



March 14

AS 2 Zoom meeting will not start until 5:00 p.m.

This is the time to work on your article discussion.

If you have any questions please place them in the chat box.

3:30 -4:45 p.m. Article and discussion board

Zoom will be open for questions only

4:45 - 5:00 p.m. BREAK

5:00 - 6:40 p.m. Lecture/PowerPoint

Uppers

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Energy

- ▶ Natural Energy is produced when the body needs it.
 - ▶ Epinephrine- physical energy
 - ▶ Norepinephrine- confidence, motivation, well-being
- ▶ Forced Energy- before the body needs it
 - ▶ Energy is maintained because of stimulants (cocaine/amphetamines) block the reabsorption of dopamine

Stimulant	Schedule	Trade/Other name	Medical Use
Cocaine/Freebase	II	Coke, snow, blow, Crack	Local Anesthesia
Amphetamine/Meth	II	Crystal, Meth, speed	ADHD, Narcolepsy, Weight loss
Methylphenidate	II	Ritalin, Concentra	ADHD
Other Stimulants	III,IV	Progil, Meridia	Varies

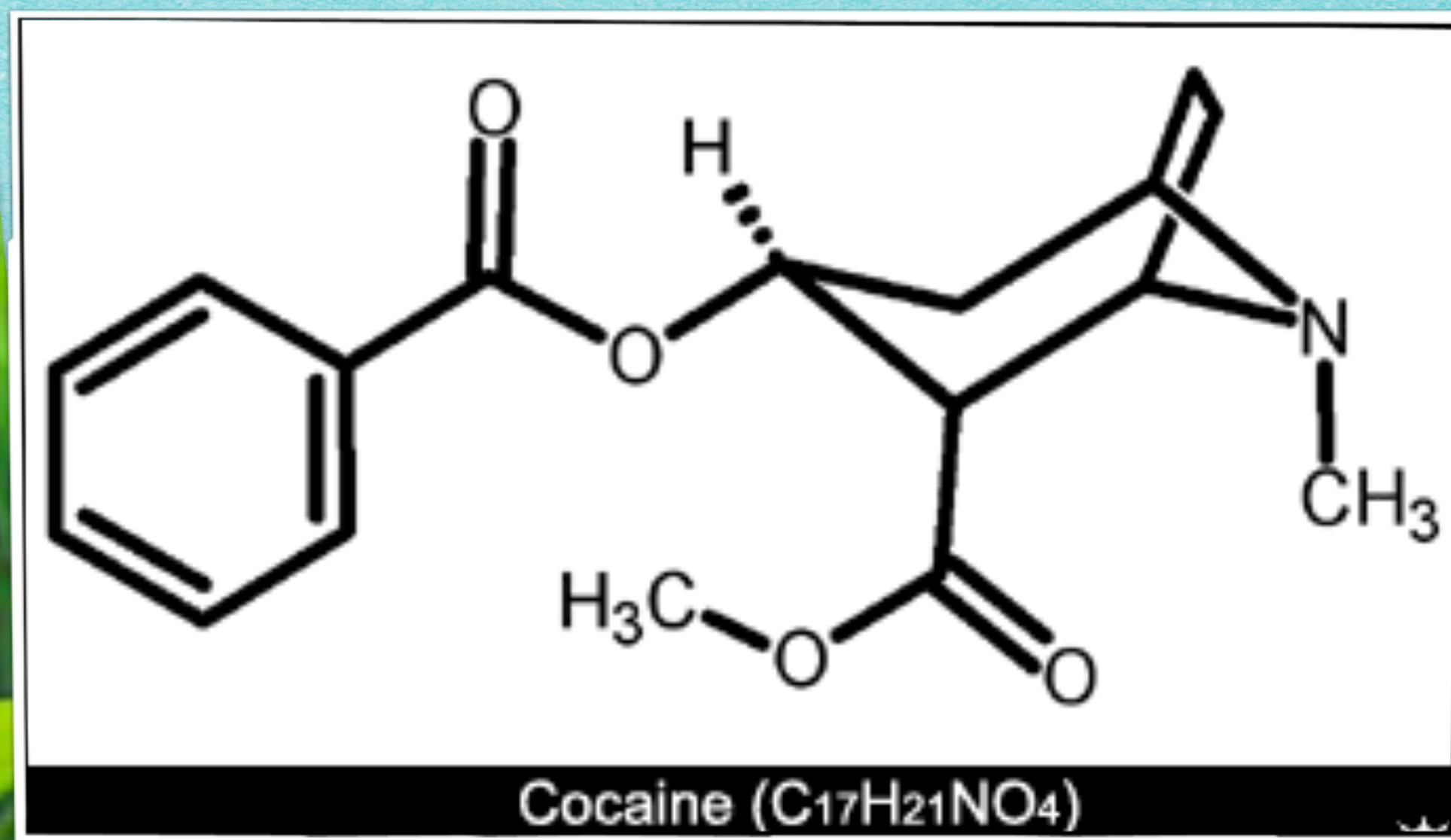
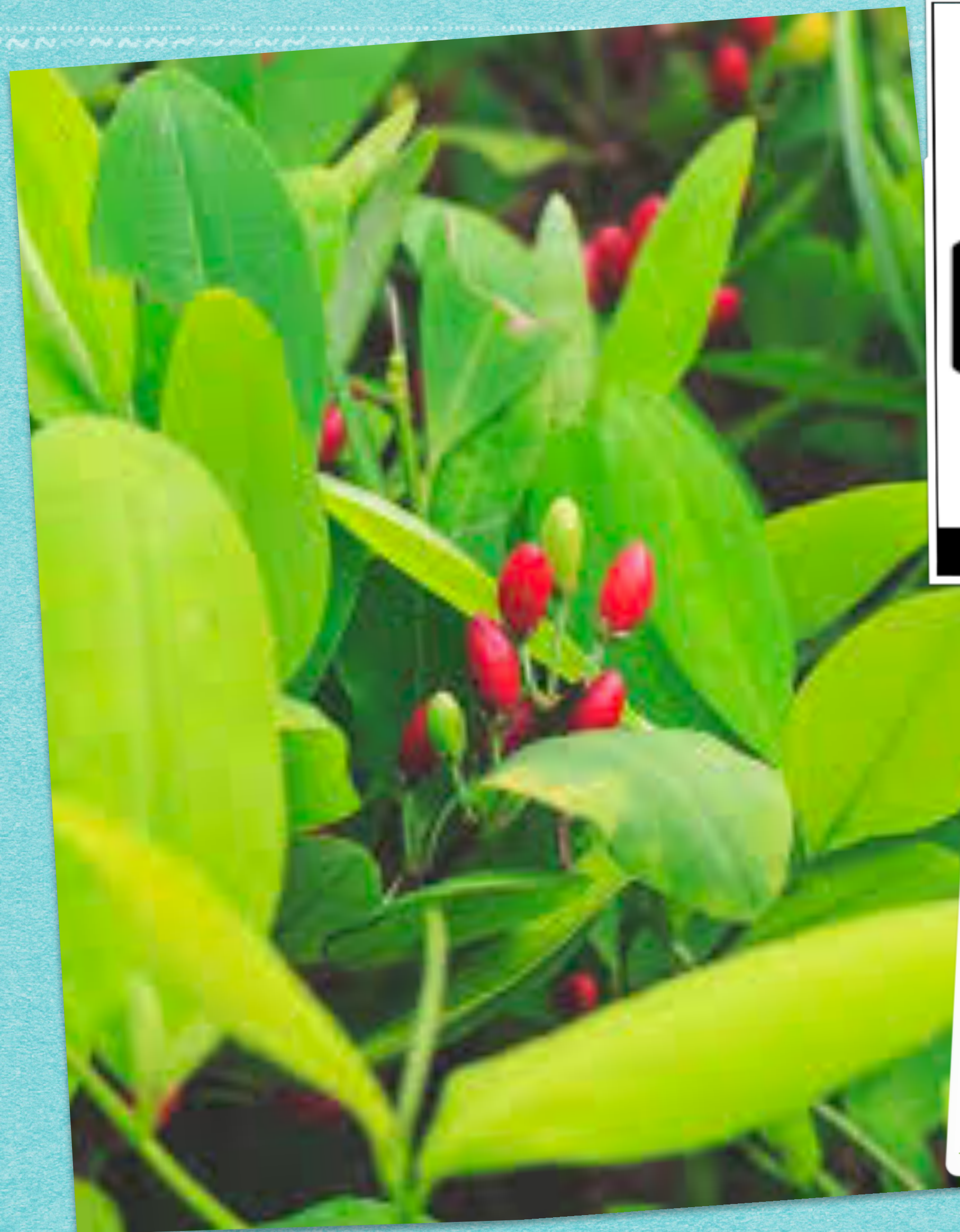
Stimulant Uses

