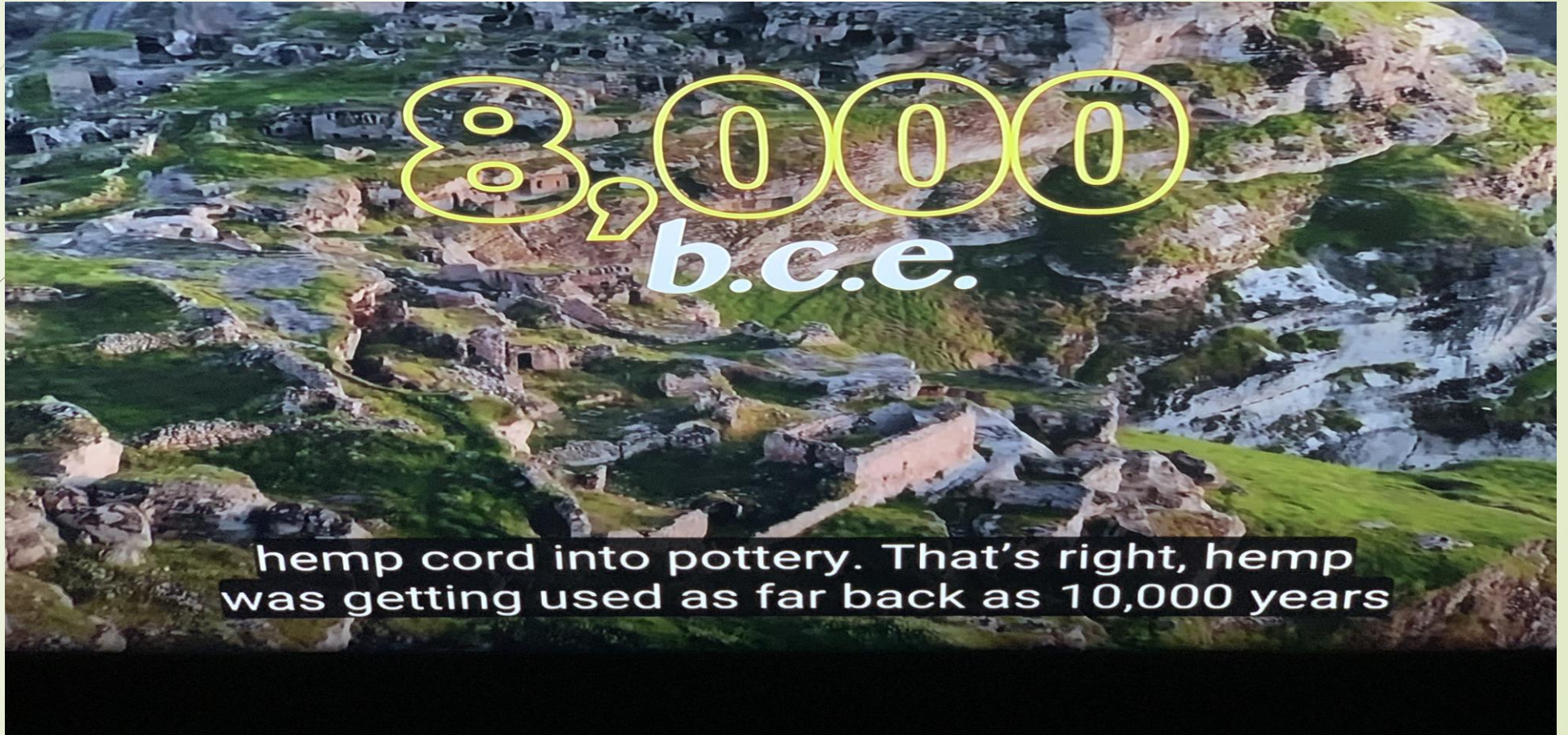




- Dr. Falah M. Hauth, MB. ChB.
CCFP. FCFP

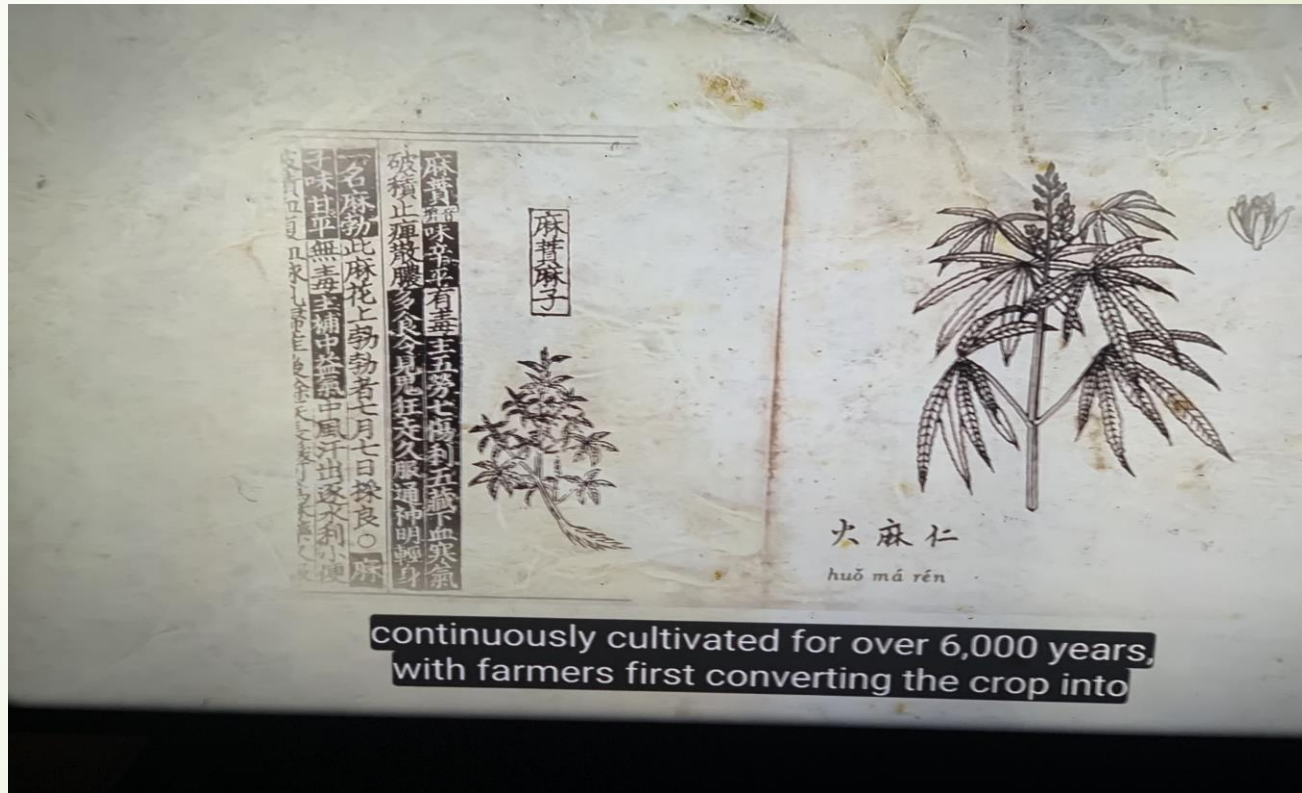
- Dr. Falah Mohammed Hauth, MB. ChB. CCFP. FCFP
- Graduated from Mousel medical school 1983
- Work in different Baghdad Hospitals , then volunteered for 2 years in Kurdistan. came to Canada 1988
- Worked around the world before coming to Canada
- In Canada research assistance at neurosurgery TGH & St. Joseph. Halifax NS, back to ON
- Currently practicing family medicine in Kitchener

Marijuana in the History



hemp cord into pottery. That's right, hemp was getting used as far back as 10,000 years

