



# Medical Cannabis 101



Toll Free: 1-866-710-9770

[www.apollocannabis.ca](http://www.apollocannabis.ca)



# Who is Apollo?

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- Established in 2013, experts in medical cannabis
- Research-based
- More than 120,000 patients across Canada
- Team of Psychiatrists, Anesthesiologists, Neurologists, Pain Specialists, Psychiatrists, Family Doctors, Researchers, Academics, and Statisticians

# Apollo's Research

## Pain Reduction

- 43% reduction in interference with daily activities
- 37% reduction in pain severity
- 95% reduction in opioid use

## PTSD

(Preliminary Results)

- 37% reduction in PTSD symptoms
- Improvements in:
  - Social functioning
  - Emotional wellbeing
  - Energy level

## Driving

(Ongoing Research)

- Cannabis roadside screening
- In partnership with the University Health Network and the Ministry of Transportation



# Licensed Producers

- Licensed by Health Canada.
- Authorized to produce and sell to the public: Dried bud, oils, sprays, capsules, vape cartridges, edibles, and topicals.
- They adhere to rigorous standards and regulations and provide medical cannabis to authorized patients.
- Over 600 authorized LPs within Canada.
- Offer a range of products with various ratios of CBD:THC.





BETTER SUITED FOR DAYTIME

# SATIVA



INCREASES ENERGY (FATIGUE)



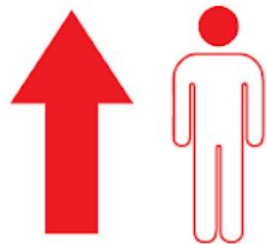
ANTI-DEPRESSANT



STIMULATING



MIND DOMINANT



UPLIFTING & EUPHORIC

HELPS WITH MOOD DISORDERS

INCREASES ALERTNESS



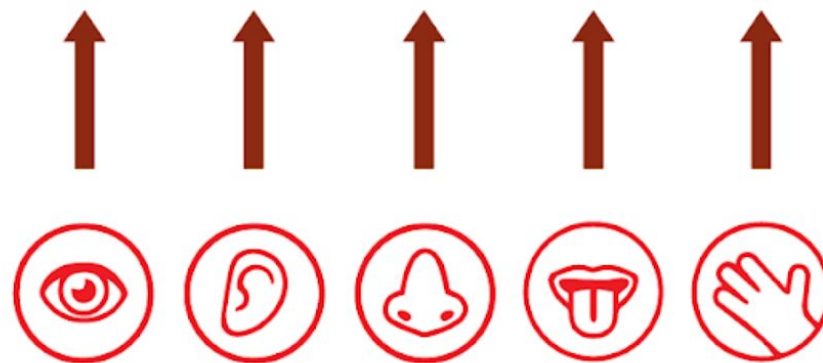
FOCUS



CREATIVITY



ENHANCED SENSES



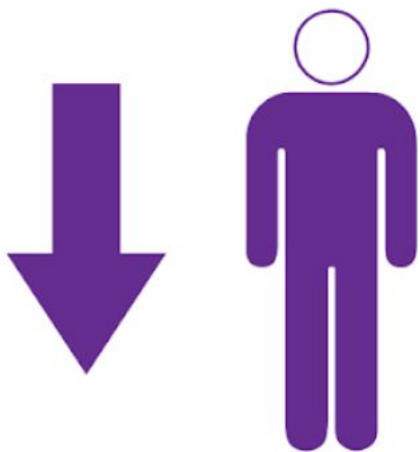


# INDICA

BETTER SUITED  
FOR NIGHTTIME



**BODY  
DOMINANT**



**HELPS  
WITH  
SLEEP  
(INSOMNIA)**

**DEEP  
RELAXATION**



**ANTI  
NAUSEA**



**SEDATING**



**ANTI  
ANXIETY**

**APPETITE  
STIMULANT**



**MUSCLE  
RELAXANT**



**PAIN  
RELIEF**



**REDUCES HEADACHES  
AND MIGRAINES**

**REDUCES  
MUSCLE SPASMS  
AND SEIZURES**

# The Medical Cannabis Compounds

# Potential Medical Benefits

## **CBD** ( Cannabidiol )

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- Non-psychoactive
- Anti-inflammatory
- Analgesic (pain killer)
- Neuroprotective
- Anti-nausea
- Antiemetic (prevents vomiting)
- Antipsychotic
- Anti-ischemic
- Anxiolytic (reduce anxiety)
- Anti-epileptiform

