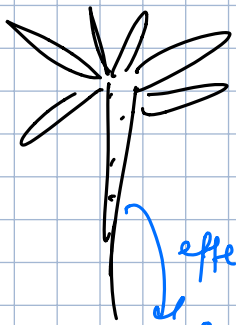


# CANNABIS

- History of usage 5000 yrs ago in China.  
 ↳ human beings get attracted to things that bring instant joy.
- joy, laughter, bad trip, anxiety, hunger etc.
- marijuana, bhang is surprisingly 'accepted' in society although it induces the same effect.
  - The component is the same. both come from a plant called Cannabis.

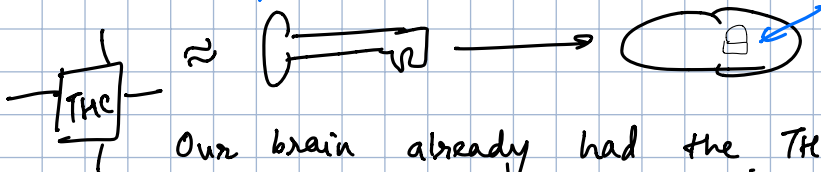


- Chemicals - ①  $\Delta^9$ THC (Tetrahydrocannabinol)  
 ② CBD (Cannabidiol)

For many years, we didn't know why this plant had such an effect on the brain.

Receptor. (like a lock)

THC receptor in the brain.



Our brain already had the THC receptor. Why? It's almost as if you were meant to consume it. It didn't make sense.

Our brain had this endogenous THC receptor. Not only in humans but (already present) also present in animals. cats, puppies, rats etc.

Around 20 years ago, we found a molecule (endogenous molecule, already present inside the brain) for which the THC receptor was meant in the brain.

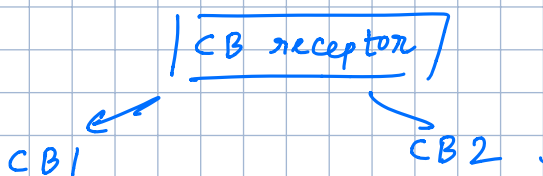


This molecule was put into rats and they were happy, joyous, blissful.

Bliss molecule → Anandamide (based on Sanskrit word, "Anand")

So, THC receptor was meant for Anandamide.

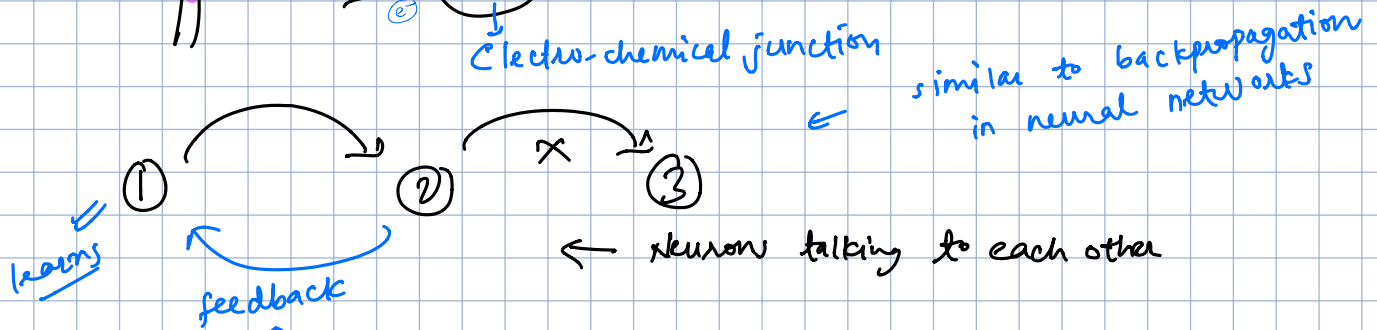
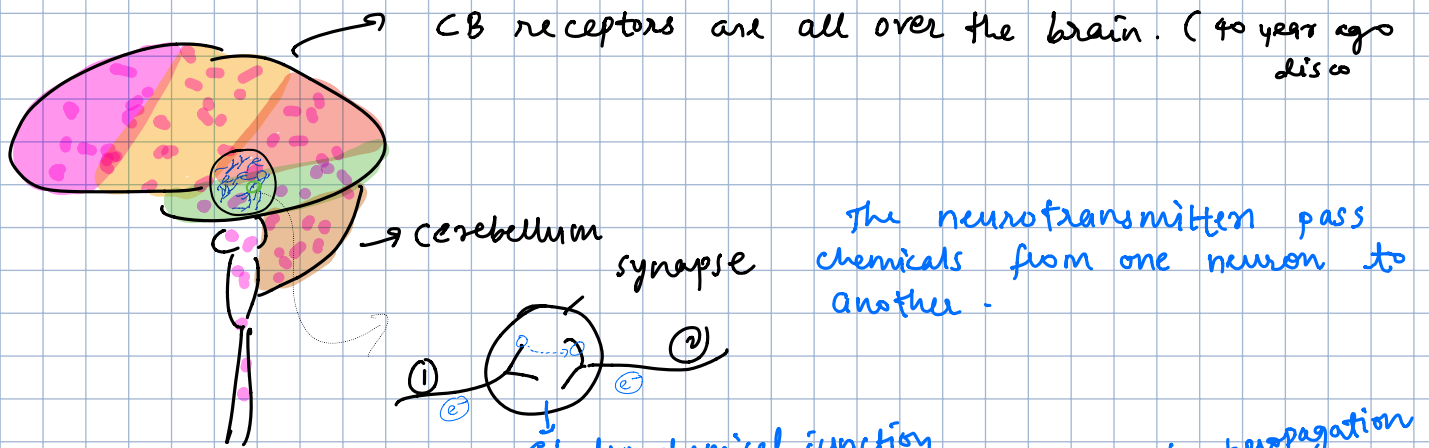
THC receptor was later called cannabinoid receptor (CB receptor)



