DOPAMINE: HOW DOES IT AFFECT US?

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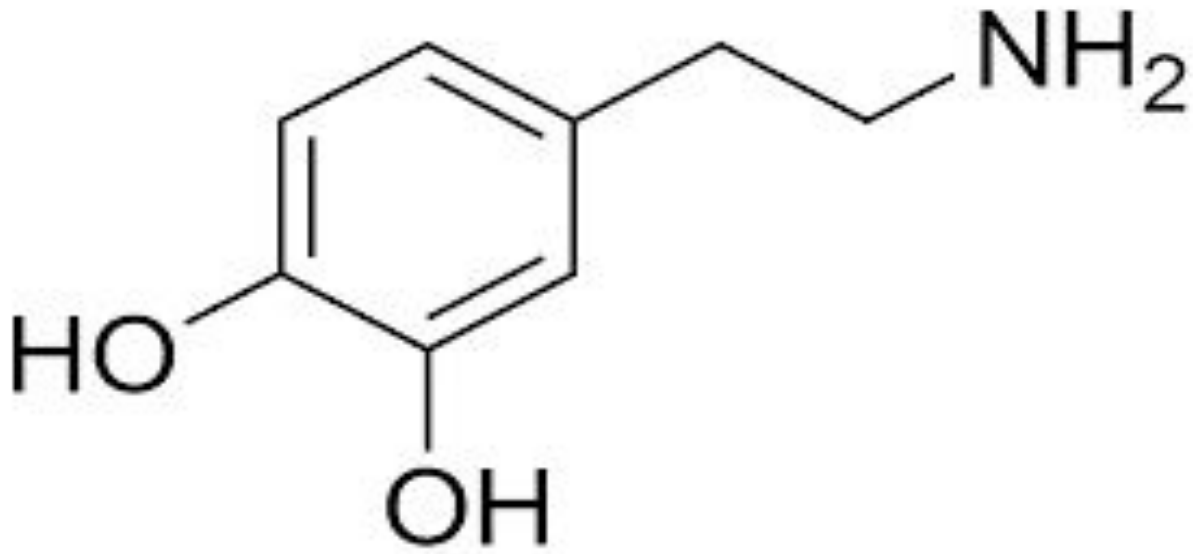

NH2
HO
OH

Dopamine

Dopamine is a neurotransmitter produced in the hypothalamus of the brain, created by the decarboxylation of tyrosine and L- Dopa.

Dopamine

Dopamine plays a vital role in many physiological functions including mood, movement, memory, reward pathways and motor control.

So what does this mean?

Impacts

- neurological and neuropsychiatric disorders,
- Schizophrenia
- Tourette syndrome
- OCD
- drug addiction
- Many of the drugs used to treat these disorders target dopamine receptors.

LOW DOPAMINE:

