



PSYCHOLOGY

WELCOME TO PSYC 110

brotip #370

don't waste your time
waiting on someone
who wouldn't wait
for you.

brotips|tumblr

PSYC 110 (General Psychology)

Module 8:

Human Sexuality

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What should we get out of today?

THE PLAN

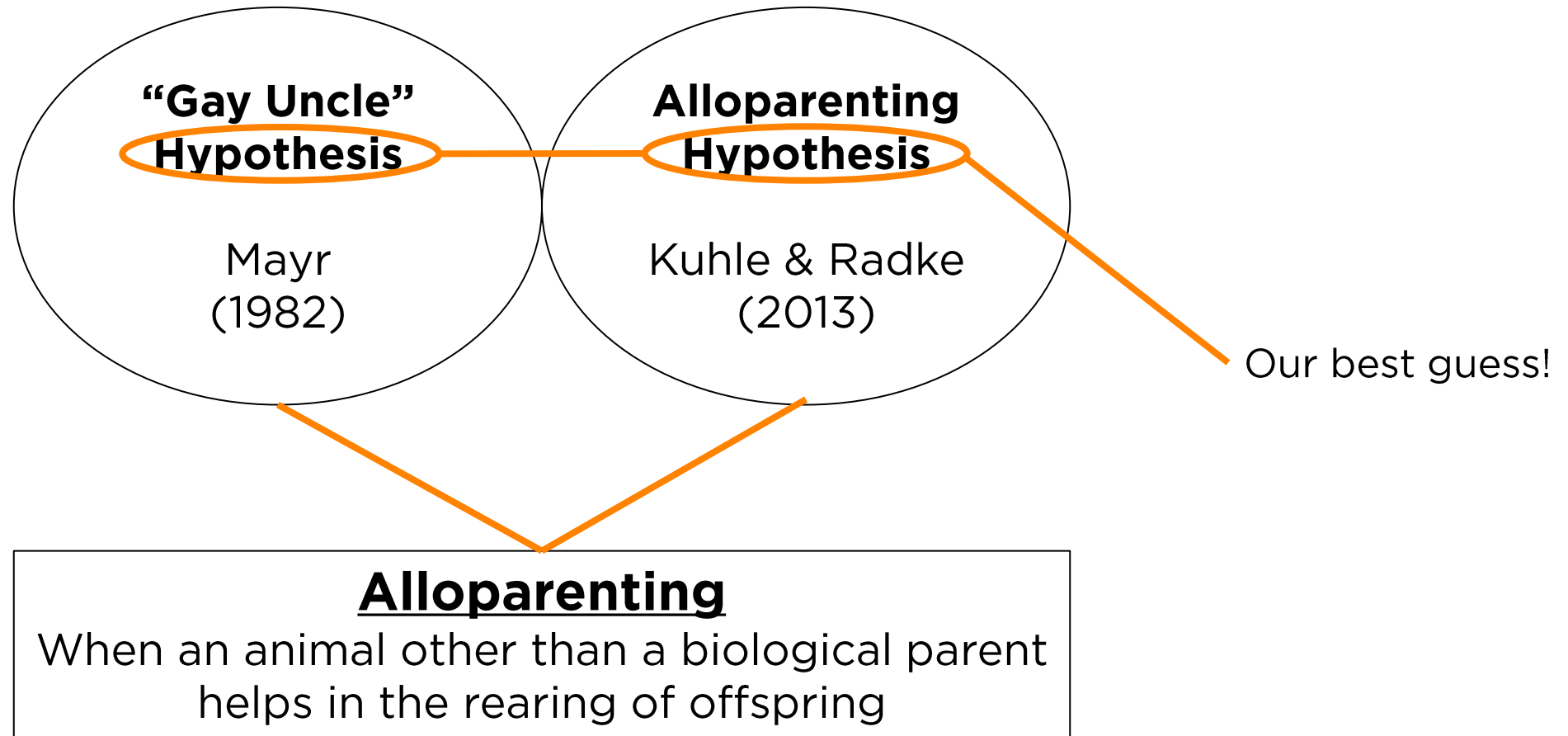
**SEXUAL ORIENTATION AND
EVOLUTION**

**BEHAVIORAL GENDER
DIFFERENCES**

HORMONES AND AROUSAL



But what about evolution?





Evolutionary theory can explain sexual orientation

GAY UNCLE HYPOTHESIS



Homosexual family members are less likely to directly reproduce...

AND THEREFORE

Have more time and resources to assist in the rearing of other family members (e.g., siblings' children)...

AND THEREFORE

Still contribute to their genetic line via *indirect* fitness!