CB receptors are present all over the body. They play a role in -

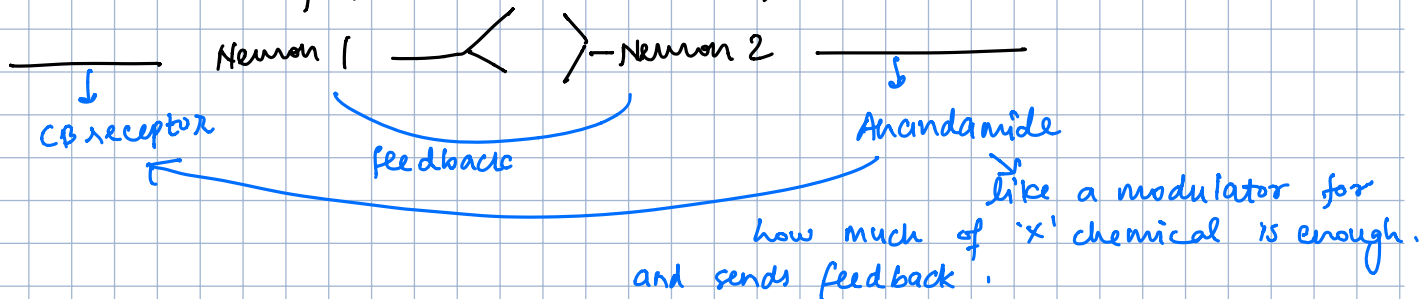
- motivation
- memory
- sleep
- hunger
- pain
- stress

One research that also got popular is that CB receptors also play a role in "runner's high" → you feel happy after running for long.



This feedback is carried by CB receptor.

In this process of feedback, neuron 2 produces anandamide.



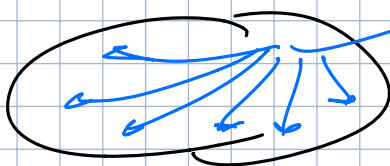
This entire system is called Endocannabinoid system (ECS).

What happens when we smoke up?

ECS

Marijuana

THC will attach in random proportions in different parts of the brain.



THC attaches to CB receptors everywhere. It will go anywhere it can.

Anandamide is more controlled and measured.

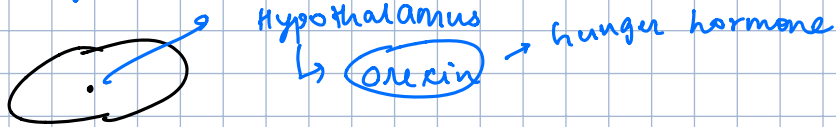
Symptoms - (1) Random associations inside the brain / to remember anything.



amygdala → Emotions → panic attack

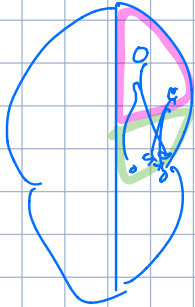
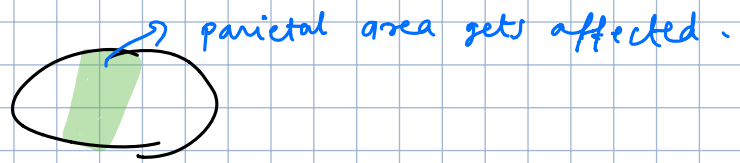
Every symptom can be explained basis what part of the brain it attacks.

## ② Hunger



## ③ Feeling we call "high"

- detached
- incoordination
- perception of time
- relaxed



Right side gets more active than left. don't know why.

Random networks get connected randomly. → new ideas, art, learning.

Chronic usage and brains starts decreasing the receptors which means you start resisting/blocking the effect of marijuana.

Your tolerance increases.

- "You don't get as high anymore".