Hampson et al, 1998; Lewicke et al, 2012;  
Mechoulam et al, 2007; Pertwee, 2008





# Potential Medicinal Benefits

## **THC** ( Tetrahydrocannabinol )

- Analgesic via CB1, CB2
- Neuroprotective antioxidant
- Powerful anti-inflammatory
- Muscle relaxant
- Antiemetic (prevents vomiting)
- Appetite-stimulating
- Insomnia
- Primary psychoactive component

# Potential Medical Benefits

## Other Cannabinoids *(There are around 140)*

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Much more research needs to be done, but some research has found potential benefits in:

- **CBG (Cannabigerol):**  
Anxiety, pain, infection, nausea
- **CBN (Cannabinol)**  
Sleep, appetite stimulant, inflammation

# Terpenes

Terpenes are aromatic compounds found in many plants, often associated with cannabis because it contains high concentrations of them

## Common Terpenes & Potential Benefits :

- **Myrcene**: Sedative effect, muscle relaxant & anti-inflammatory
- **Pinene**: Help with alertness, asthma & also anti-inflammatory
- **Limonene**: antifungal, anti-bacterial and improve mood
- **Linalool**: anti-inflammatory, anticonvulsant and antidepressant
- **Caryophyllene**: anti-fungal, anti-inflammatory and help with anxiety



# Trichomes

Cannabinoids are produced inside the heads of the trichomes.



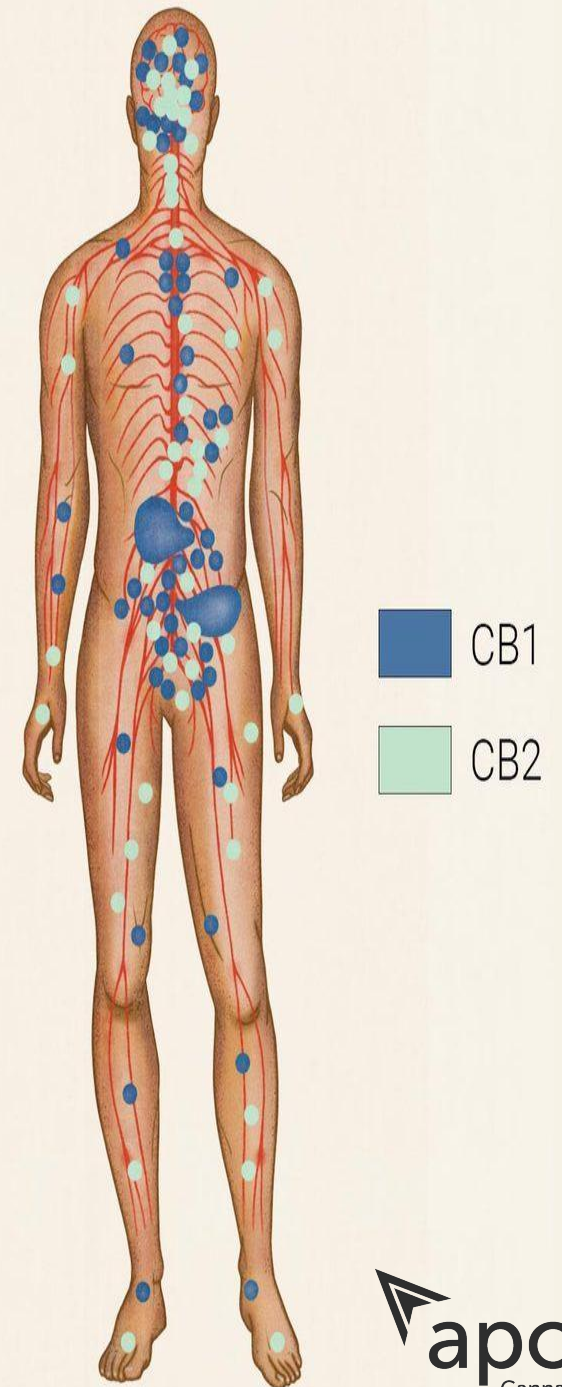
# Medical Cannabinoids

**Cannabinoids:** A class of compounds that act on cannabinoid receptors in the human body.

**Endocannabinoids:** Cannabinoids that are naturally produced in the body (endogenous).

**Phytocannabinoids:** Cannabinoids that occur naturally in the cannabis plant. There are dozens, but CBD & THC are the most researched and recognized in the medical world.

