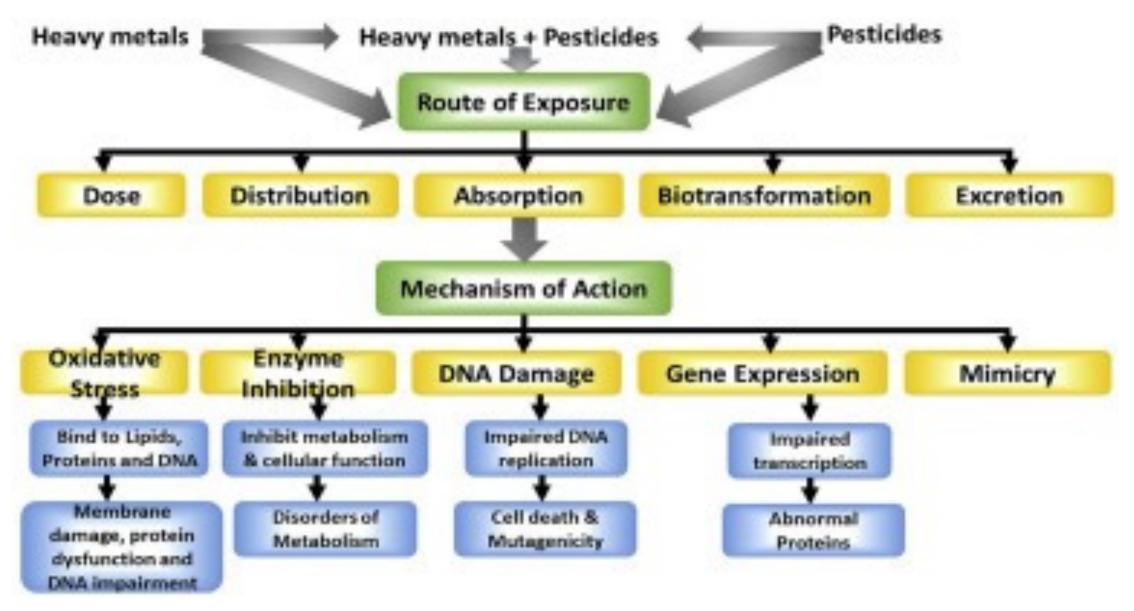














Dr. Uma Says® Cannabis C.A.R.E.S.™

Choice Alternative Research Education Solutions

Dr. Uma Dhanabalan, MD MPH FAAFP MRO CMS

GHHS, LLC (C) 2006-2021









Dr. Uma Says®
"Cannabis The Plant5P's"TM
(People Pets Planet Peace Profit)





Dr. Uma Says® "Cannabis The Global Solution" TM

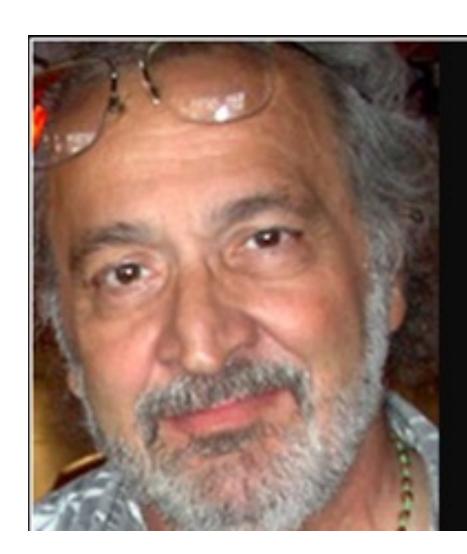
Dr. Uma Says® "Cannabis Is For Health & Wellness Locally & Globally"™

Dr. Uma's 5 Pillars

- Legalization
- Laboratory Standard
- Cultivation
- Products
- Education (Stigma & ECS)







Hemp will be the future of all mankind, or there won't be a future.

— Jack Herer —



HEMP...WILL.....

- Reduce Pesticides Pollution
- Reduce Soil Erosion & Restores The Land
- Produce Biodegradable Plastic
- Absorbs Lethal Metals
- Produce Inexhaustible Biofuel
- Reduces Carbon Emission Impacts
- Reduces Deforestation





Dr. Uma Says®



"Safety 1st, Do NO HARM"TM

"Reach One Teach Ten, Teach One Reach Ten" TM

"Cannabis Is An Entrance To A Better Quality Of Life, An EXIT Drug From Pharmaceuticals, Narcotics, Alcohol & Nicotine." TM

"Cannabis The Exit Drug"®

UpliftingHealthandWellness.com 508-444-2324