Alloparenting Hypothesis

Sexual fluidity (dynamic sexual orientation) is more socially accepted in women compared to men

Women are more likely than men to report feeling attraction to more than one gender (e.g., bisexuality, pansexuality)





Evolutionary theory can explain sexual orientation

Alloparenting Hypothesis

Evolutionarily, women depend on other women to help raise children

- Especially in absence of father

Animal Behavior Evidence: Female Bonobos engage in sexual activity with same-sex troop members to promote social bonding

- Mostly with current or potential allomothers

Psychological adaptation may remain in humans from our ancestors



Our closest genetic relatives!



Evolutionary theory can explain sexual orientation

Asexuality



Feeling no sexual attraction to any gender

0.5% of the population

Can still have romantic interests

Can also alloparent



point
solutions



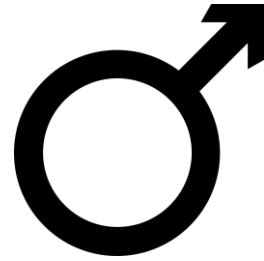


BEHAVIORAL GENDER DIFFERENCES



Gender identity influences some (but not all) of our behavior

GENERALLY, when compared to those who identify as feminine...



Masculine identity



Higher aggression and physicality

- 7x more likely to commit violent crimes
- More likely to punish others in experiments
- Higher prevalence in physically-demanding jobs (e.g., bricklayers)



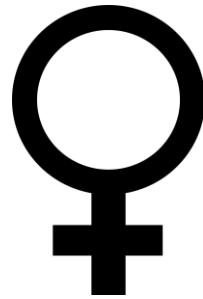
More interest in things

- More likely to collect cars, toys, etc.
- Higher prevalence in fields related to systemizing (physics, engineering)



Gender identity influences some (but not all) of our behavior

GENERALLY, when compared to those who identify as masculine...



Feminine identity



Higher emotional intelligence

- Higher prevalence in fields related to empathizing (psychology, nursing, teaching)
- Demonstrate more “considerate” behaviours
- More emotionally supportive relationships



More interest in people

- Better understanding of social dynamics, interpersonal relationships, etc.
- More neuron connectivity in areas related to social cognition



Gender roles are prevalent but not absolute

Gender is a social construct *based on* biology



Don't forget, evolution is slowwwwww

Many traits from our ancestors still remain that influence gender roles and differences

e.g., higher incidence of ADHD in men—
hunter-gatherers, or just easier to identify?



Gender roles are prevalent but not absolute



Modern views on gender promote reconsideration of traditional roles

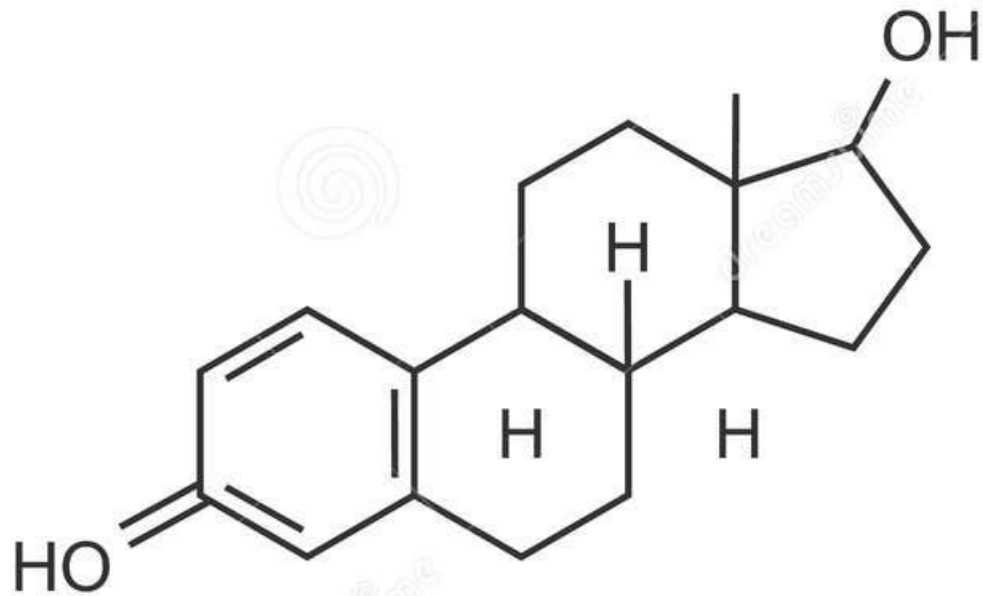
- Fathers receiving parental leave w/ newborns
 - More career-oriented women