**Synthetic Cannabinoids:** Laboratory-synthesized compounds that bind to cannabinoid receptors, e.g. pharmaceuticals (i.e. Nabilone)



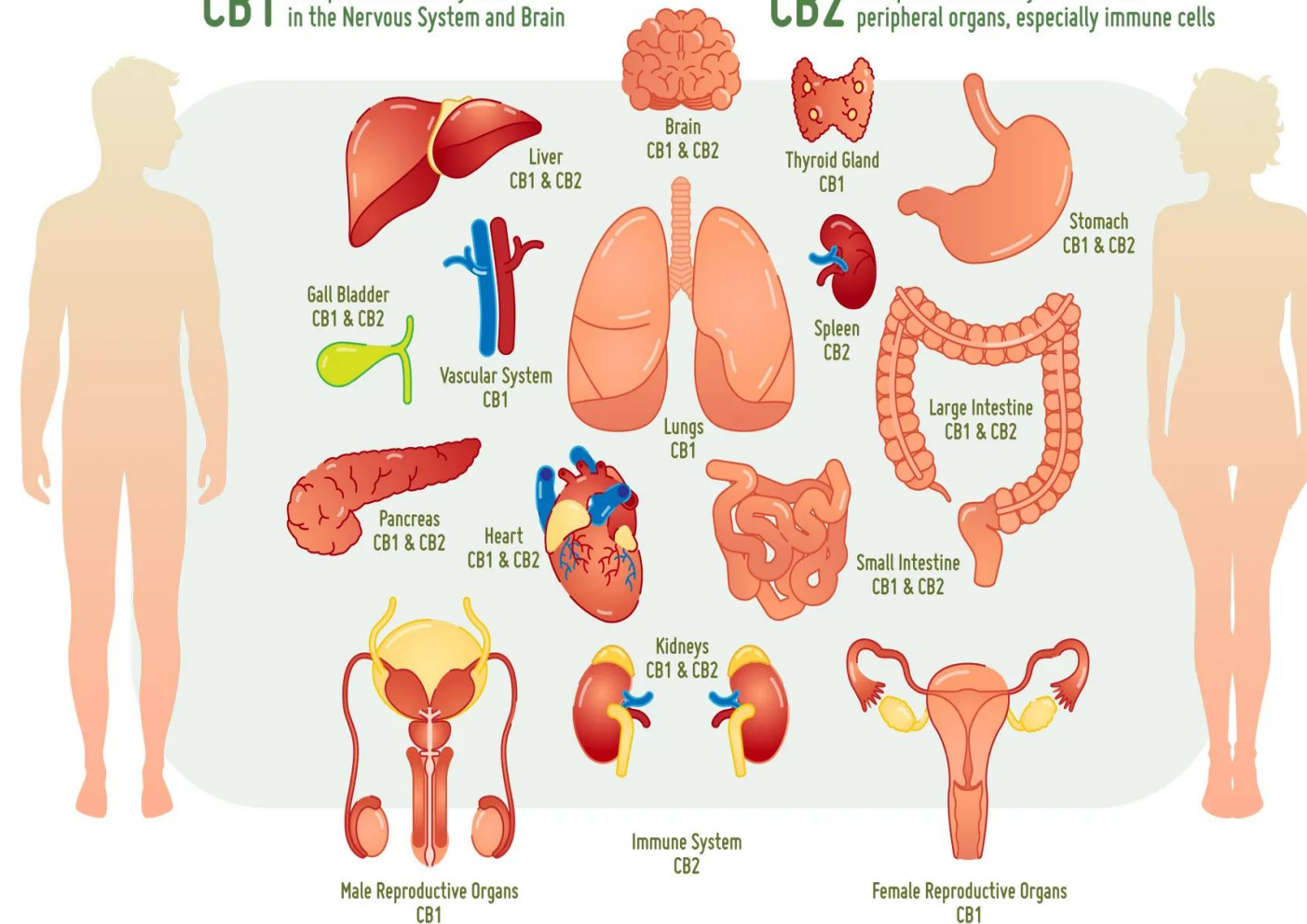
# Endocannabinoid System

- Inflammation
- Pain
- Digestion
- Sleep
- Bone Density
- Mood
- Stress Regulation
- Reproduction

