

Sexual Arousal

Pheromones

- Pheromones are biochemicals that are secreted outside the body.
 - In research on animals, some pheromones appear to be important in sexual communication and even have been called sex attractants.
 - **Menstrual synchrony** in humans is the convergence over several months of the dates of onset of menstrual periods among women who are in close contact with each other.

Anaphrodisiacs

- Substances that decrease sexual desire
- Examples:
 - Potassium nitrate (saltpeter)
 - Cyproterone acetate

Aphrodisiacs

- There is no known substance that works well as an aphrodisiac.
- Myths: oysters, bananas, powdered rhinoceros horn, bull's testicles, amyl nitrite, butyl nitrite.
- So-called natural aphrodisiacs include yohimbe, cayenne, argininer, aventa sativa, and damiana.
- Viagra and Cialis have been approved for use in treating male sexual dysfunction.

The Sexual Response Cycle: Definitions

- **Vasocongestion** occurs when a great deal of blood flows into the blood vessels in a region, in this case the genitals, as a result of the dilation of the blood vessels in the region.
- **Myotonia** occurs when the muscles contract, not only in the genitals but also throughout the body.

The Sexual Response Cycle: Stages of Sexual Response

- Masters and Johnson described four stages of sexual response:
 - Excitement
 - Plateau
 - Orgasm
 - Resolution

The Sexual Response Cycle: Excitement Phase

- The **excitement** phase is the beginning of erotic arousal.
 - Erection is the obvious arousal response in the male.
 - Lubrication of the vagina is an important response of females.
 - Both result from vascongestion.

The Sexual Response Cycle: Plateau Phase

- Vasocongestion reaches its peak during the plateau phase.
 - The penis is completely erect, the glans swells, and the testes are pulled higher and closer to the body.
 - The **orgasmic platform** is a tightening of the outer third of the vagina and the elevation of the clitoris.

The Sexual Response Cycle: Orgasm

- In both males and females, there are sharp increases in pulse rate, blood pressure, and breathing rate during orgasm.
 - For males “ejaculatory inevitability” is a sensation that ejaculation is just about to happen and cannot be stopped.
 - For women the main feeling begins around the clitoris and then spreads outward through the whole pelvis.

The Sexual Response Cycle: Resolution Phase

- Following orgasm is the resolution phase, during which the body returns physiologically to the unaroused state.
 - Men enter a **refractory period** during which they are incapable of being aroused again.
 - Women do not enter into a refractory period, and some can have **multiple orgasms**.