Marijuana in the History

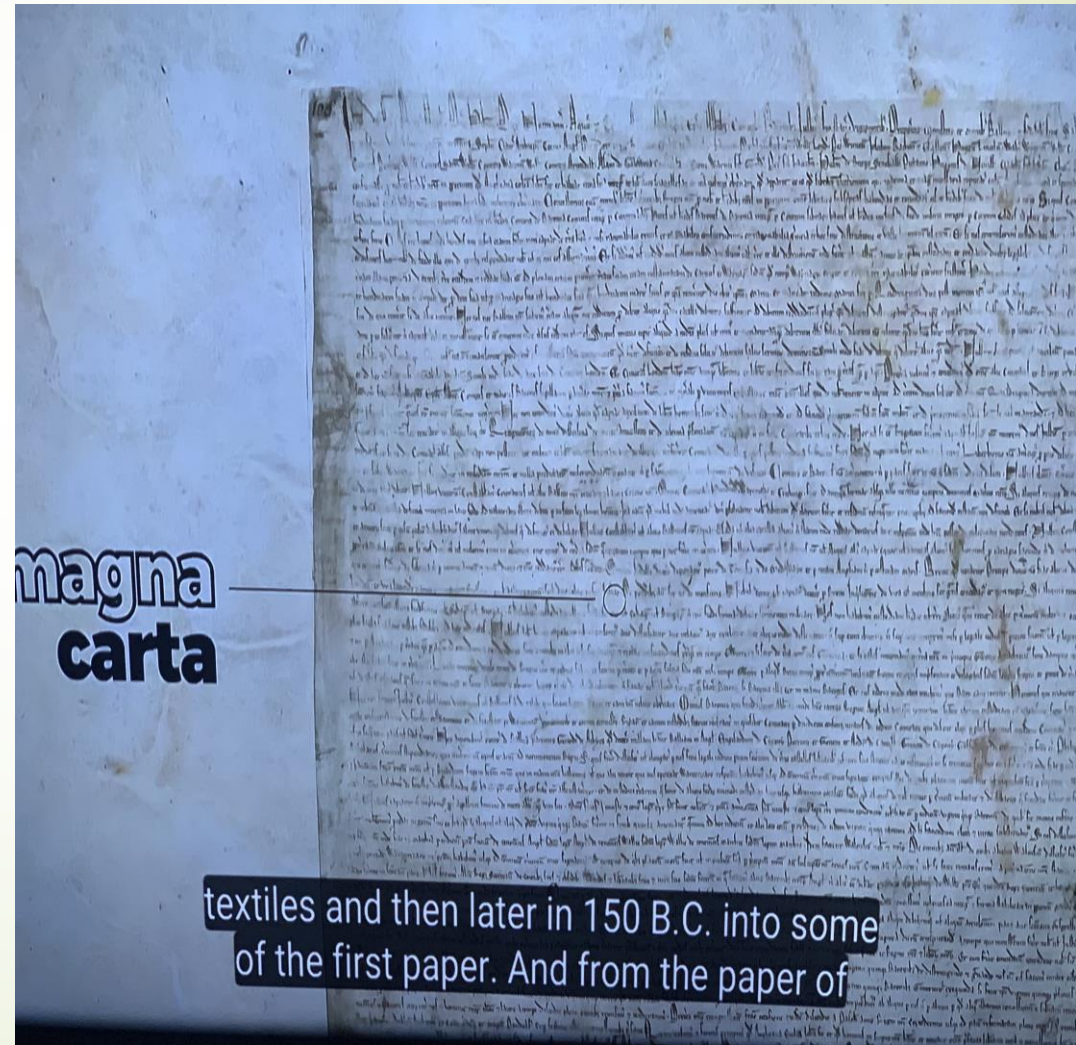


Marijuana in the History



Marijuana in the History

150 BC – First organized production of paper started in **China**. It was made from macerated hemp fibers, old fishnets, plant bark and water.



magna
carta

textiles and then later in 150 B.C. into some
of the first paper. And from the paper of

Cyclical Vomiting

History of marijuana

2737 B.C China → India →

Egypt 1500 BC → Assyrian 1000 BC →

500 ACEurope → 1545 to New world by Spanish
→

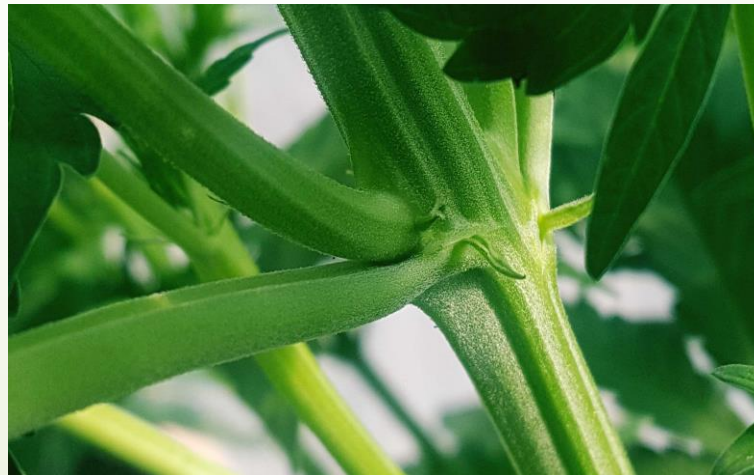
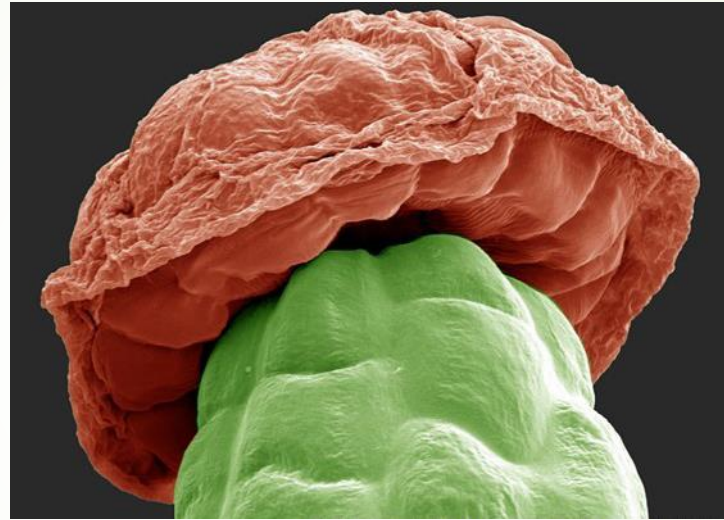
1611 to Jamestown by English Merchants