Hormones + Arousal

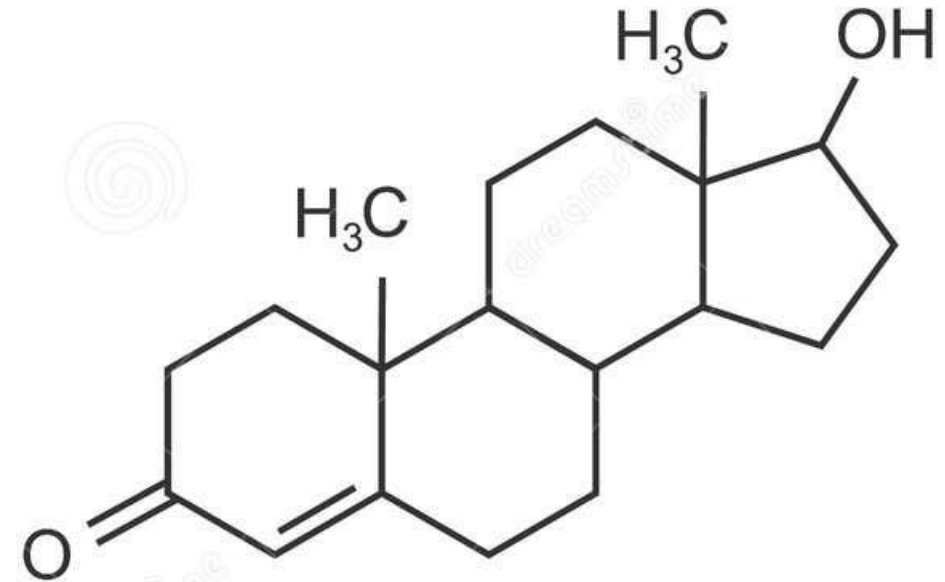


Sexual engagement is influenced by hormones



ESTROGEN

Primary Female Sex Hormone



TESTOSTERONE

Primary Male Sex Hormone

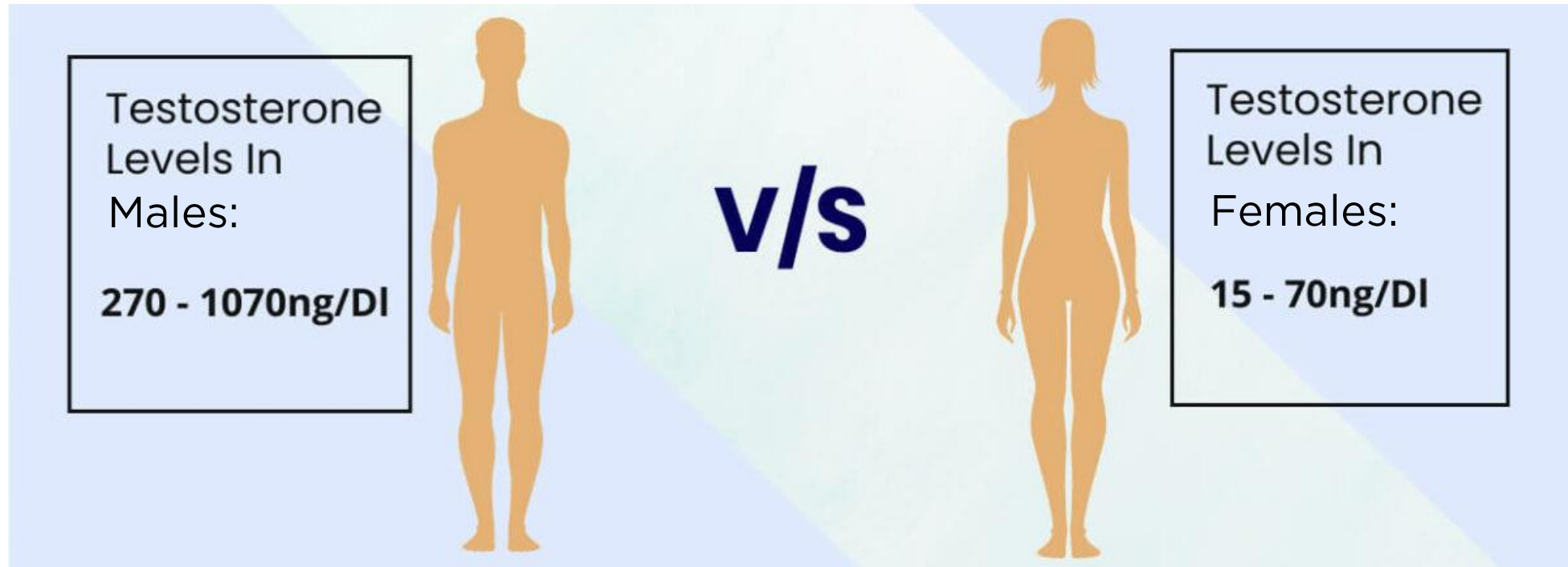


Sexual engagement is influenced by hormones

Hormone	Primary Sex	Source of Production	Main Function
Testosterone	Male	Testes	Stimulate the male secondary sex characteristics (developed during puberty)
Estrogen	Female	Ovaries	Stimulate the female secondary sex characteristics (developed during puberty), repairs the wall of the uterus, controls ovulation
Progesterone	Female	Ovaries and Placenta	Prevents the wall of uterus breaking down



Both sexes have both hormones



In both sexes, Testosterone influences:

- Libido (i.e., sex drive)
- Mood and energy
- Cognitive function
- Bone health
- Muscle mass

In both sexes, Estrogen influences:

- Cardiovascular health
- Cognitive function
- Bone health
- Muscle recovery
- Immune system regulation



Alcohol influences our hormones

Small amounts of alcohol (1-2 drinks) can cause a short-term *increase* in testosterone production for both males and females

Chronic alcohol use has opposite effect

- Liver damage
- Can promote conversion of Testosterone into Estrogen

Know your standard drinks.