## The Human Endocannabinoid System

**CB1** Receptors are mostly found in the Nervous System and Brain

**CB2** Receptors are mostly found in the peripheral organs, especially immune cells



# Potential Therapeutic Uses

- Chronic Pain
- Sleep Issues
- Anxiety
- Cancer
- Fibromyalgia
- Migraines
- Endometriosis
- Arthritis
- PTSD
- Neuropathic Pain
- Stress
- Multiple Sclerosis
- Epilepsy
- Menopausal Symptoms
- Many More



# Cancer & Medical Cannabis: The Research

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- To date, there have been hundreds of studies published looking at the use of cannabinoids as a cancer treatment option. While some promising results have been found, there is not enough evidence within human trials to prove that medical cannabis is an effective treatment option in battling cancer itself. Much more clinical research needs to be completed.
- That said, medical cannabis has been proven in research to help relieve symptoms of cancer and chemotherapy, improving cancer patients quality of life.





# Medical Cannabis and Treating Chemotherapy Symptoms

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- Sleep
- Chronic Pain
- Appetite & Weight Gain
- Reduction in Nausea & Vomiting
- May combat tumour growth but studies are preliminary.



# Cancer & Medical Cannabis: Some Examples

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- A 2023 study found that in the long term, cannabis helped improve cancer patient's cognitive functioning. How? Through pain relief and better sleep, patients were less fatigued.
- Another 2023 study from McGill found medical cannabis can help reduce the total number and medications and opioids taken by cancer patients, while still reducing pain scores.
- A 2021 study found CBD was able to decrease viability and induce cell death in human lung cancer and cancer stem cells.



# Prostate Cancer: How Can Cannabis Help?

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- The expression of cannabinoid receptors on the surface of prostate cancer cells is greater than that seen in non-cancerous cells, which suggests that the endocannabinoid system may play a crucial role in the growth of these cancer cells
- Recent studies have highlighted the role that CB2 receptors play in regulating tumor cell metastasis
- Cannabidiol has been shown to exert chemo-preventive effects in preclinical models of prostate cancer.

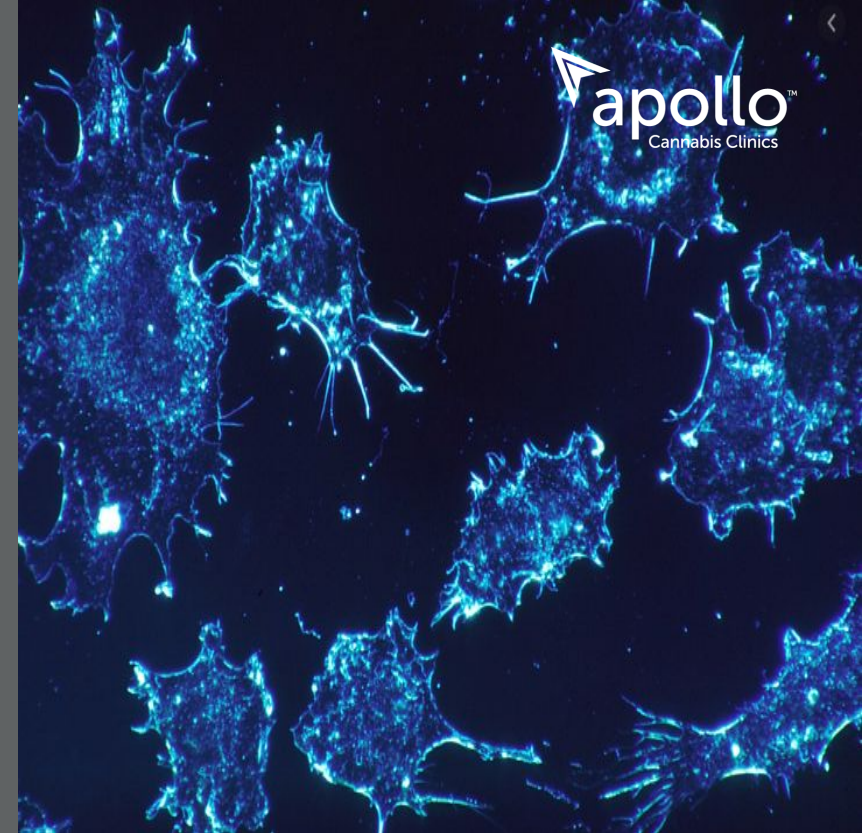


# Cancer: How Can Cannabis Help?

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Tumors that have an abundance of receptors will be more likely to respond to cannabis. Research suggests that when cannabinoid receptors on the tumor cells are activated, a number of actions may be triggered. These include:

1. apoptosis, or “cellular suicide”,
2. decreasing blood supply to the tumors,
3. activation of our endocannabinoid system which has powerful anti-cancer properties.
4. the non-THC cannabinoids have been shown to lower testosterone levels, mimicking pharmaceutical drugs.