Marijuana in the History



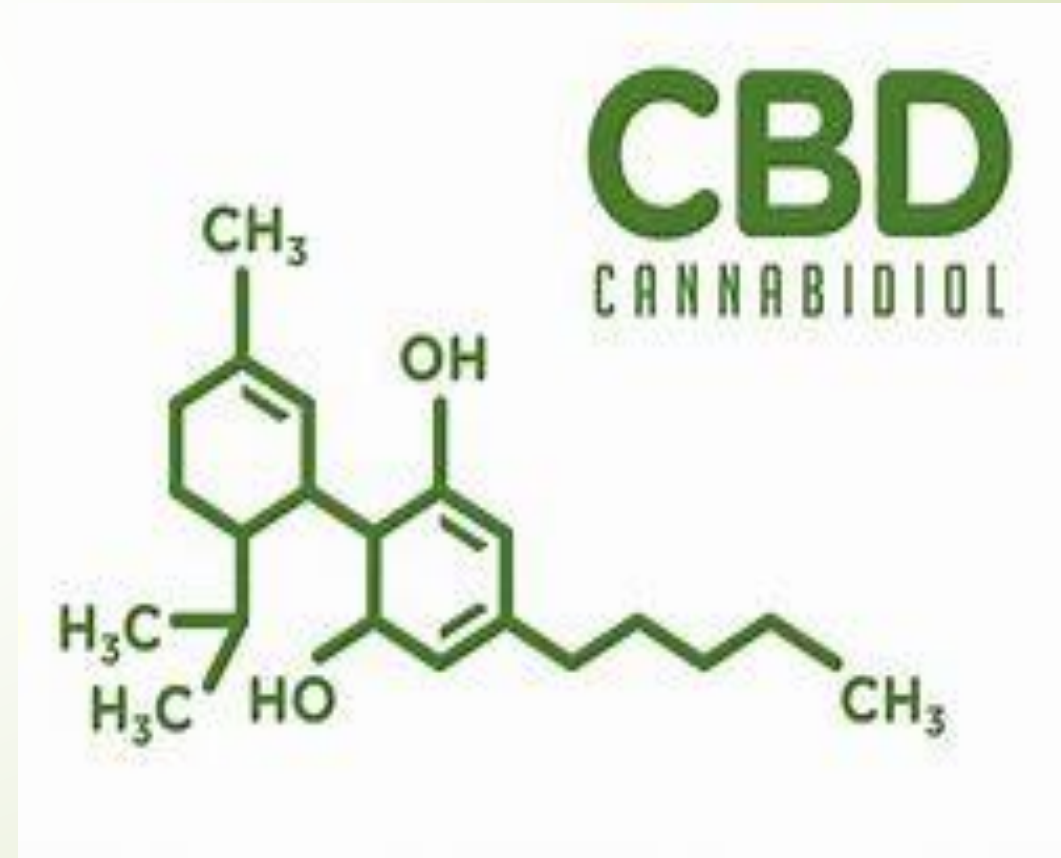
Cannabis

Cannabis plants are covered by microscopic, mushroom-shaped, hair-like compounds called **trichomes**.



Cannabis

- Chemical structure of the most popular active ingredients



Cannabis

- **weed,**
- **herb,**
- **pot,**
- **grass,**
- **bud,**
- **ganja,**
- **Mary Jane,**

البانجو


الكيف

Marijuana & Hash

The major difference between the two is that the term “weed” usually applies to dried pieces of the plant, mainly flower buds, while hash is a paste from resin, or sap of the plant. **Hash contains a higher concentration of psychoactive chemicals.**



Psychoactive



Hashish (a purified form of cannabis smoked with a pipe) was widely used throughout the Middle East and parts of Asia after about **800 AD**. Its rise in popularity corresponded with the spread of Islam in the region. The Quran forbid the use of alcohol and some other intoxicating substances, but did not specifically prohibit cannabis.

في التاريخ الحشيش

بقايا من قلاع
الموت للحشاشيين



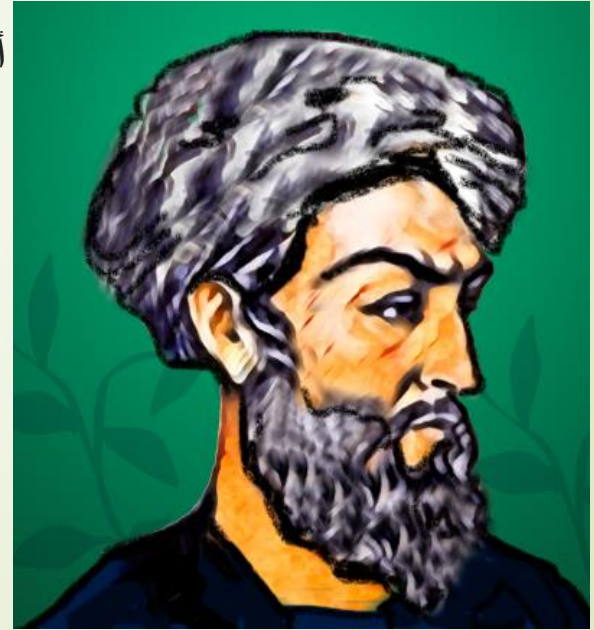
الحشيش في التاريخ

- يعتبر أول من دواء 500 والتي ذكر فيها "الخشخاش" ألف كتباً عديدة أهمها (قبل الميلاد 6-50) **ديسقوريديس** التي يأتي منها **الخشخاش** وشجرة **الأفيون** استعمل علم النبات كمادة علمية في تطوير مهنة الصيدلة وأول من وصف



أبو العباس أحمد بن محمد واسمه أبو العباس النباتي لعالم العربي المسلم
637 - 1166م / 561هـ) 'بن مفرج بن أبي الخليل
علوم الأندلسي، محدث، عالم مشهور بشؤون الإشبيلي، (م 1239 / هـ
الظاهري، ونباتي عشاب والفقيه الحديث،

الأطباء كان العرب يمارسون تخدير المريض أثناء العمليات الجراحية فقد كان يستعملون السكران وهو عشب مخدر المغاربة



الحشيش والشعر عند العرب

- الشاعر الدمشقي محمد بن علي بن الاعمى ينشد في الحشيش ويقول
- دع الخمر واشرب من مدامه حيدر
- معنبره خضراء مثل الزبرجدي
- وفيها معاناً ليس في الخمر مثلها
- فلا تسمع فيها مقالاً مفند
- هي البكر لم تنكح بماء سحابه
- ولا عصرت يوماً برجل ولا يد
- ولا نص في تحريمها عند مالك
- ولا حد عند الشافعي واحمد
- ولا اثبت النعمان تنجيس عينها
- فخذها بحد المشرفي المهندي
- وكف اكف الهم بالكف واسترح
- ولا تطرح يوم السرور الى غد