▶ Medical Uses

- ▶ Narcolepsy
- ▶ Obesity
- ▶ ADHD

▶ Non-Medical Use

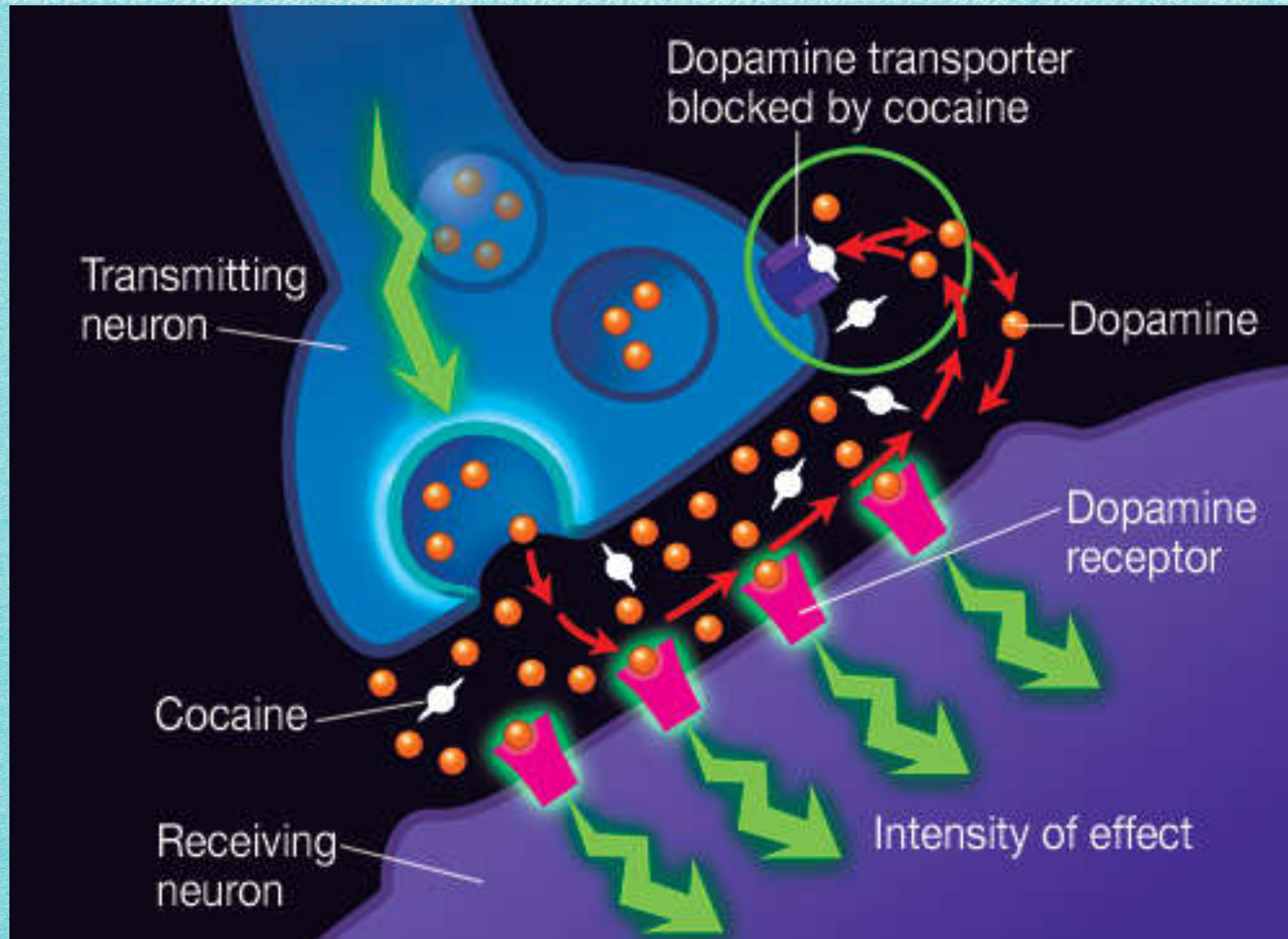
- ▶ Euphoria
- ▶ Alertness
- ▶ Energized
- ▶ Weight loss