Me after one glass of wine

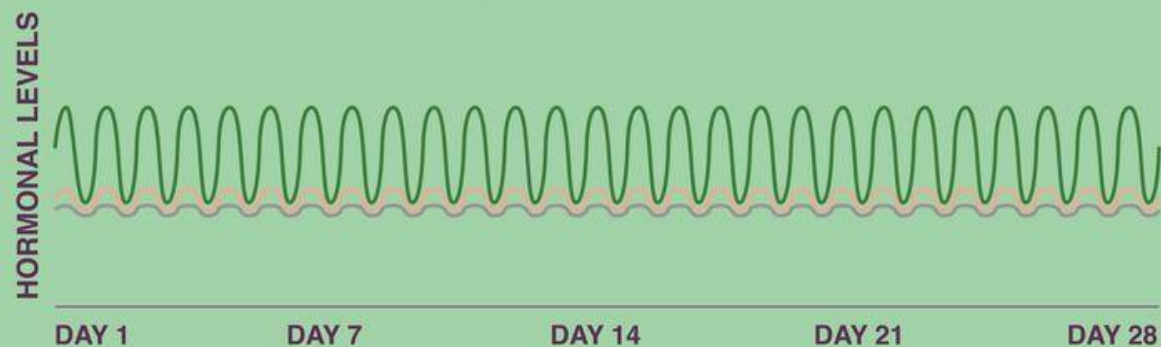




Our sex hormones change over time

Male Hormone Cycle

Example of an average male 24-hour cycle across 28 days



BRAIN HORMONES

LH

Luteinizing
Hormone

FSH

Follicle-Stimulating
Hormone

TESTES HORMONES

T

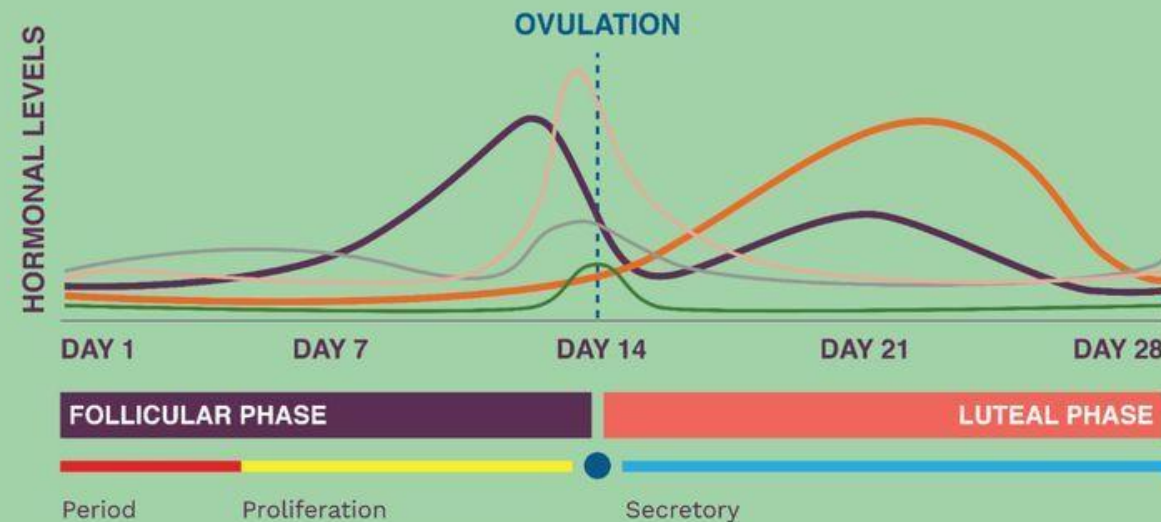
Testosterone

Key Hormone



Female Hormone Cycle

Example of a non-oral contraceptive menstrual cycle



BRAIN HORMONES

LH

Luteinizing
Hormone

FSH

Follicle-Stimulating
Hormone

OVARY HORMONES

E

Estrogen

P

Progesterone

T

Testosterone

Key Hormones





Our sex hormones change over time

24-hour cycle

Testosterone usually peaks in the morning

- Highest level of energy
- Highest level of sexual desire

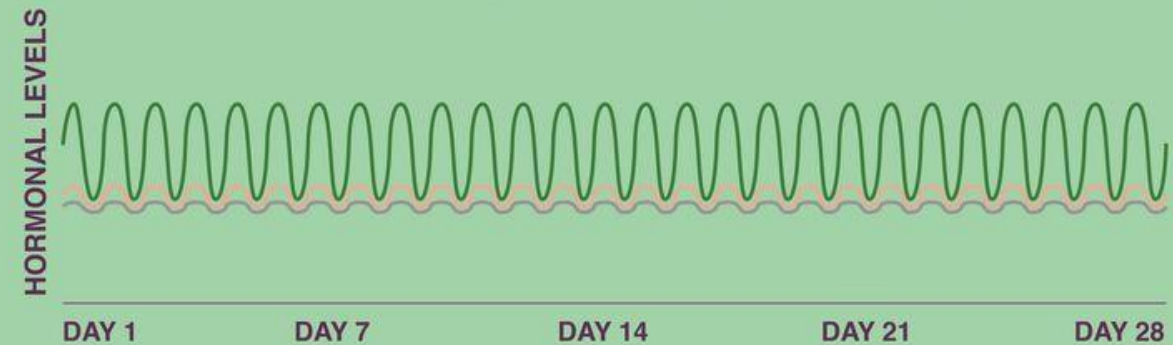
Continuously creating sperm (male sex cells)

