Happy early Valentine's Day!

The Love Drugs: Physiology of Love

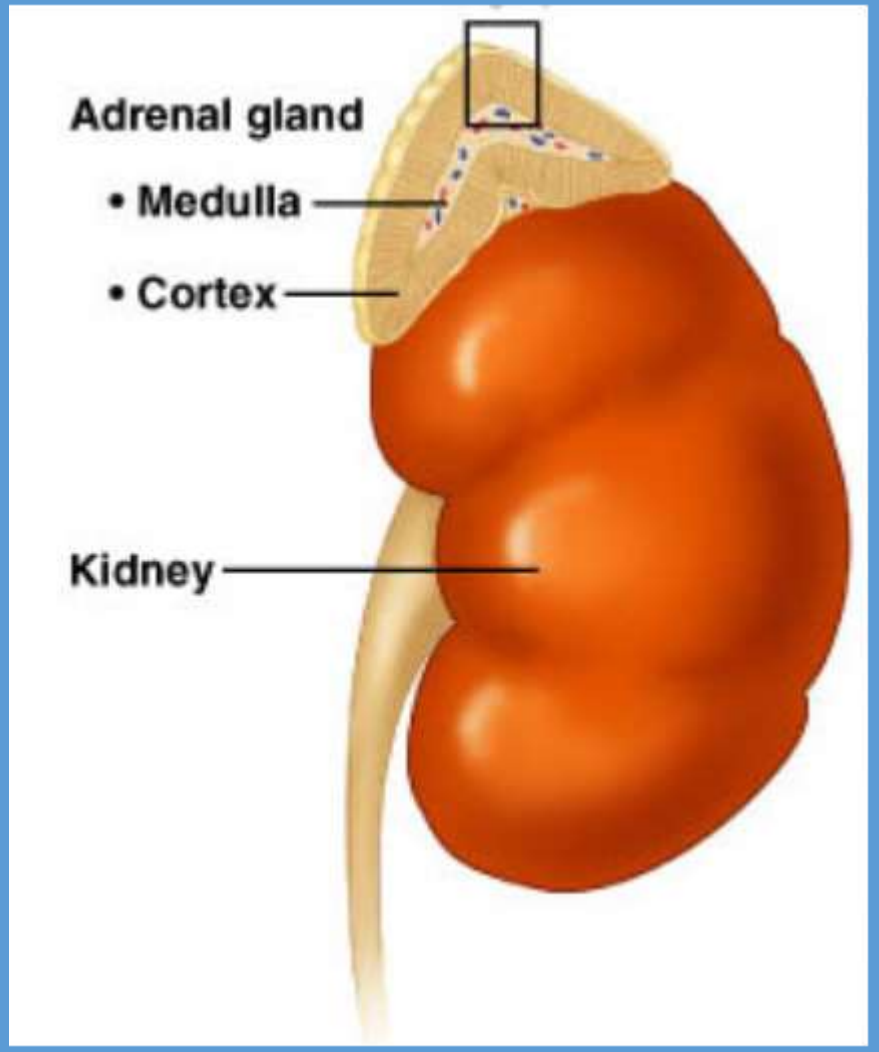
Adrenal Glands

Located at the top of the kidneys

Adrenal Cortex - outer area

Adrenal Medulla - inner area

Adrenal Glands = Adrenaline



Adrenal Medulla

- **Epinephrine & Norepinephrine** – increased heart rate, breathing rate, elevated blood pressure (fight or flight, response to stress)

People with severe life threatening allergies often carry injectors

Adrenaline

Falling in love activates your stress response and you start to sweat, heart races, and mouth may go dry

Posterior Pituitary Hormones

- **Oxytocin** - Oxytocin causes milk letdown in nursing mothers and contractions during childbirth.
- Lowers heart rate and cortisol levels