History of Cocaine

- ▶ 1859 Albert Niemann separated chemicals
- ▶ 1879 Karl Koller disc-Anesthetic properties
- ▶ 1880-1890 medicines laced with cocaine
- ▶ 1900's- Snorting powder
- ▶ 1914-First attempt at smoking cocaine
- ▶ 1970's- Freebase cocaine was smokable
- ▶ 1980- Crack





Short Term Effects

- ▶ Extreme happiness and energy
- ▶ Mental alertness
- ▶ Hypersensitivity to sight, sound, and touch
- ▶ Irritability
- ▶ Paranoia
- ▶ Extreme and unreasonable distrust of others

Brain:

- Increased risk of strokes
- Reduced attention
- Insatiable hunger
- Insomnia/Hypersomnia
- Lethargy

Systemic:

- Fever
- Eosinophilia

Nose:

- Rhinorrhea (discharge)

Throat:

- Soreness
- Hoarse voice

Teeth:

- Bruxism (abrasion)

Lungs:

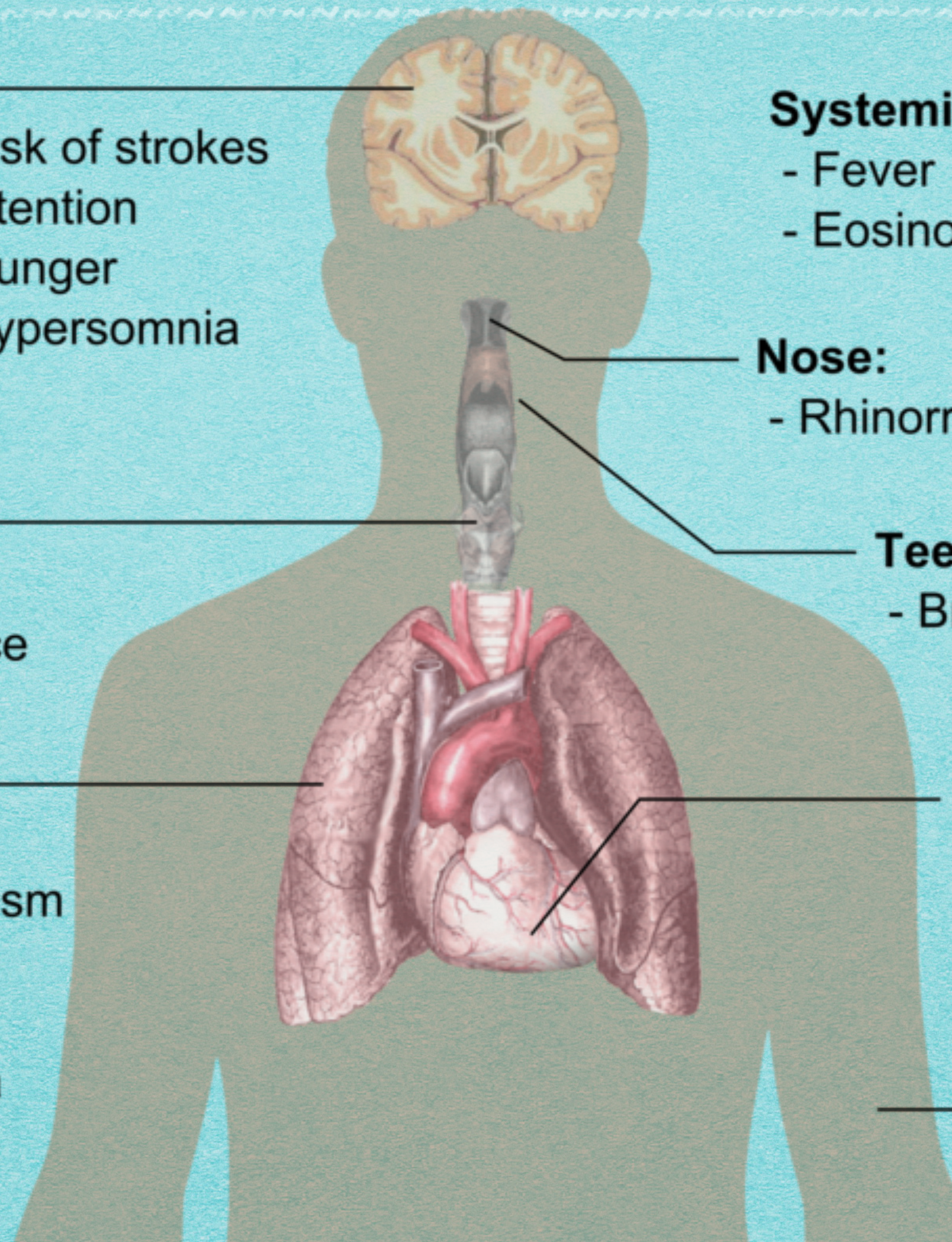
- Hemoptysis
- Bronchospasm
- Dyspnea
- Infiltrates
- Eosinophilia
- Chest pain
- Asthma

Heart:

- Increased risk of infarction

Skin:

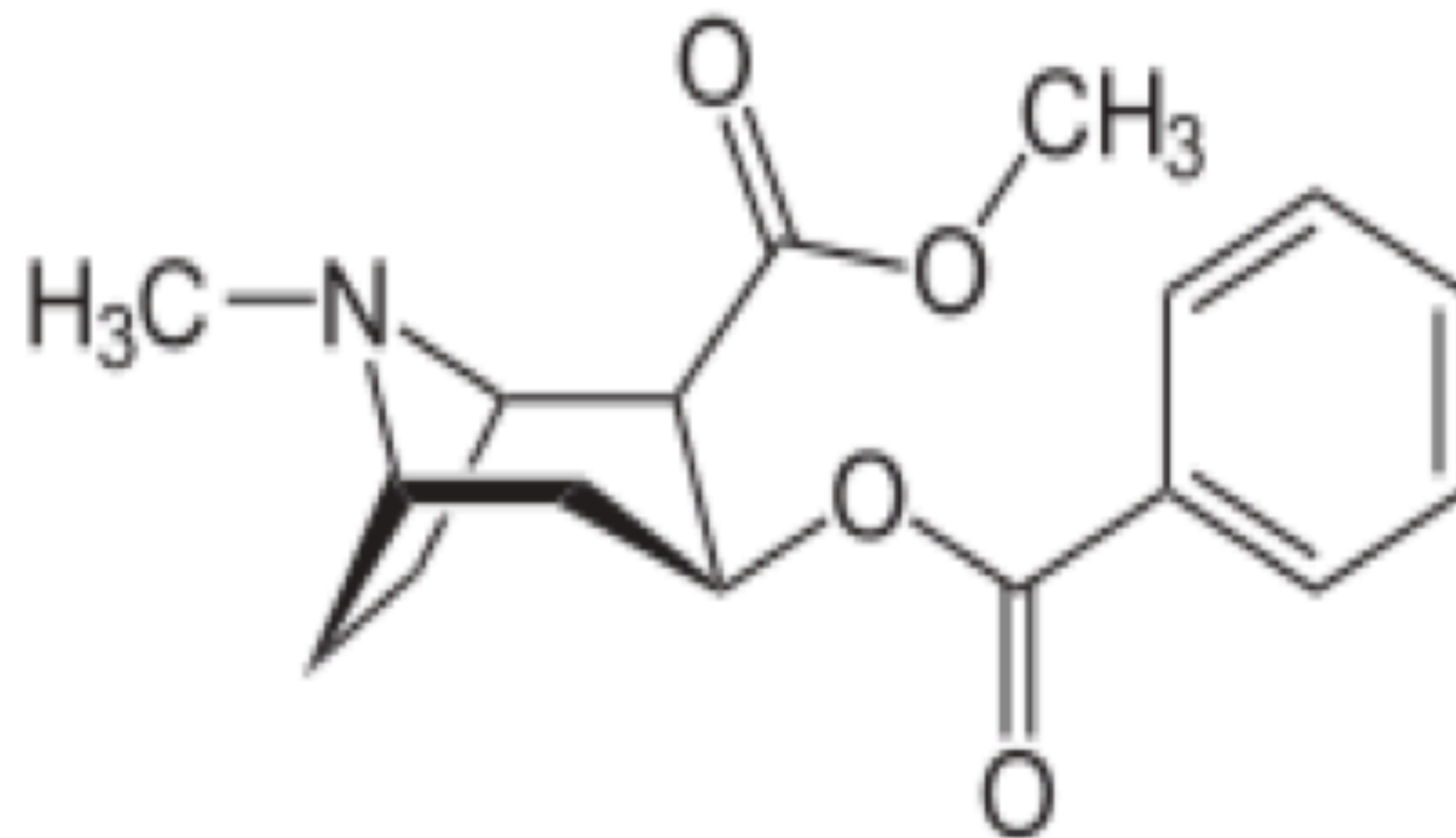
- Pruritus



Psychological Effects

- ▶ Aggression, Violence
- ▶ Inhibitory function are suppressed
- ▶ Emotional triggers are over stimulated
- ▶ Flight Center is hyperactive

Cocaine (smokable)



Systemic:

- Increased temperature

Pupils:

- Dilation

Sense of balance:

- Vertigo

Blood vessels:

- Constriction
- Increased blood pressure

Heart:

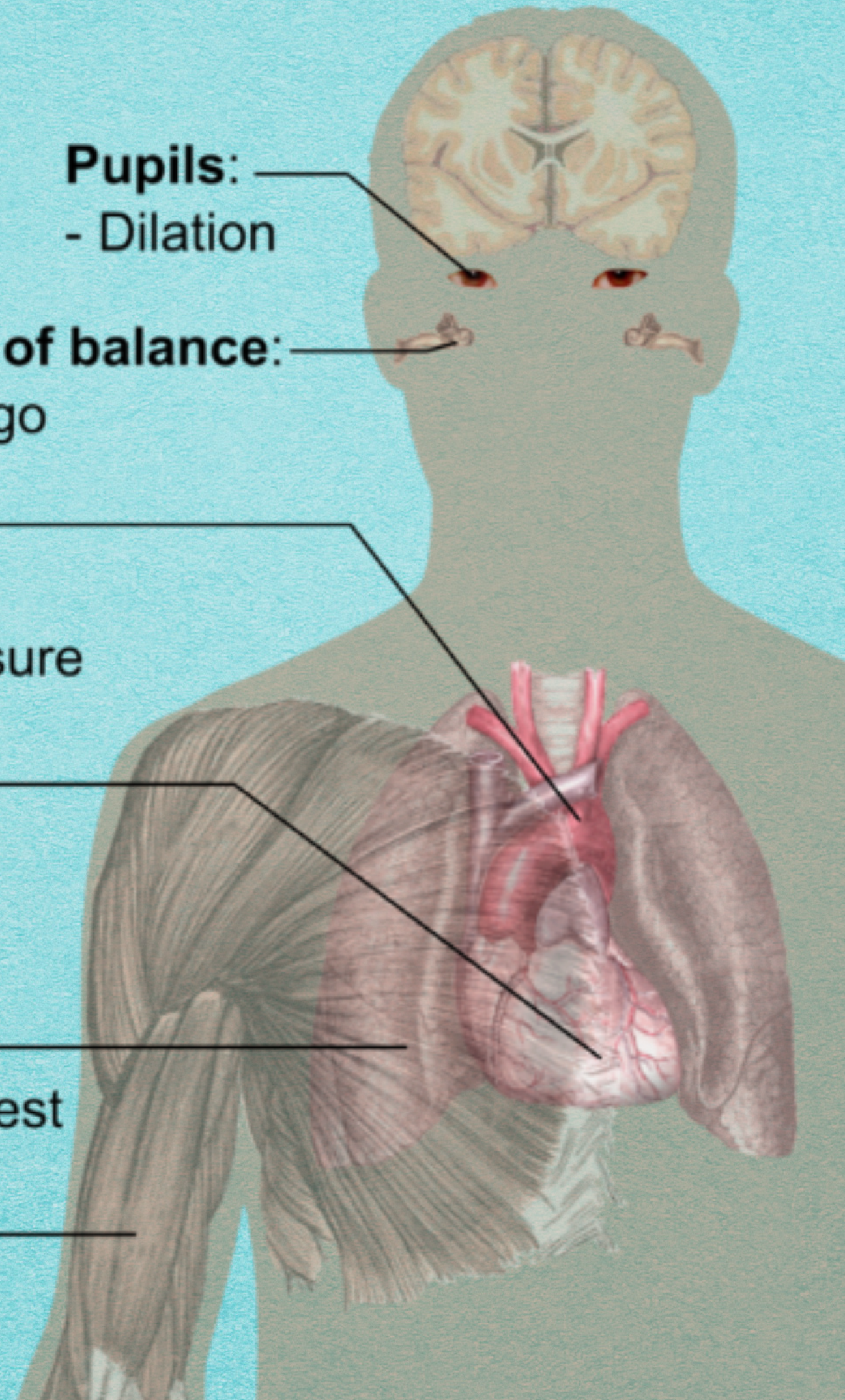
- Increased heart rate
- Risk of cardiac arrest