- Fully replace stores every ~70 days

Sperm can survive in uterus for up to five days

Male Hormone Cycle

Example of an average male 24-hour cycle across 28 days



BRAIN HORMONES

LH

Luteinizing
Hormone

FSH

Follicle-Stimulating
Hormone

TESTES HORMONES

T

Testosterone

Key Hormone



Let's pause for a second.

Dr. T, a cisgender man, is about to explain
the female hormone cycle.

Let's acknowledge that this is highkey mansplaining a topic that is
very integral and unique to the female experience.

Let's also be aware that female sexual health is extremely
underrepresented in science, medicine, and society in general.

SO, as a disclaimer...

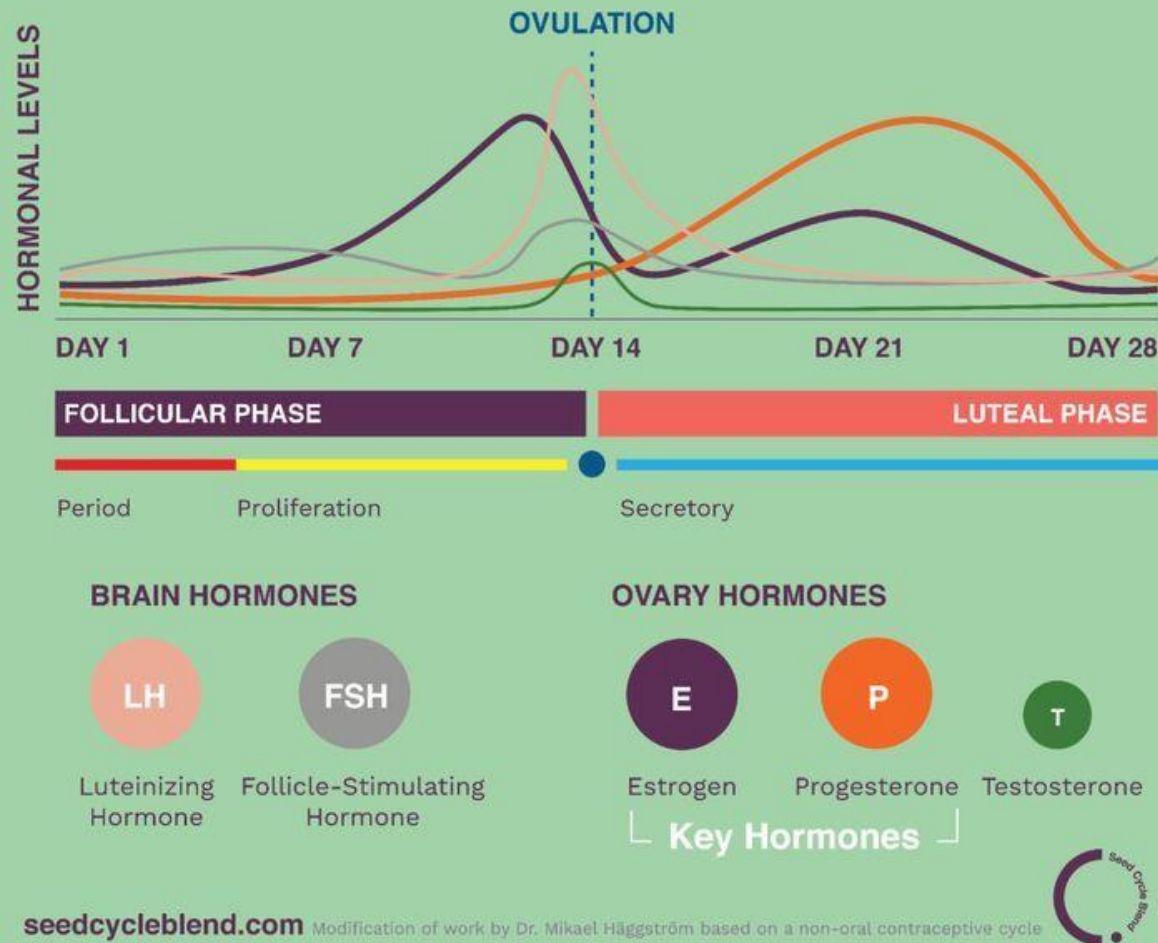
Dr. T promises the following information was rigorously researched
via both scientific literature and direct inquiry with
important females in his life ❤️