# Products Now Available for Medical Patients

## Softgels, Oils & Edibles

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## Flower & Vaporizers

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## Topicals

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## Concentrates

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# Oil & Capsules & Edibles

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- Edible
- Long lasting relief (4-8 hours)
- Takes 1-2 hours to 'kick in'
- Easy to use
- Precise dosing
- Discreet

It's important to start low and go slow



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# Vaporizing

## Vaporizer Cartridge/Pen

Prefilled with cannabis extract



- Releases the compounds
- Health Canada approved devices
- Inhale warm mist or vapor with medical compounds
- Fast acting (within 5 minutes)
- Shorter lasting (1-4 hours)

## Dry Cannabis

Plant matter, heated in a vaporizer



# Possible Side Effects

## Possible

- Dizziness
- Dry Mouth
- Drowsiness
- Anxiety
- Red Eyes
- Fast Pulse
- Low Blood Pressure
- Cognitive Slowing

## Uncommon

- Panic Attack
- Paranoia
- Psychosis

## Opioid Overdose

- Respiratory Depression





# How Addictive is Cannabis?

<u>Drug/Substance</u>	<u>Dependency</u>
Tobacco	32%
Heroin	23%
Cocaine	17%
Alcohol	15%
<b>Cannabis</b>	<b>9%</b>



# Substitution Effect

- Alcohol substitute 40%
- Illicit drug substitute 26%
- Prescription drug substitute 65.8%

Many Patients use Medical Cannabis as harm reduction (Reiman 2009)



# Medical vs. Recreational Cannabis

	Medical	Recreational
<i>What is it?</i>	Prescribed by a healthcare practitioner	Purchased through black market or licensed retailer
<i>Where is it purchased?</i>	Online/phone and delivered to residence	In store or online
<i>Medical Advice</i>	Personalized treatment plan with guidance on dosing, strain selection and ongoing support	Legally unable and unqualified to give medical advice, strain or dosing suggestions
<i>Cost</i>	Lower cost	Higher cost than medical - excise tax of 10% or \$1/Gram
<i>Supply</i>	Reserved for patients	Often shortages
<i>Insurance</i>	Auto insurance, Group benefits, Healthcare Spending Account	N/A
<i>Discounts</i>	Up to 30% discount for low income or disabled	N/A
<i>Tax-deductible?</i>	Medical expense	N/A

# Apollo Can Help You

- No Doctor's Referral Needed
- Consult with a Healthcare Practitioner
- Personalized Education and Treatment Plans
- Prescription Fulfillment & Registration
- Support Available 7 Days a Week
- Video or Phone Appointments from Home
- Canada-Wide



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# Patient-Centric Appointments



Book Your Free  
Appointment



Appointment  
with a Healthcare  
Practitioner



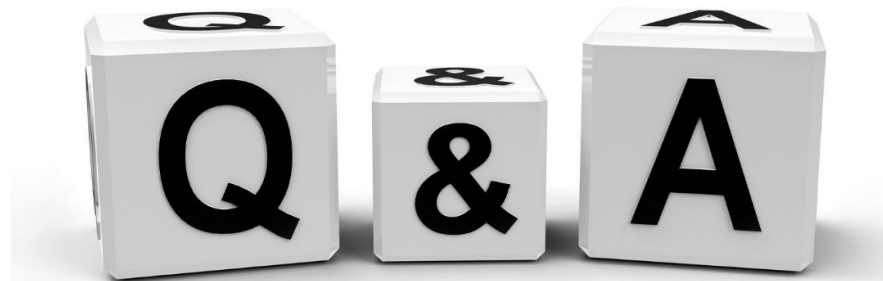
Medication  
Delivered &  
Ongoing Support



Personalized  
Education &  
Treatment Plan



# Question & Answer Session - Ask Away!



- Is my personal information ever given to anyone outside the doctors office?
- What's the difference between Apollo and a dispensary?
- Can cannabis be taken alongside my other medications?



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# Contact Apollo to Learn More

1-866-710-9770

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