The Endocannabinoid System

Recently, researchers studied how the THC in marijuana makes people high. They found the receptors it binds to and named them the Cannabinoid-1 (CB1) receptor in the nervous system and the Cannabinoid-2 (CB2) receptor in the immune system. Our brains are rich in CB1 receptors, which control central nervous system functions such as pain, sleep, metabolism, and movement.

We have an internal endocannabinoid in our bodies called anandamide. This is the brain's natural feel-good chemical, which naturally binds with our receptors. It is released after running, for example, which is often called the runner's high. Anandamide is also found in chocolate!

THC and anandamide molecules aren't exactly the same, but THC is close enough to TRICK THE BRAIN into letting it bind to the CB1 receptors! When THC gets into the brain, it interferes with our normal bodily functions. Teens who use marijuana may have attention deficits, memory loss, and impaired learning ability. When your brain is forming, marijuana use can change its structural development, causing changes in the prefrontal cortex. You want your brain to function and develop the way it's supposed to!

Research: www.ncbi.nlm.nih.gov/pmc/articles/PMC4789136

**CB1 RECEPTORS = Nervous System** 

**BRAIN** RETINA SPINAL CORD

LUNG **HEART** 

**REPRODUCTIVE SYSTEM** 

CB2 RECEPTORS = **Immune System** 

DIGESTION

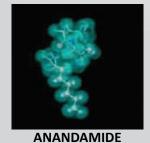
**LIVER** 

**BONES** 

**SPLEEN** 

COLON

**PANCREAS** 





DRUG - THC

## **QUESTION:**

Why are attention, memory, and learning important to your future career goals?

REFLECT