Our sex hormones change over time

Female Hormone Cycle

Example of a non-oral contraceptive menstrual cycle



21-to-35-day cycle

Menstruation (“Period”)

- Day 1 to ~6
- Lining of the uterus sheds
- Pain—cramps
- Overall lack of comfort

Follicular Phase—Proliferation

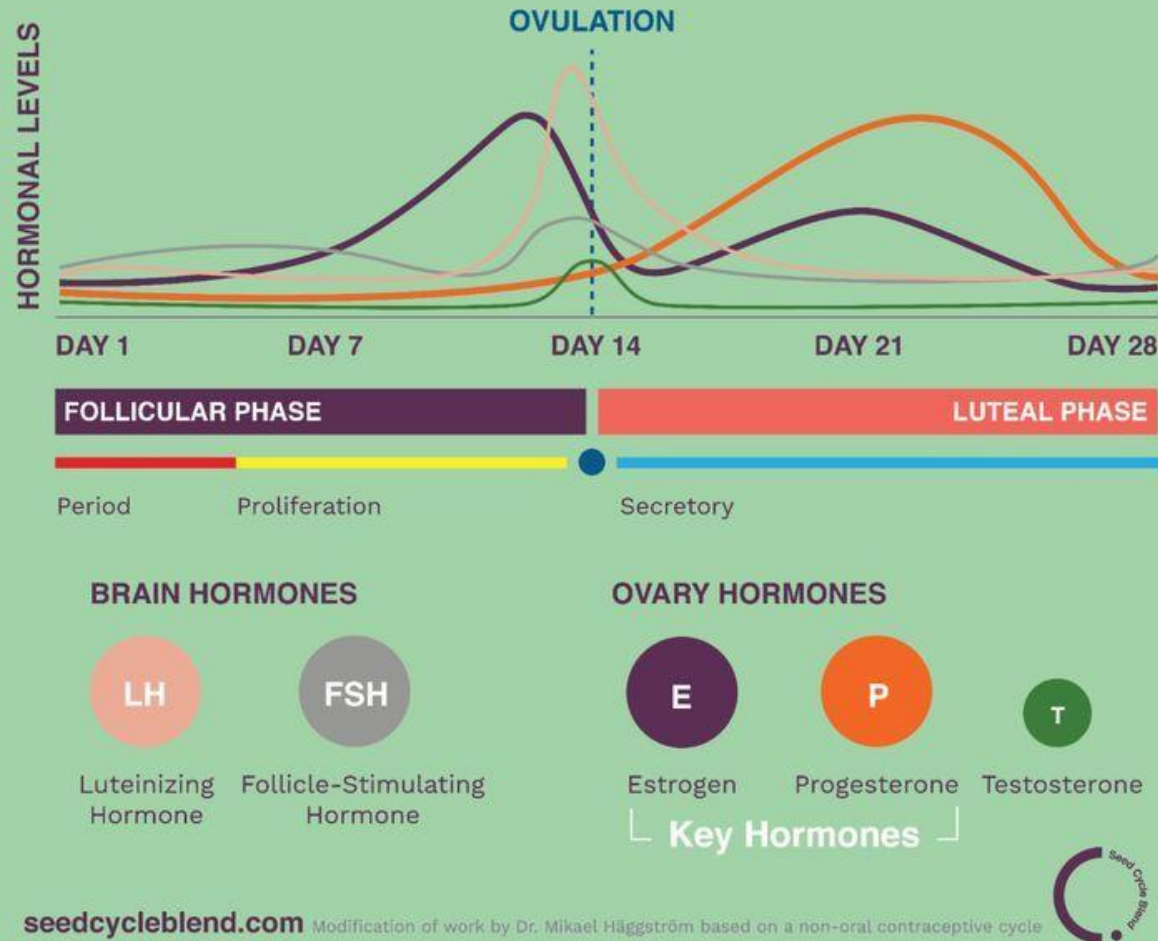
- Day ~7 to ~14
- Body preparing for ovulation
- Highest energy and motivation
- Highest metabolism
- Libido increases towards ovulation



Our sex hormones change over time

Female Hormone Cycle

Example of a non-oral contraceptive menstrual cycle



21-to-35-day cycle

Ovulation

Ovum (egg) releases from ovaries into fallopian tube, where it can be fertilized and lead to pregnancy