Sativa

Strain name	THC (%)	CBD (%)
OG Shark	21.4%	0%
Afghani	15.6%	0%
Skywalker OG	22.9%	0%
Lemon sour diesel	18.3%	0%
Jack Herer	17.9%	0%
Jean Guy	17.3%	0%
White widow	18.7%	0%
Pink kush	25.8%	0%
Master kush	25.6%	0%
Sweet Skunk CBD	9.1 %	11.2%

Marijuana Seeds

- Kerosene Krash®
 - From €22.00 per seed
 - Orange Bud®
 - From €5.50 per
- Glueberry O.G.®
 - From €8.50 per seed
- Mokum's Tulip®
 - From €14.00 per seed



Hash



أنواع الحشيش



00201007012000



www.altaafi.com



Psychoactive

- ▶ CBD is a non-psychoactive cannabinoid, so it doesn't create a "high" sensation. Instead, it demonstrates effective pain relief and anti-inflammatory properties,
- ▶ A lot of focus is given to separating CBD from THC (or tetrahydrocannabinol), another cannabinoid derived from the plant. This is to remove the psychoactive effects of THC that have led to its status as a controlled substance in many countries worldwide.
- ▶ Both cannabinoids, although chemically similar, interact with the body's endocannabinoid system in very different ways. THC binds with the CB1 (cannabinoid 1) receptors in the brain to produce a sense of euphoria, or a "high". In contrast, CBD has a very low affinity to the CB1 receptors.



Marijuana

The limit for THC content in cannabis-derived products is currently

0.2 % in the EU,

0.3 % in Canada and set at similar levels around the world, meaning that removal of THC from CBD is a requirement for commercialization

Marijuana

Interduce as treatment
for Rheumatism, gout and Malaria
in China 2737 BC
Market .Value US\$ 120 Billion



Tobacco

**Interduce as
pain killer for
toothache dressing
wound
by indigenous comm
unity 6000 BC
M.V. US\$ 121 Billion**



Heroin

Introduced as cough
medicine by
German chemical compan
y in 1890
M.V US\$ 65 Billion



المريوانا

➤ OLM, Ottawa Life Magazine

- Deloitte suggest that the Canadian weed market could climb to the staggering \$22 billion in the following decade
- The Government imposed a 10% tax on weed sales, so every bill will be contributing to the national economy from now on. If we know that the **market is currently worth some \$7 billion annually**, it's easy to calculate that Canada will get some \$700 million per year from pot legalization.
- **Tourism**
- Amsterdam is a beautiful city
- **Lower expenses**
- Drug-related crimes

- 
- THC medical use
 - Side Effects of Chemotherapy
 - Multiple sclerosis
 - HIV/AIDS
 - Spinal injury: Lessen tremors
 - Nausea and vomiting
 - Chronic pain
 - Inflammation
 - Digestive health

- CBD used for
- Pain (neuropathic, chronic, cancer-related, etc.)
- Epilepsy
- Multiple Sclerosis (MS)
- Sclerosis (ALS)
- Parkinson's
- Inflammation
- Depression
- Rheumatoid Arthritis
- Nausea

CBD in Europe



المريوانا

- Argentina, Australia
- Belgium
- Cambodia ,Canada , Columbia, Costa Rica, Croatia, Czech Republic
- Ecuador, Estonia
- Germany
- Italy, (Israel)
- Jamaica
- Mexico
- Nepal, Netherlands, North Korea
- Pakistan, Peru, Portugal
- Russia
- Switzerland
- Ukraine, Uruguay





CMA position on Marijuana

- ▶ Changes to the criminal law affecting cannabis must not promote normalization of its use, and must be tied to a national drug strategy that promotes awareness and prevention, and provides for comprehensive treatment.