Lungs:

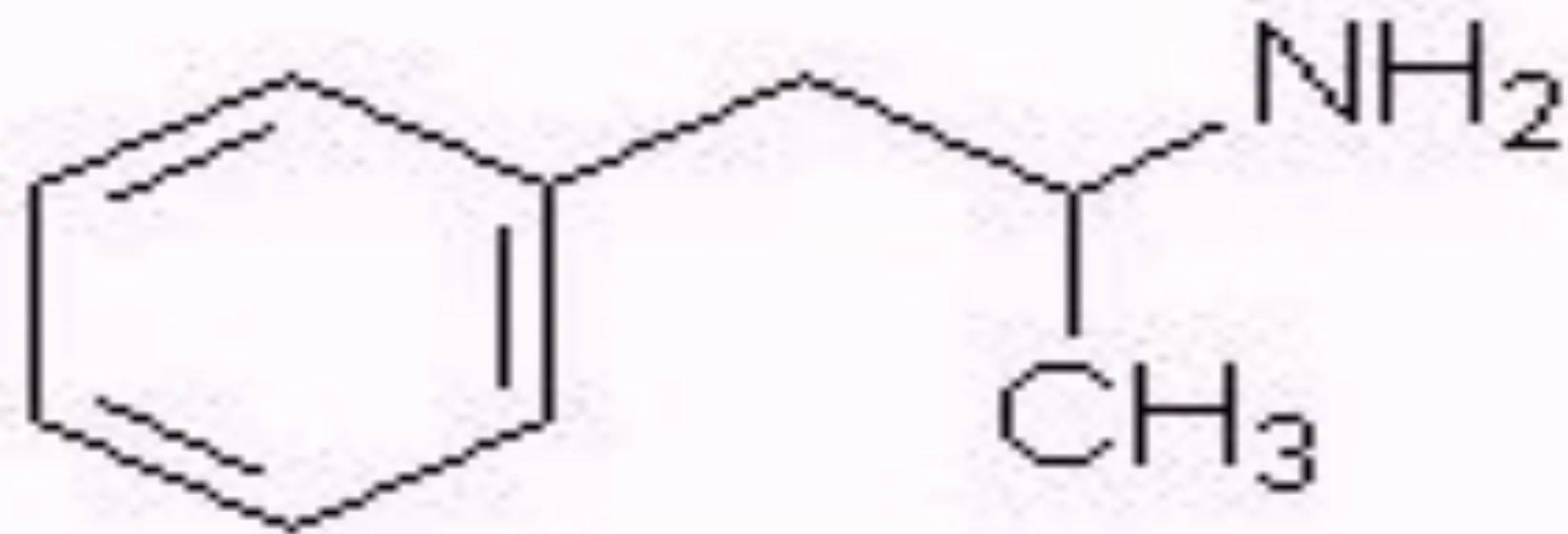
- Risk of respiratory arrest

Muscles:

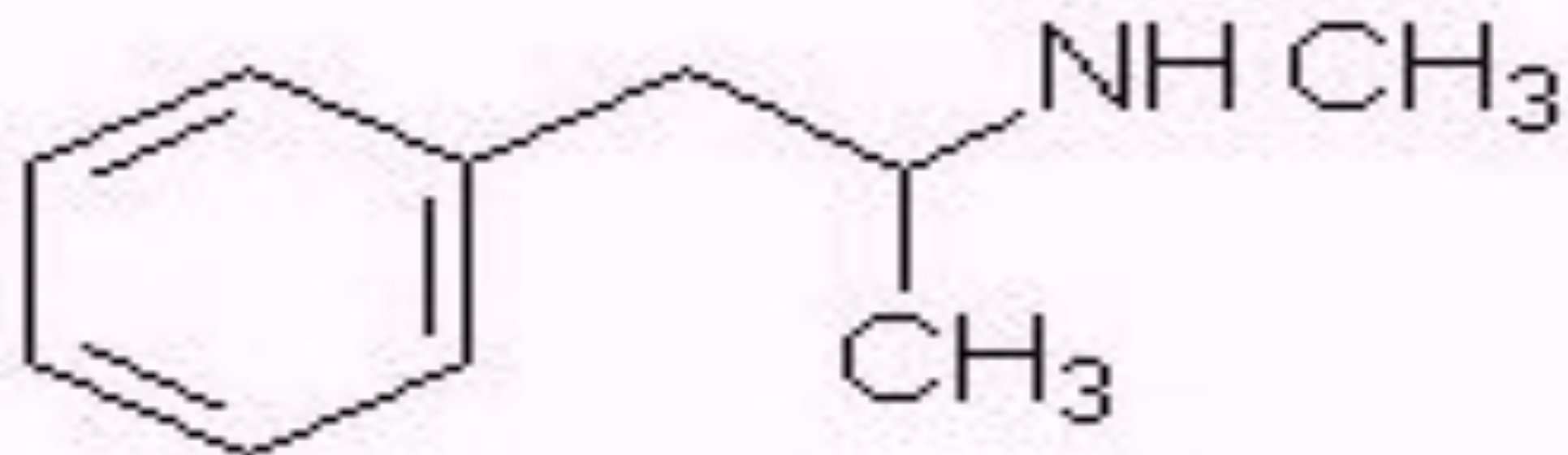
- Tremor
- Twitches



Amphetamine



Amphetamine



Methamphetamine

History

- ▶ Romanian chemist Lazar Edeleanu first synthesized amphetamine in 1887
- ▶ 1919 methamphetamine was synthesized in Japan
- ▶ 1930 amphetamines were used for medical applications
- ▶ Medical use founded that it:
 - ▶ Energized
 - ▶ Counter low blood pressure
 - ▶ Reduced need for sleep
 - ▶ Suppress appetite