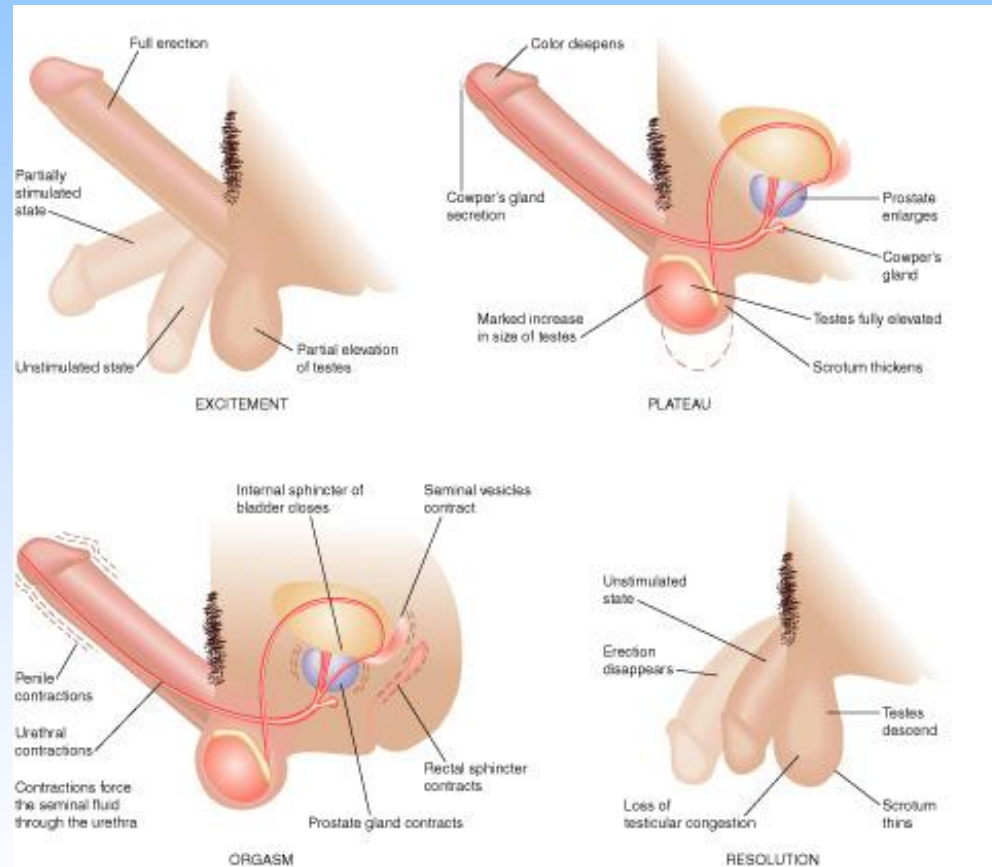
Multiple Orgasms in Women

- If stimulated again, a female can immediately be aroused & move back into the excitement or plateau phase & have another orgasm.
- Multiple orgasm is more likely to results from hand-genital or mouth-genital stimulation than from intercourse.
- Masters & Johnson found that women in masturbation might have 5 to 20 orgasms.
- When a vibrator is used, some women were capable of having 50 consecutive orgasms.

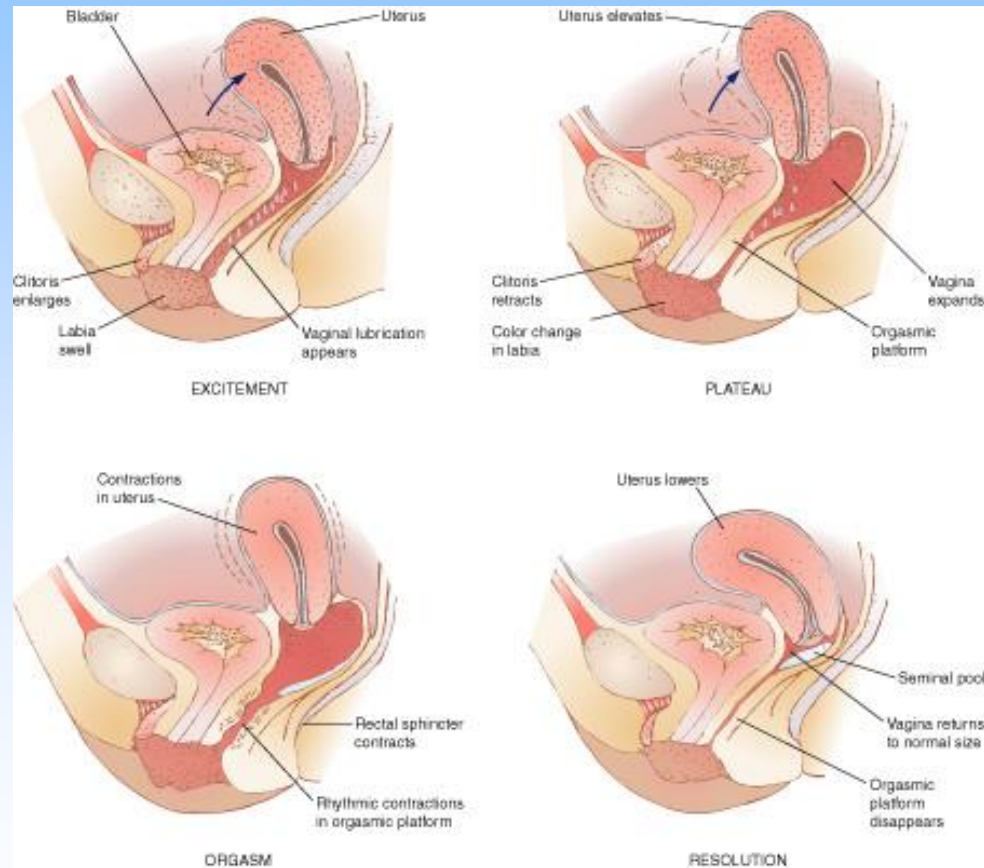
The Sexual Response Cycle: Vaginal and Clitoral Orgasms

- Masters and Johnson concluded that, physiologically, there is no difference between a vaginal orgasm and a clitoral orgasm.
 - This does not mean that psychologically there are not different kinds.

Changes During the Sexual Response Cycle in Males



Changes During the Sexual Response Cycle in Females



Criticisms of Masters and Johnson's Model

- Focused almost entirely on the physiological aspects of the response, ignoring what the person is thinking and feeling emotionally.
- Masters and Johnson's research excluded anyone whose pattern of sexual response did not include orgasm, so the model cannot be generalized to the entire population.

Should Intercourse and Orgasm Be the Goal?