**Under such a multidimensional approach
the CMA would endorse decriminalization.**

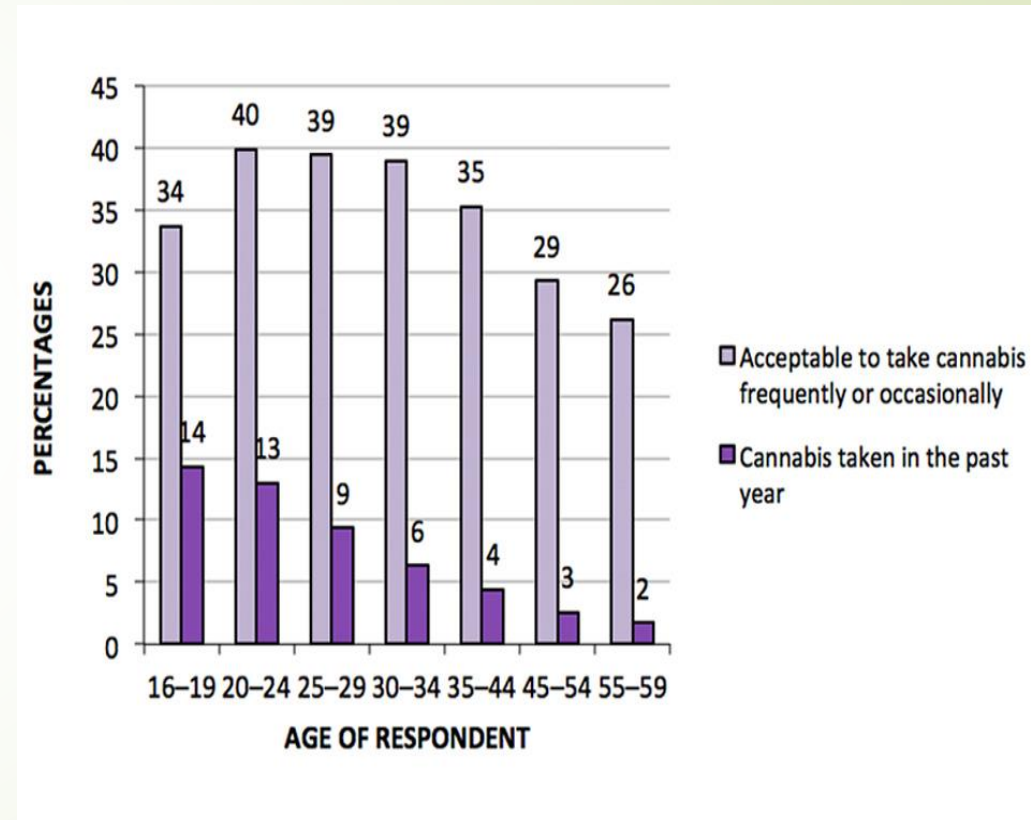


What UN see around the world

- The United Nations Office on Drugs and Crime UNODC states that cannabis often contains 5% THC content, resin "can contain up to 20% THC content", and that "Cannabis oil may contain more than 60% THC content."

Marijuana user Age groups

A scoping review of the literature was systematically conducted using PubMed and AgeLine from January 1, 2000 to December 8, 2017
Age group 50-65 year old 3.5-6% of total user
Most initiated at age 18



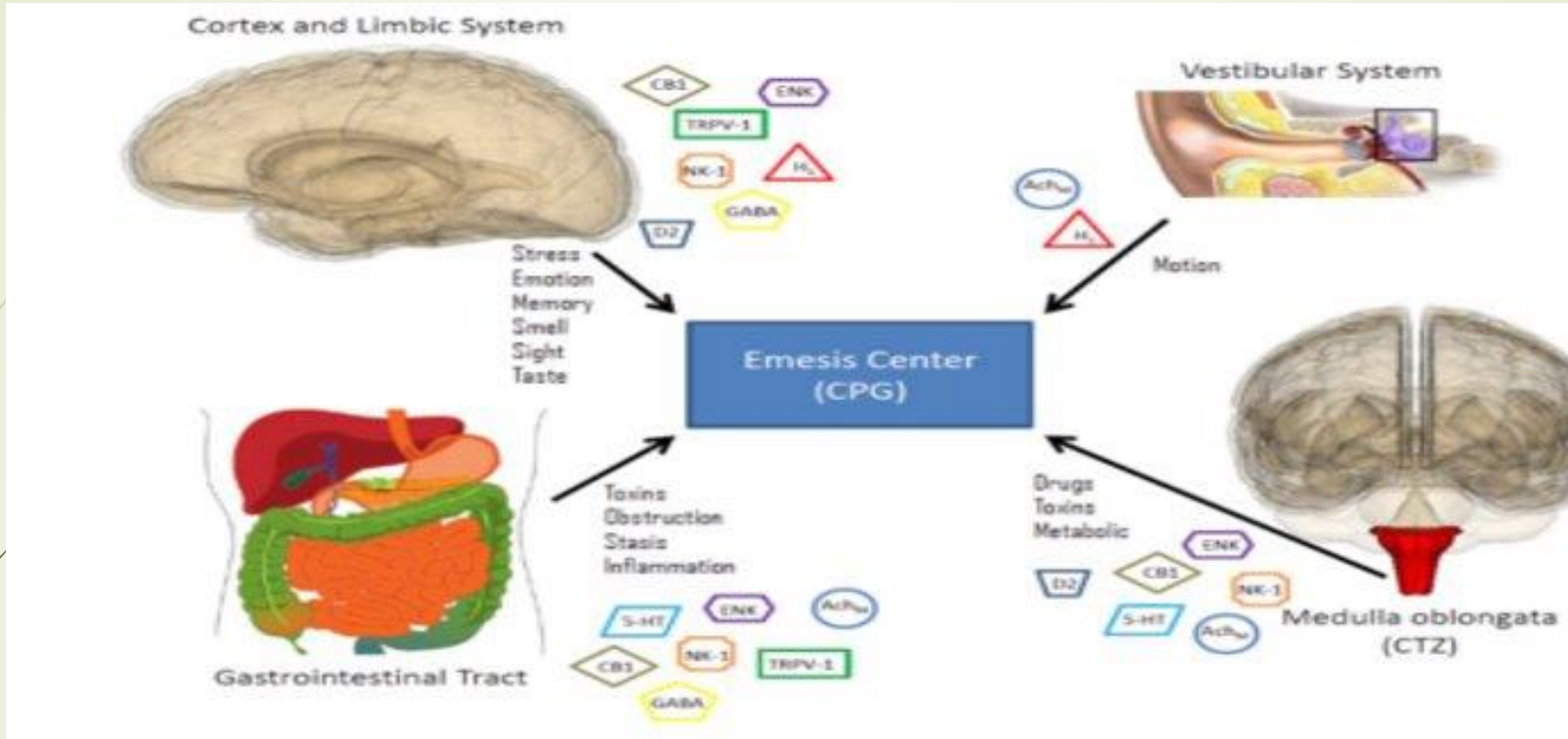
Some of Questions?

