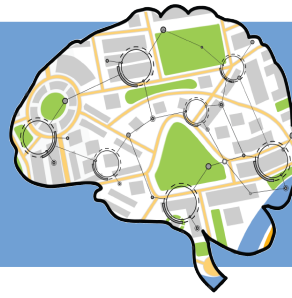


Marijuana & My Brain

Activity Guide Grade 6-12



Know Your Neuro

Cannabis: Cannabis sativa is a species of plant. There are two strains of the plant: one is selectively bred to produce fiber and seed (hemp), and the other for mind/body altering effects (marijuana).

Endocannabinoid System: The body's system of neurotransmitters and receptors that help regulate appetite, pain sensation, mood and memory. Cannabis binds to the receptors in this system.

Marijuana stays in the body longer than many other substances, and thus it may arrest brain development longer than others. Because it binds to receptor sites in the Endocannabinoid System, marijuana may have negative effects on more systems, such as appetite, mood, motor function and memory.

Critical Thinking Section

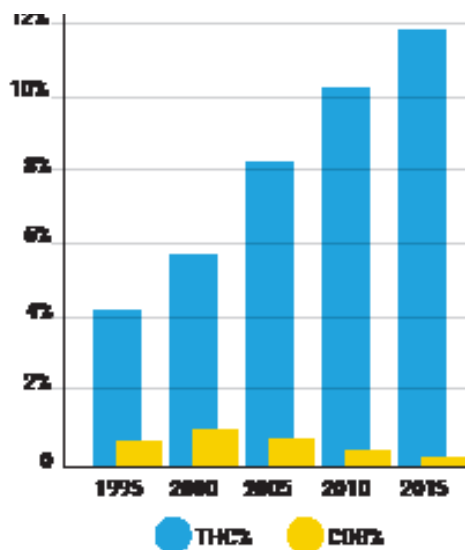
Discussion

- What are your beliefs about marijuana use?
- Do you know someone who uses marijuana? How do they act? How does it affect you?
- Does your family have a rule about marijuana use? Do you agree with it? Why or why not?
- Why are marijuana manufacturers breeding plants that have less CBD if CBD is the medicinal part of marijuana?
- What are the short-term vs. the long-term effects of marijuana use?
- What are your consequences at home and school if you use marijuana at home or on campus?
- Why have so many states passed recreational and medicinal marijuana use laws? Who do marijuana lobbyists represent?

CBD or Cannabidiol:

A compound extracted from the Cannabis sativa plant that does not cause euphoria or intoxication and is sometimes used medicinally to reduce pain and swelling. It is not fully understood how CBD affects the receptors it binds to in the brain.

CBD modulates and reduces the impact of THC in marijuana, which is why CBD is being bred out of marijuana by the marijuana industry.



Short-Term Effects

- Altered senses, including time
- Changes in mood, euphoria, excitement
- Impaired coordination and memory
- Sedation, drowsiness
- Difficulty thinking and problem-solving
- Altered judgment
- Hallucinations, delusions, psychosis

Long-Term Effects

- Changed structure, functions and chemical activity of the brain
- Diminished executive function, attention, learning, memory and motor skills
- Diminished visuospatial function, verbal learning, short-term memory and cognitive function
- Altered emotional functioning, depression, anxiety, mania, paranoia, psychosis
- Increased risk of schizophrenia
- Cannabis dependence
- Lower life satisfaction
- Overall lower lifetime achievement
- Exacerbation of emerging or existing mental health issues
- Sleep problems, lung problems, stroke
- Testicular cancer
- Drugged driving accidents
- Poor school or work performance
- Potential loss or lower IQ and less crystallized intelligence