

Here are some things to keep in mind before we start our discussion of:

Annual Review of Psychology

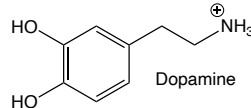
Dopamine and Addiction

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1) Dopamine neurons respond to _____ such as food with reflexive, linked _____.

- Dopamine neurons also come to respond with _____ to stimuli that immediately _____ and reliably _____ the _____.
- _____ (also called phasic firing) of dopamine-containing neurons are necessary to establish _____ associating predictive _____ with _____.

2) Actual dopamine neuron activity is very complicated as there can be shifts in so-called _____ (the overall baseline of activity) as well as phasic activity, that is the _____ associated specifically with an event.

3) Within the striatum, close to half of the output neurons express only _____, and the other half express only _____.

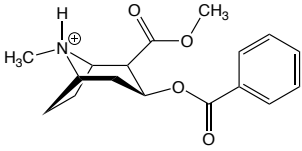
- _____ have low or loose binding to dopamine and are thus _____ by dopamine molecules.
 - Current thinking is that _____ activate when high dopamine is released due to a _____ being received and repeated activation leads to _____.
- _____ have high or tight binding to dopamine and are usually _____ by dopamine molecules.
 - Current thinking is that _____ activate to _____ associated with a _____ and repeated activation of _____ leads to _____.
 - **LOSS of _____ therefore leads to _____ and an ignoring of _____.**
- _____ is a disabling psychiatric disorder with many positive, negative and cognitive symptoms that can be attributable to an imbalance between dopaminergic pathways that signal _____.

4) Addiction is commonly identified _____ . It was usually defined by characteristics of _____ or by characteristics of _____ symptoms.

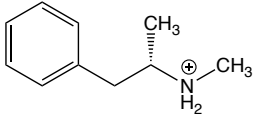
- Addiction is caused by molecules that act to release _____.
- **Unusually high levels of _____ caused by drugs of addiction activate _____ and decrease the number of _____ on neurons**
 - **Both of these effects are _____ with _____.**

Take Home Lessons from Today 10-12-23

Cocaine

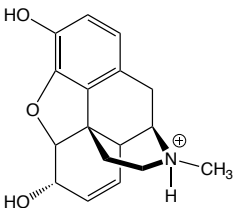


Amphetamines

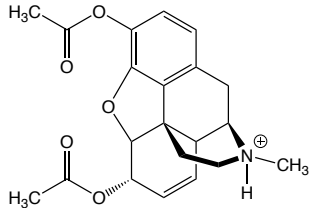


Methamphetamine

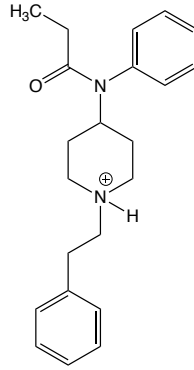
Opiates



Morphine



Heroin



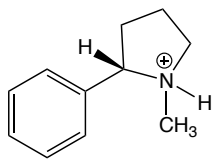
Fentanyl

Alcohol

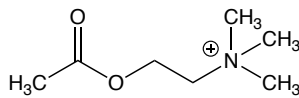


Ethanol

Nicotine

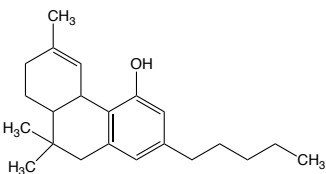


Nicotine

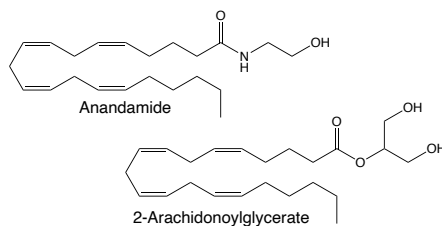


Acetyl Choline

Marijuana



THC

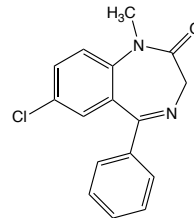


Endocannabinoids

Other Forms of Addiction

Overeating and Gambling

Barbiturates and Benzodiazepines



Caffeine