- **Is it addictive ist gateway drug** ? This depend on multifactors . 32% unversity students in USA using THC, only 1.8% using cocain
- **Do Marijuan kill brain cells**? It causes problems in learning and memory, coordination, reaction time and judgment. It also can cause hallucinations, paranoia and a range of emotional problems. Marijuana use may cause academic difficulties, poor sports performance, impaired driving and troubled relationships **marijuana use disorder**
- **Do Marijuan cause Cancere**? There are 500 types of chemical,including more than 100 compounds that are chemically related to THC, called *cannabinoids*.(CBD)
- Testicular cancer non seminoma . No strong association with lung canceerr



Marijuana Detection

- THC and its major (inactive) metabolite,
- THC-COOH, can be measured in blood, urine, hair, oral fluid or sweat using chromatographic techniques as part of a drug use testing program or a forensic investigation of a traffic or other criminal offense.

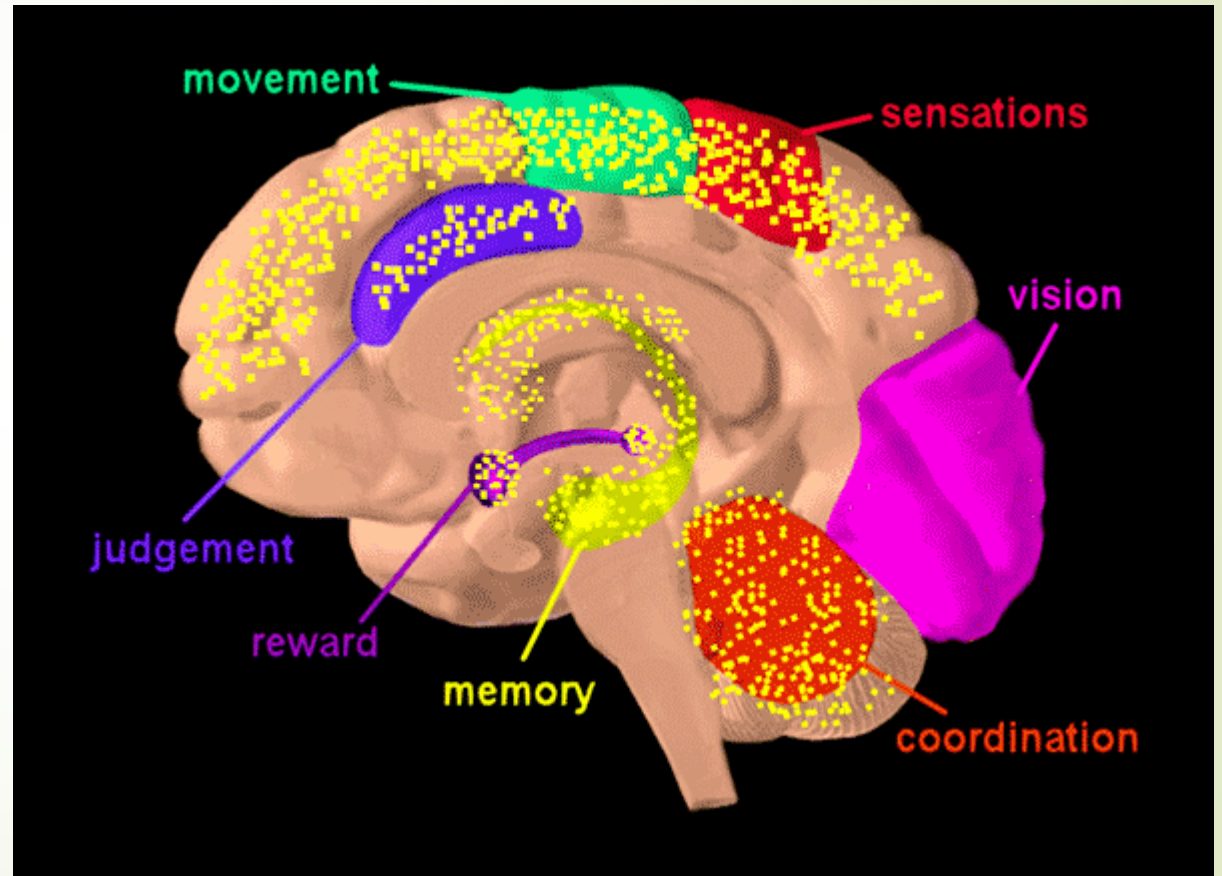


CPG: central pattern Generator

stimuli Can activate the chemoreceptor trigger zone of the Medulla oblongata, Vomiting center this through the Vagus Nerve initiated series of responses