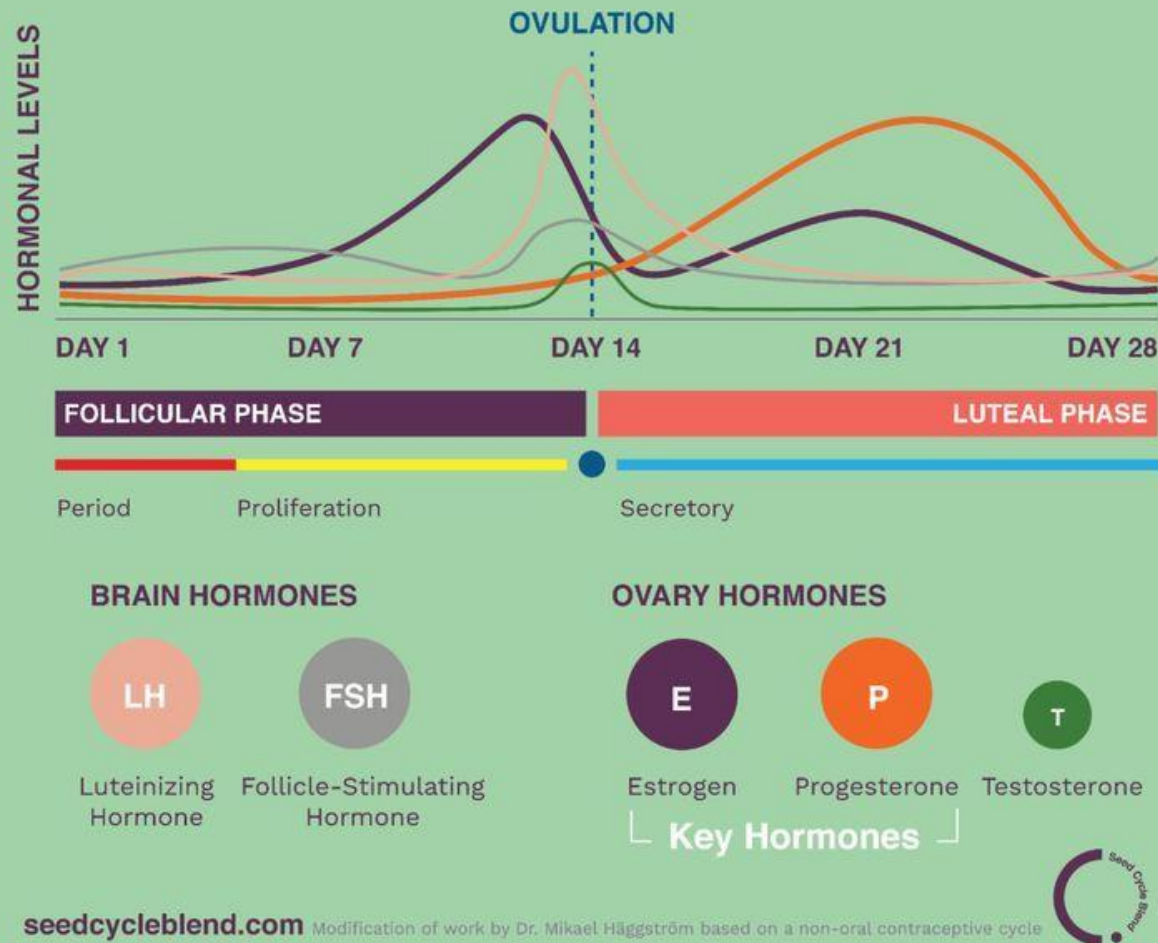
- Day ~14
- Highest level of sexual arousal in days approaching ovulation in Follicular Phase
- Fertility peaks two days before ovulation
- Egg can be fertilized up to 12-24 hours after release