Cycle of heavy use

- ▶ WWII- pilot alertness
- ▶ Soldiers alertness and aggressiveness
- ▶ Germans first used methamphetamine to energize troops
- ▶ Legal Benzedrine to US soldiers
- ▶ 1950/1960's Amphetamine-based diet pills
- ▶ 1970 6-8% of US pop., used amphetamines for weight loss
- ▶ Hippie Experience included amphetamines

Effects

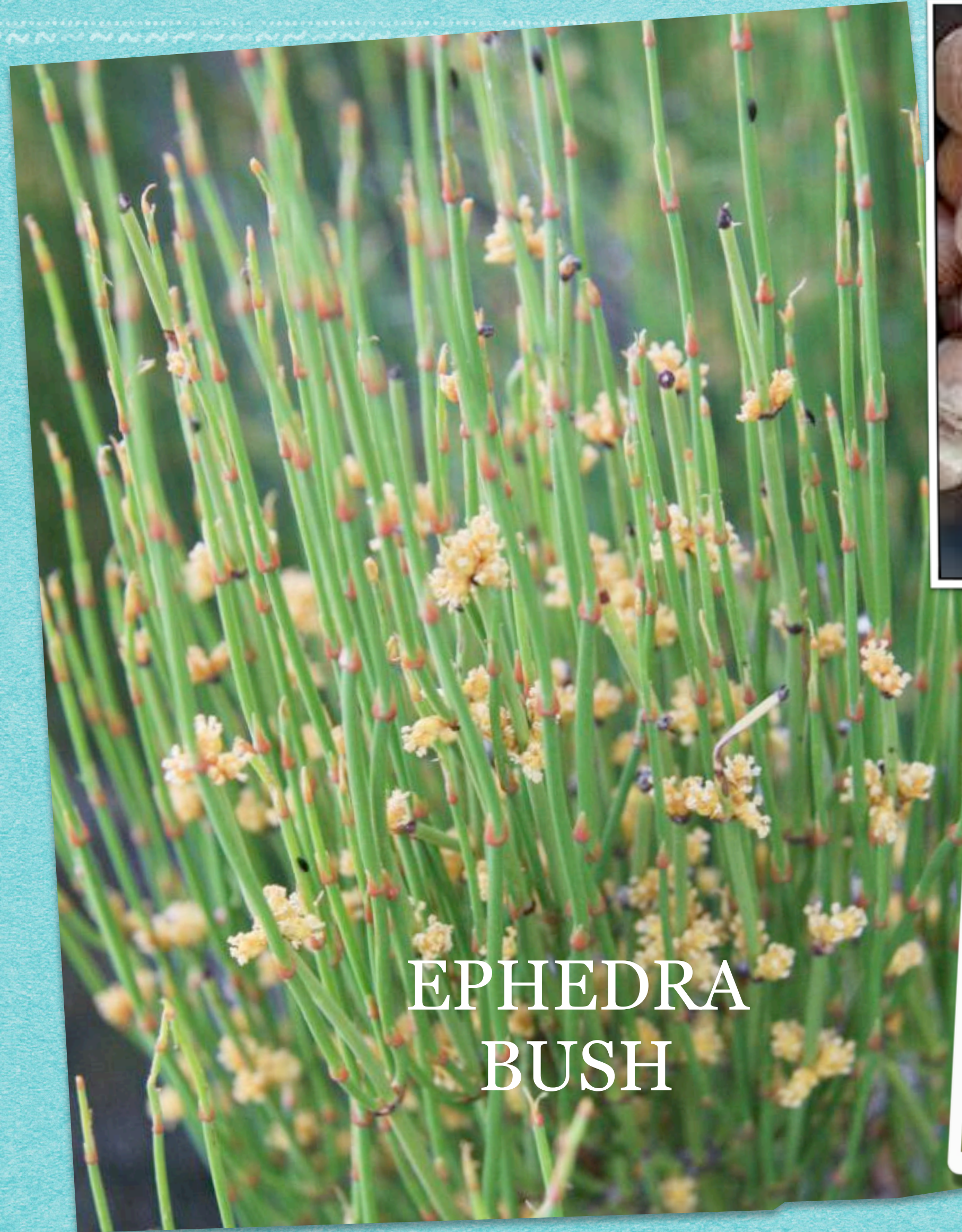
- ▶ Sympathomimetic agent
- ▶ Powerful synthetic stimulants
- ▶ Smoked, snorted, injected, oral ingestion
- ▶ Effects last 4-6 hours (can be up to 24 hrs)

Congeners

- ▶ Stimulants drugs that are chemically dissimilar but pharmacologically related to
- ▶ Amphetamines and produce many of the same effect but are not as strong.
 - ▶ Ritalin
 - ▶ Concerta
 - ▶ Adderall
 - ▶ Dexedrine

Plants (stimulants)

- ▶ Coca shrubs (Cocaine)
- ▶ Tobacco (Nicotine)
- ▶ Khat bush (Cathinone)
- ▶ Ephedra bush (Ephedrine)
- ▶ Betel Nut (Arecoline)
- ▶ Coffee (caffeine)