Depression

Poor concentration

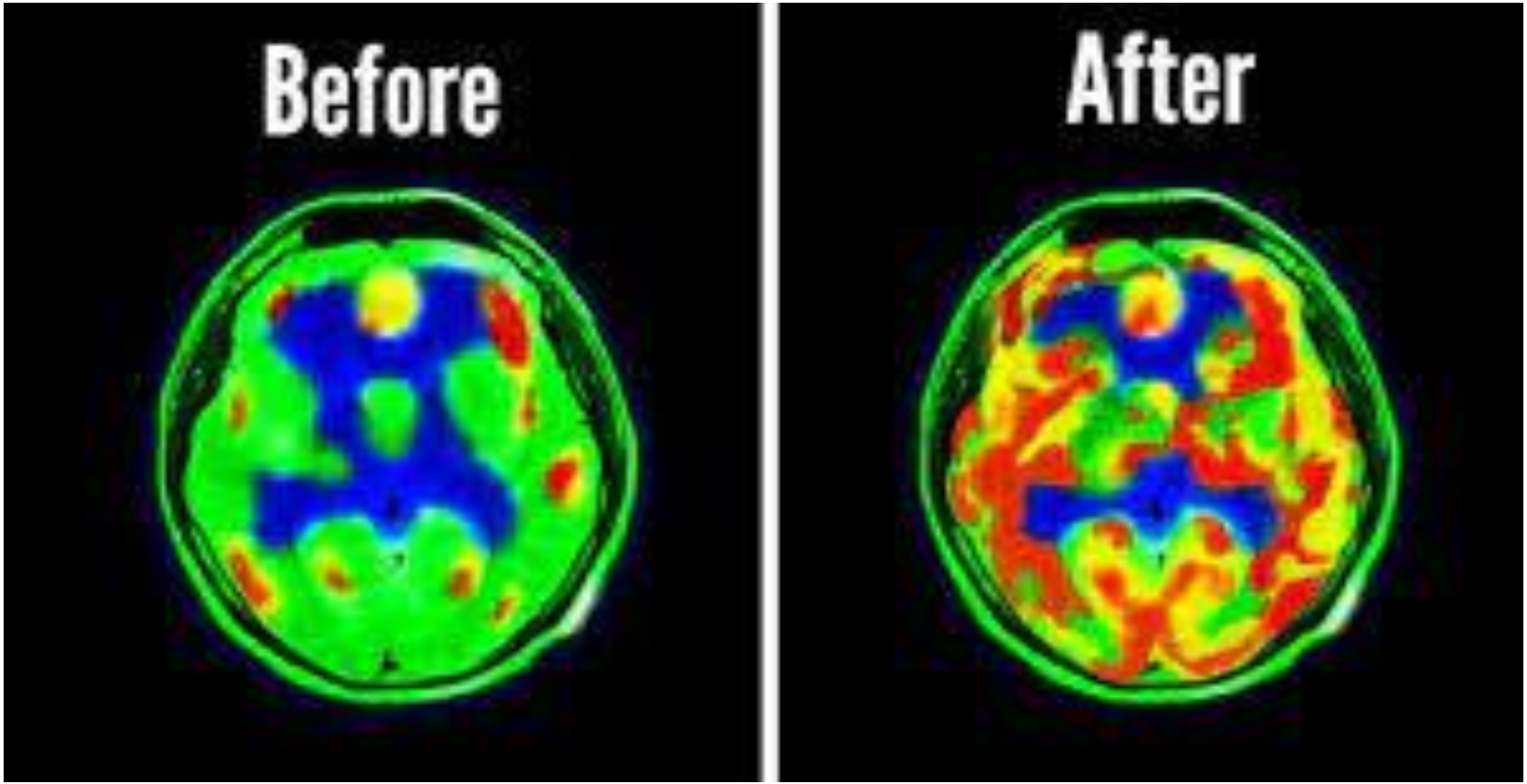
Tremors

Memory loss

How do we measure dopamine?

One way to measure dopamine levels is to use a mouse line that expresses a fluorescent dopaminergic reporter, DAT-Ai14, to assess levels of dopaminergic signaling using a transgenic approach to label boutons.

This lights them up like little stars as we can see here..


Before
After

HIGH DOPAMINE:

Addiction

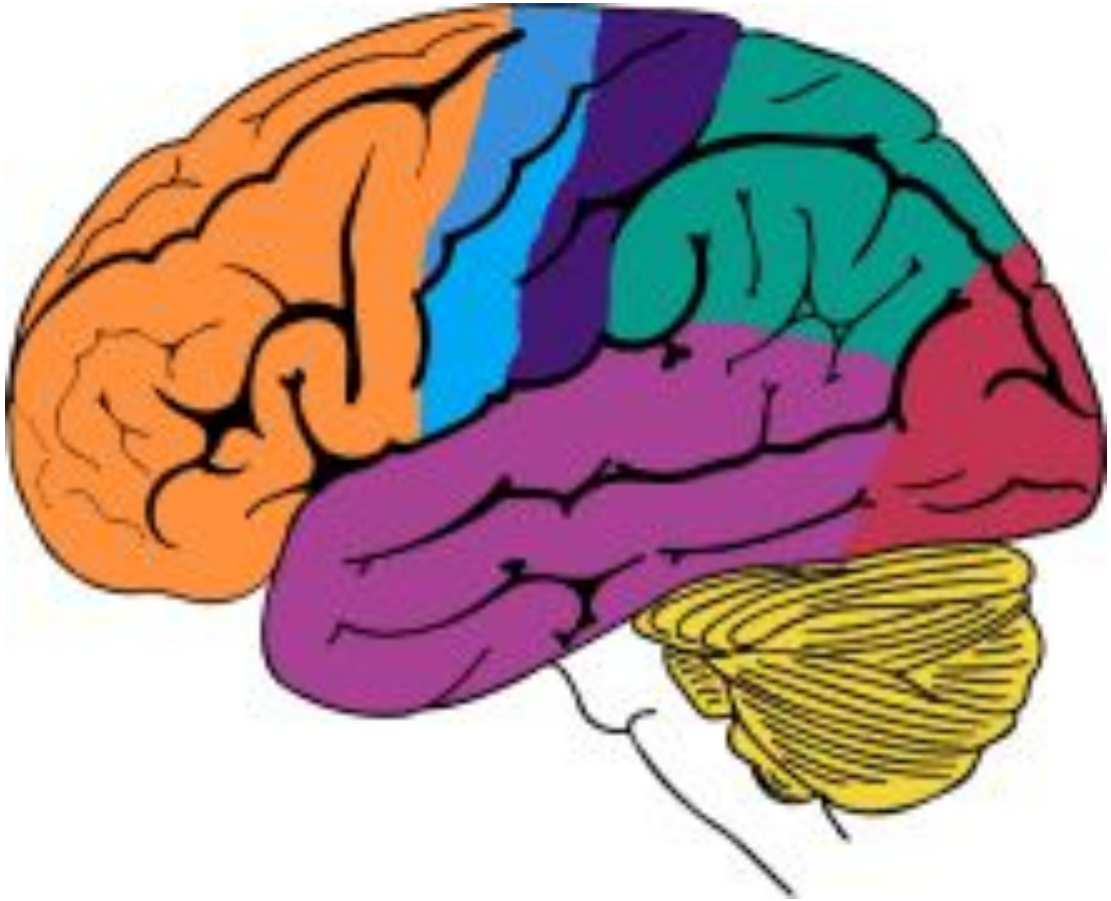
Poor Impulse Control

Aggression

gambling

Future Impacts:

- chemical synthesis of dopamine is pivotal for neurological and psychiatric disorders.
- It could be the answer to the future cure for alzheimer's
- Eradicating adhd medication or “uppers” dependencies



JUST *BREATHEEE*.. AND LET YOUR DOPAMINE LEVELS *CHILLL*!

- Thank you