Our sex hormones change over time

Female Hormone Cycle

Example of a non-oral contraceptive menstrual cycle



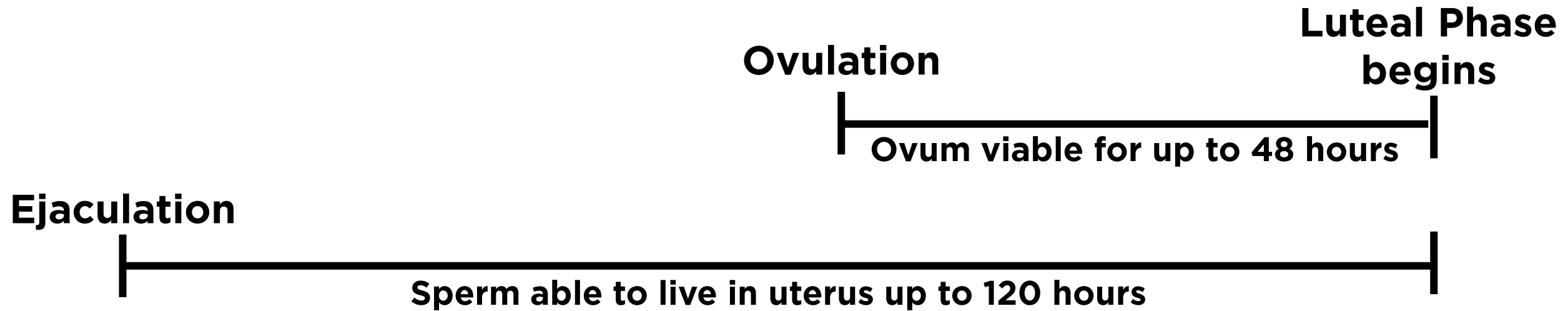
21-to-35-day cycle

Luteal Phase

- Day ~17
- Lead-up to menstruation
- Body starts to prepare for pregnancy even if the egg is not fertilized
- Low energy and mood
- Generally more interest in activities at home rather than socializing
- Some experience Pre-Menstrual Syndrome (PMS) or Pre-Menstrual Dysphoric Disorder (PMDD; severe PMS)
- If pregnancy occurs, different hormone cycle initiates



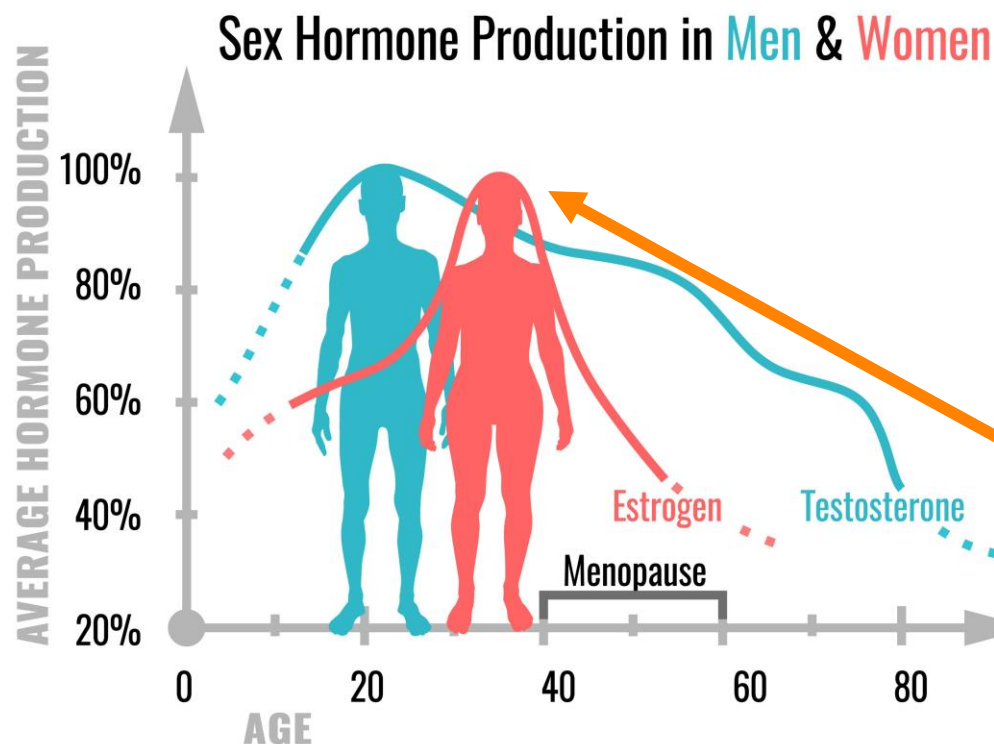
So, where do babies come from?



Pregnancy is possible when intercourse occurs up to three days before ovulation



Our sex hormones change over our lifetime



Females are born with a finite quantity of ova

After all ova are released, a female reaches **menopause** and a new cycle begins with no more ovulation nor menstruation

When approaching menopause, the female reproductive system attempts to maintain functions despite depleting ovum supply

- May reflect evolutionary trade-offs between reproductive success and long-term benefits of estrogen on other systems

Male peak fertility: Late 20s to early 30s

Male peak Testosterone: Late 20s to early 30s

Female peak fertility: Late teens to early 20s

Female peak Estrogen: Late 30s to early 40s



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HORMONES AND AROUSAL



How did we do?

A person is lying on their back, propped up on their elbows, reading a stack of books. The image is dimly lit, with the person's face and the books being the primary light sources. The text 'BE STRONGER THAN YOUR EXCUSES.' is overlaid in large, white, bold, sans-serif capital letters.

**BE STRONGER THAN
YOUR EXCUSES.**

For y'all:

Friday Quiz 7 is **March 28**

InQuizitive **due March 30**

Reflection Journal **due March 30**

Collab Project Check-In **due April 4**