THC Site of Action

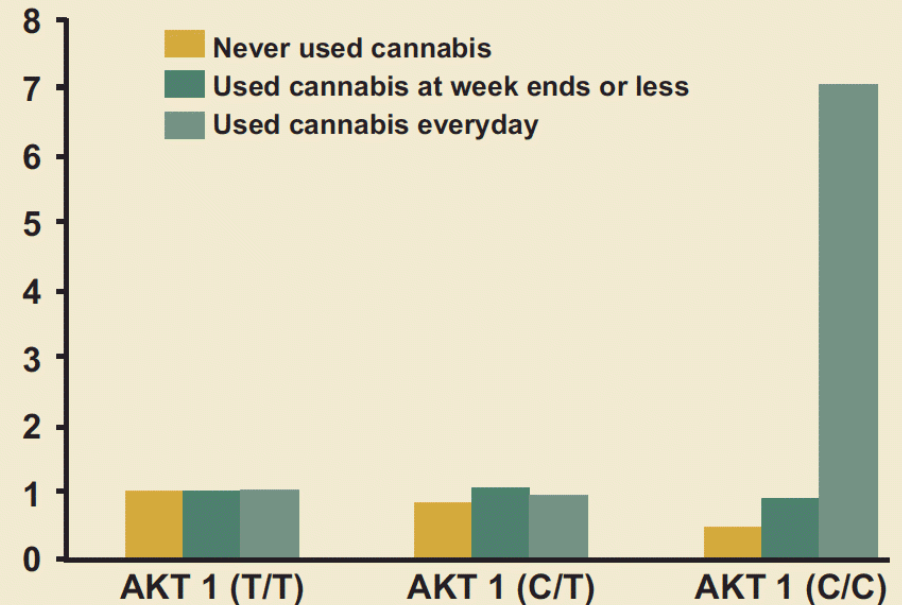
- altered senses (for example, seeing brighter colors)
- altered sense of time
- changes in mood
- impaired body movement
- difficulty with thinking and problem-solving
- impaired memory
 - hallucinations (when taken in high doses)
 - delusions (when taken in high doses)
 - psychosis (risk is highest with regular use of high potency marijuana)



Marijuana and Psychosis

people who use marijuana and carry a specific variant of the *AKT1* gene, which codes for an enzyme that affects dopamine signaling in the *striatum*, are at increased risk of developing psychosis.

AKT1 Gene Variations and Psychosis





THC is Proven medicine

- ▶ THC itself has proven medical benefits in particular formulations. The U.S. Food and Drug Administration (FDA) has approved THC-based medications,
- ▶ Nabiximols (Sativex®), a mouth spray that is currently available in the
- ▶ United Kingdom,
- ▶ Canada, and several European countries

for treating the spasticity and neuropathic pain that may accompany multiple sclerosis, combines THC with another chemical found in marijuana called cannabidiol (CBD).

Adverse Consequences of Marijuana Use

1-Acute (present during intoxication)

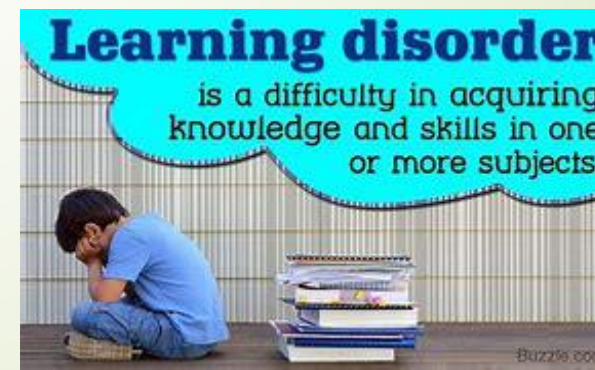
- Impaired short-term memory
- Impaired attention, judgment, and other cognitive functions
- Impaired coordination and balance
- Increased heart rate
- Anxiety, paranoia
- Psychosis (uncommon)



Adverse Consequences of Marijuana Use

2-Persistent (lasting longer than intoxication, but may not be permanent)

- Impaired learning and coordination
- Sleep problems





Adverse Consequences of Marijuana Use

3-Long-term (cumulative effects of repeated use)

- ▶ Potential for marijuana addiction
- ▶ Impairments in learning and memory with potential loss of IQ*
- ▶ Increased risk of chronic cough, bronchitis
- ▶ Increased risk of other drug and alcohol use disorders
- ▶ Increased risk of schizophrenia in people with genetic vulnerability**

Marijuana and pregnancy

There's a new warning for women who smoke [marijuana](#) during pregnancy. A recent [study](#) conducted by the **Proceedings of the National Academy of Sciences of the United States of America** finds that children of women who smoked weed during their pregnancy are at greater risk for development and behavior issues. The study states, "Here we find that maternal cannabis use is associated with increased cortisol, anxiety, aggression, and hyperactivity in young children. This corresponded with widespread reductions in immune-related gene expression in the placenta which correlated with anxiety and hyperactivity. **Future studies are needed to examine the effects of cannabis on immune function during pregnancy as a potential regulatory mechanism shaping neurobehavioral development.**"





Marijuana and Pregnancy

- ▶ **marijuana use during pregnancy** is linked to **lower birth weight** and increased risk of both **brain and behavioral problems in babies**. If a pregnant woman uses marijuana, the drug may affect certain developing parts of the fetus's brain. Children exposed to marijuana in the womb have an increased risk of problems with attention,
- ▶ Goldschmidt L, Day NL, Richardson GA. Effects of prenatal marijuana exposure on child behavior problems at age 10. *Neurotoxicol Teratol.* 2000;22(3):325-336.

Where is the Cannabis stand

● ALCOHOL	46
● HEROIN	22
● CRACK COCAINE	17
● TOBACCO	9
● CANNABIS	8
● COCAINE	7
● AMPHETAMINE	4
● KETAMINE	3
● METH	2
● ECSTASY	1