Oxytocin

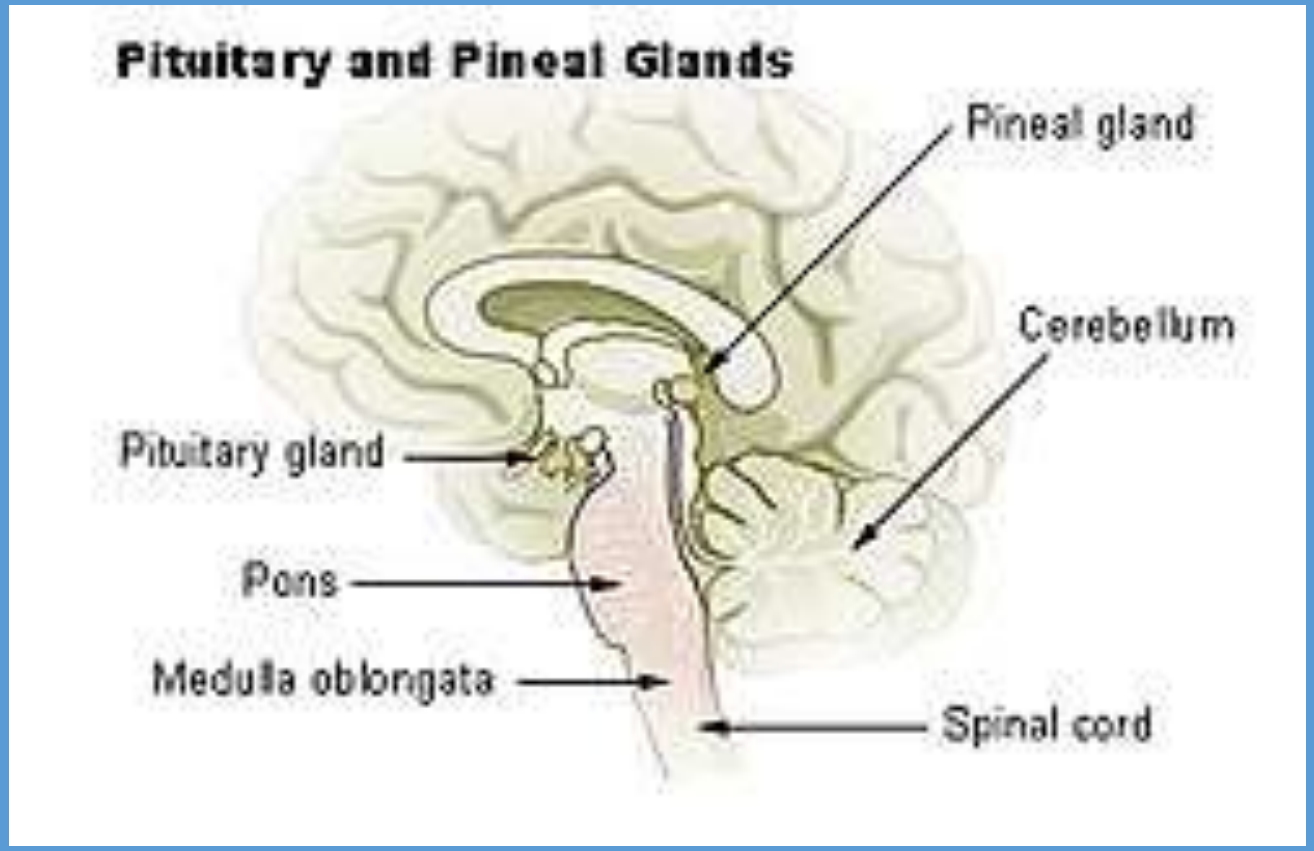
Released when we hug - lowers heart rate and cortisol levels

Oxytocin

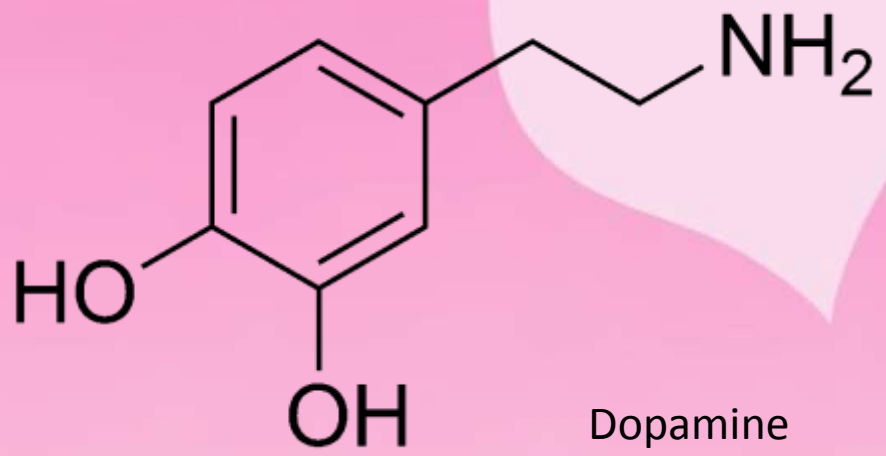
Infants who are touched gently on a regular basis gain weight and grow better than those who lack this contact