EPHEDRA
BUSH

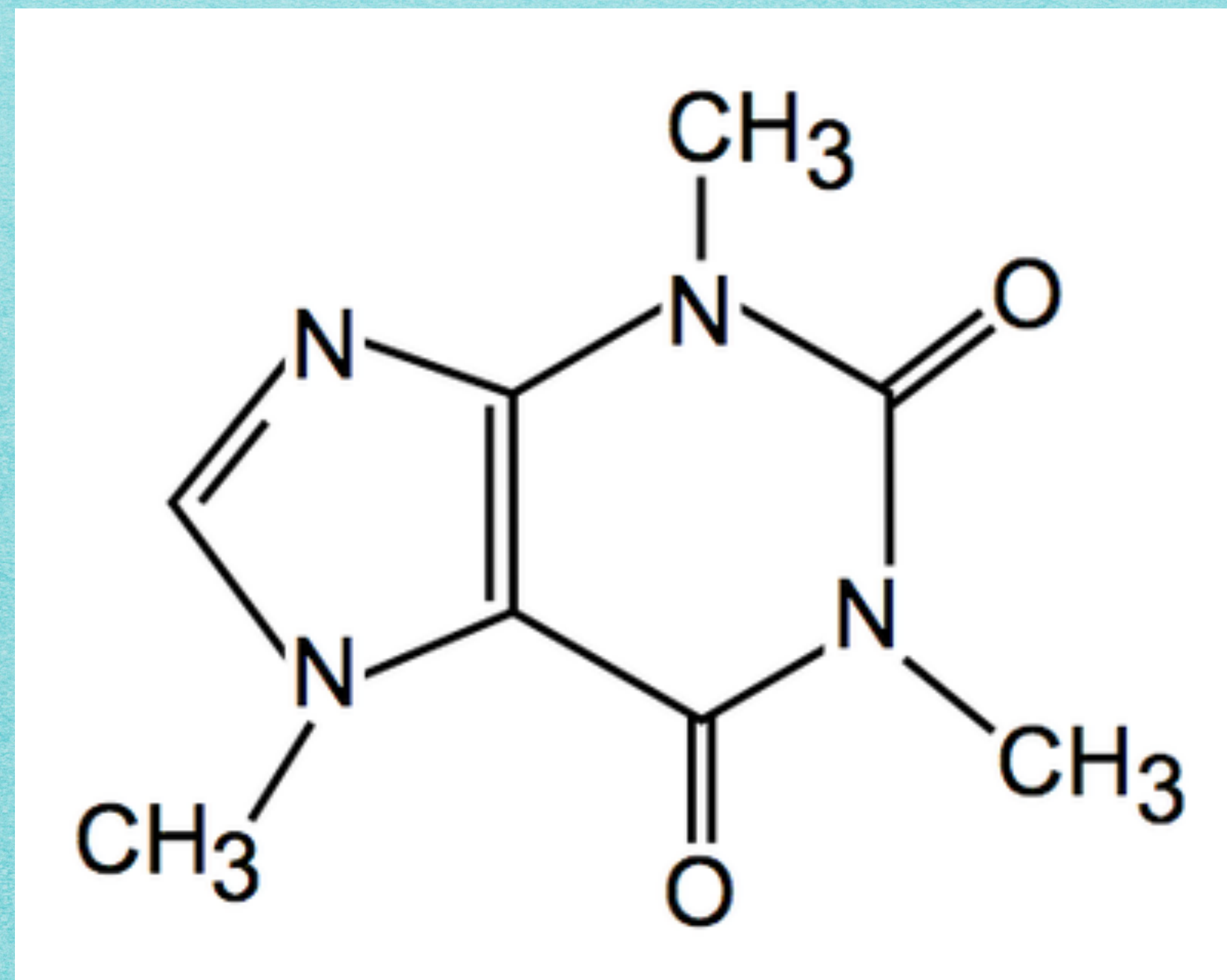


BETEL
NUT



KHAT

Caffeine

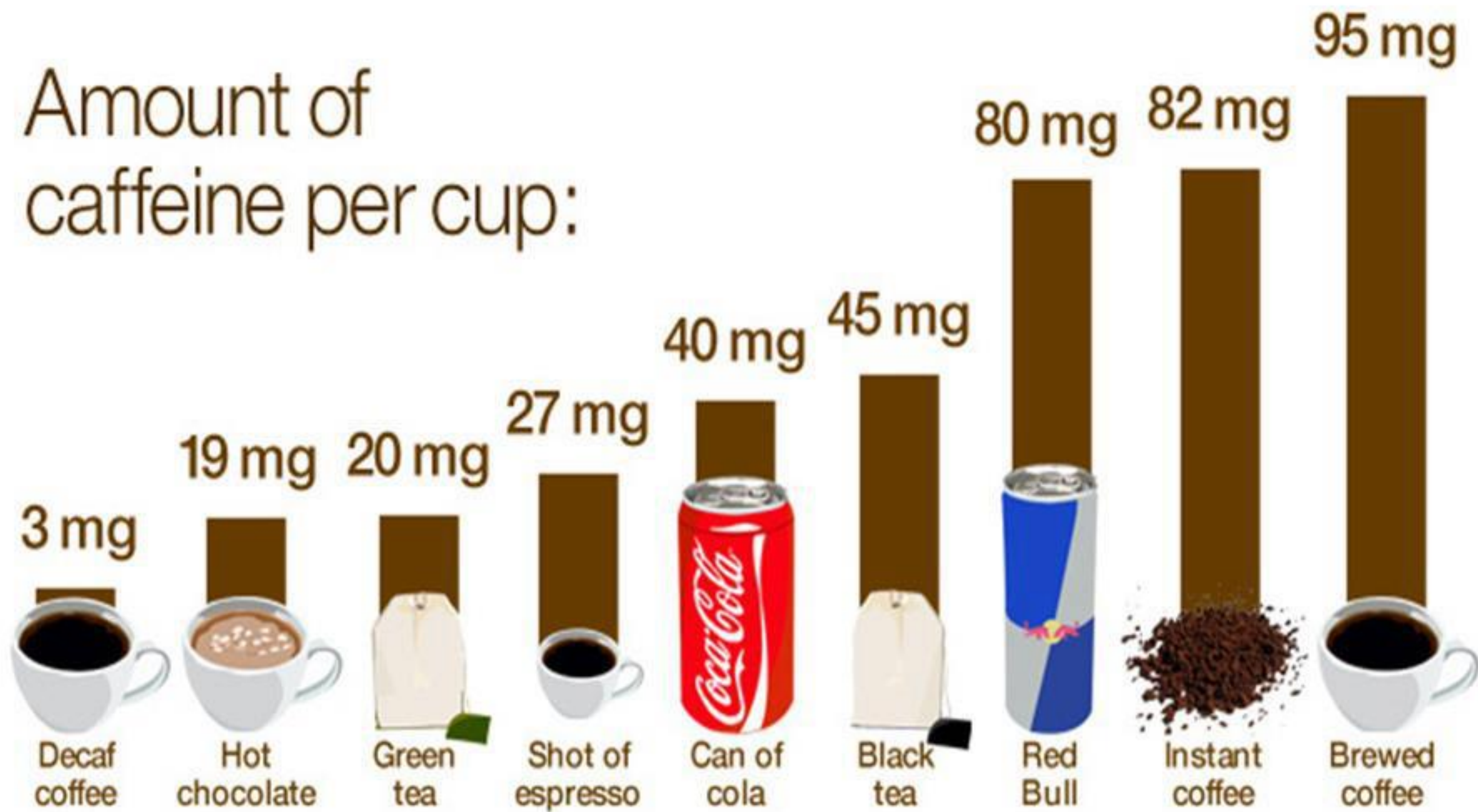


Caffeine

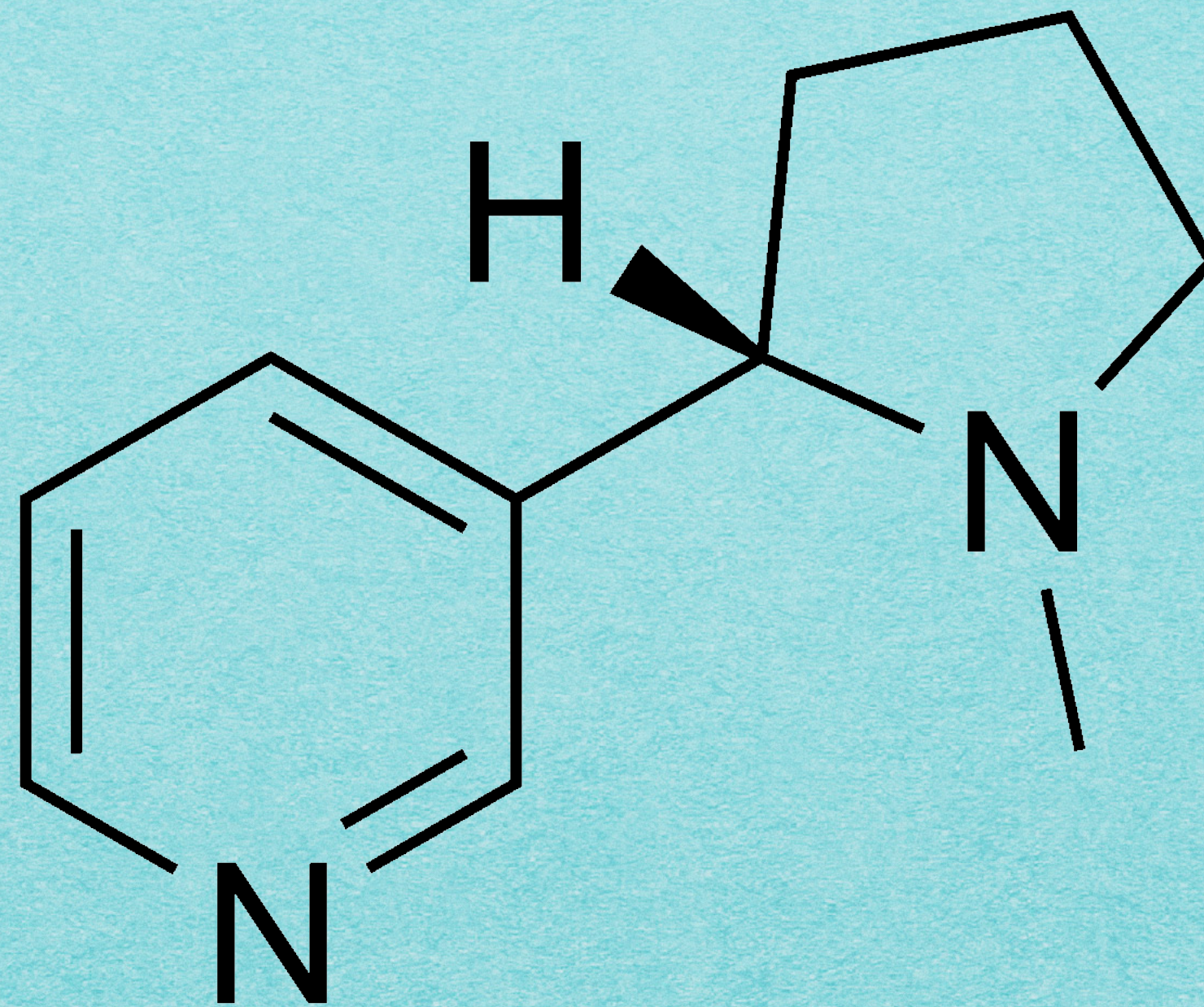
- ▶ #1 Stimulant used
- ▶ Most popular mood-altering and habit forming drug



Amount of caffeine per cup:



Nicotine



Nicotine

- ▶ 2nd most popular stimulant
- ▶ DEADLIST



Nicotine

- ▶ Nicotine's mood-altering effects are different both a stimulant and a relaxant. First causing a release of glucose from the liver and epinephrine (adrenaline) from the adrenal medulla, it causes stimulation. Users report feelings of relaxation, sharpness, calmness, and alertness.

Tolerance, Withdrawal and Addiction

- ▶ Tolerance begins with the initial use of nicotine
- ▶ Smokers do not need to increase the use for the same affect
- ▶ Severity of withdrawal cause receptors to crave nicotine
- ▶ Withdrawals last longer than with other drugs
- ▶ Age of first use determines use as an adult
- ▶ 80% of smokers want to quit



Monday March 21

► Downers

► Chapter 4

Discussion

- ▶ What do you think was the most important things to remember about stimulants?
- ▶ As a counselor, how will you proceed with client's child/adolescents taking prescribed Adderall, Ritalin?
- ▶ What about coffee or nicotine? How do you treat recovering addicts how still drink coffee or smoke cigarettes? Chew tobacco? Vape?