Pineal Gland

- located between the cerebral hemispheres
- secretes **melatonin**
  - important for maintaining Circadian rhythms (light and dark activity)
- Secretes dopamine
  - Both a hormone and neurotransmitter
  - Regulates, movement, attention, learning and emotional response



Dopamine and Serotonin



Dopamine

Yes, being in love actually does produce more dopamine, putting you on a high!

Pheromones

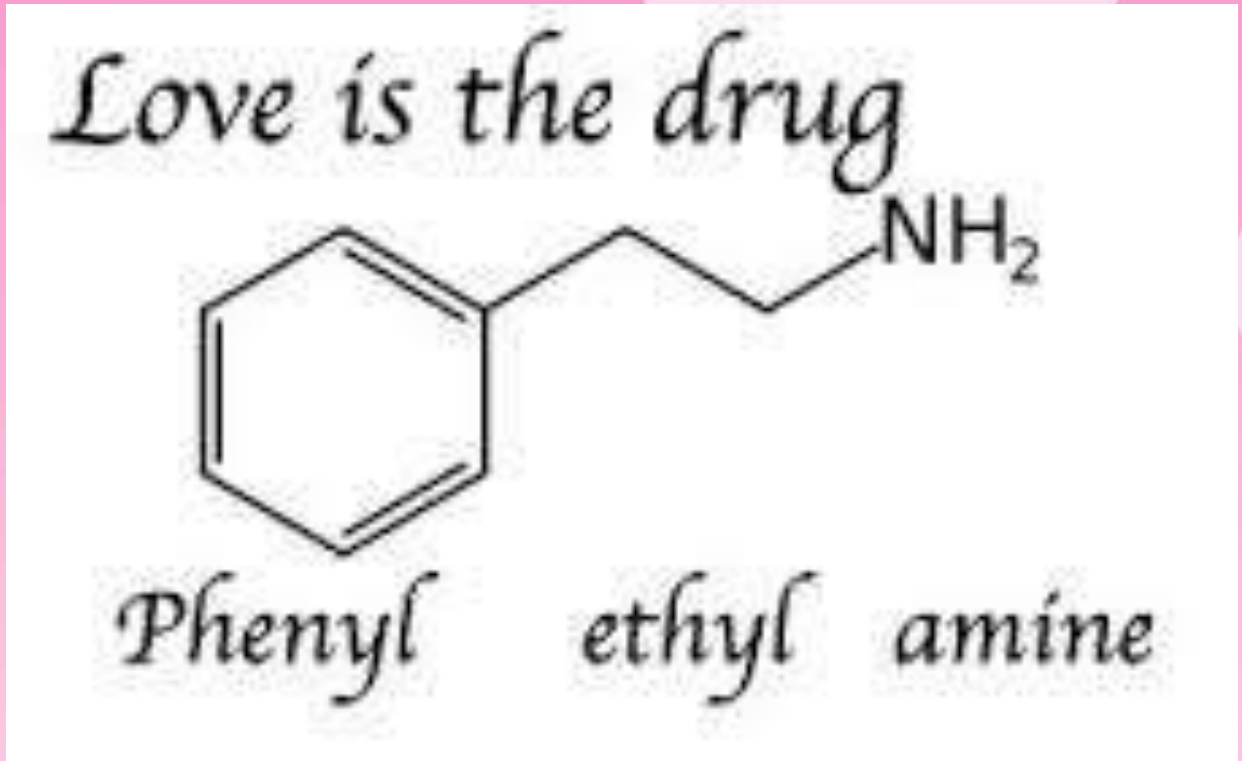
Endorphins

The bodies natural painkiller

Soooo Choloclate.....

Why is chocolate called a "comfort food"?

Phenylethylamine (PEA)



Why is chocolate called a "comfort food"? Let's learn more about the chemistry of love first.

Valentine Gifts

No joke these are real....