- Our culture has traditionally held the belief that a sexual encounter should climax with intercourse and orgasm.
- Another goal of sex has been simultaneous orgasm.
- Orgasm is good, but a large part of pleasure is the buildup to orgasm.

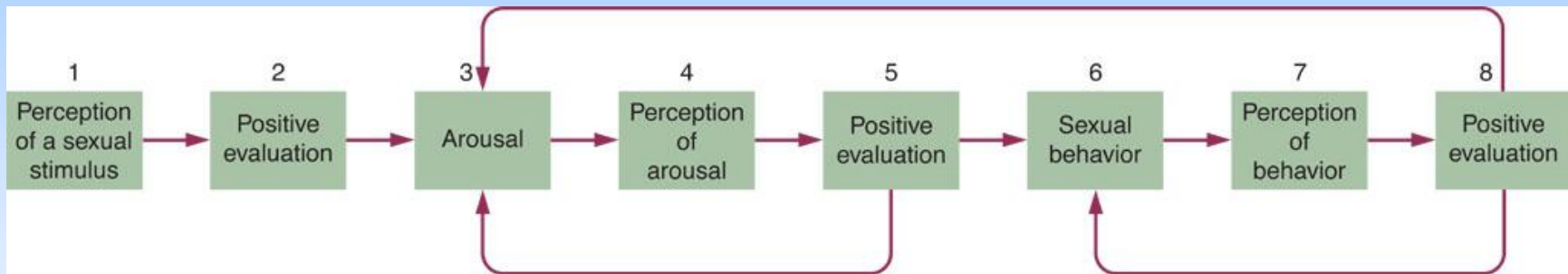
Cognitive-Physiological Models: Triphasic Model

- Helen Singer Kaplan's triphasic model of sexual response conceptualizes three relatively independent phases:
 - sexual desire
 - vasocongestion of the genitals
 - reflex muscular contractions of the orgasm phase

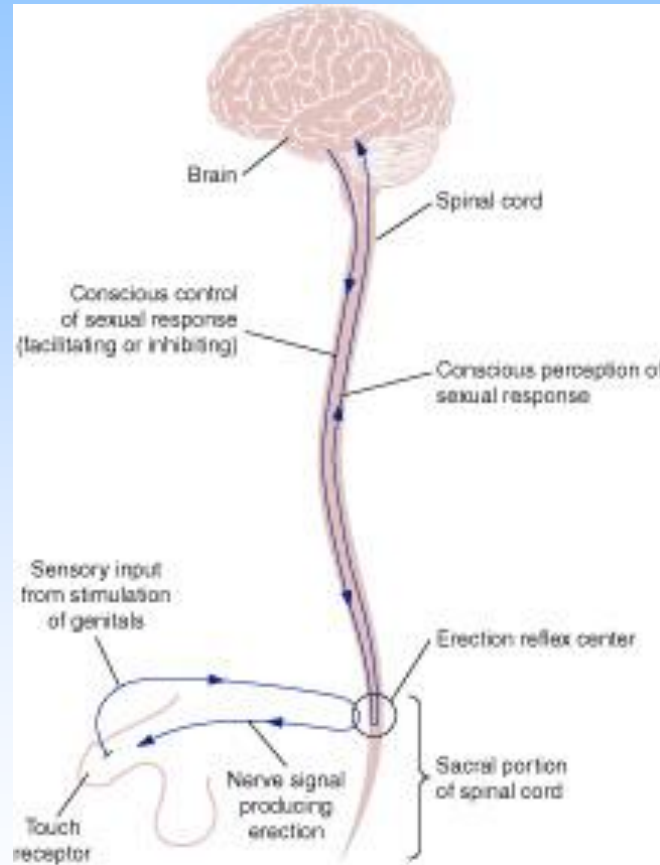
Cognitive-Physiological Models: Walen & Roth

- Walen and Roth apply a cognitive approach to understanding the psychology of human sexuality.
 - *Perception*: The perception of a stimulus as sexual.
 - *Evaluation*: If the stimulus is positive, it leads to arousal; if not, the arousal cycle stops.
 - *Sexual behavior* results from a positive evaluation.

Walen and Roth Model



Nervous System Control of Erection



Hormonal & Neural Bases of Sexual Behavior: Erection & Ejaculation

- Erection and ejaculation are controlled by fairly simple spinal cord reflexes.
 - Men, who have had their spinal cords completely severed as a result of accidents, at a level above that of the reflex center, are still capable of erections & ejaculations produced by rubbing their genitals.

Hormonal and Neural Bases of Sexual Behavior: The Brain

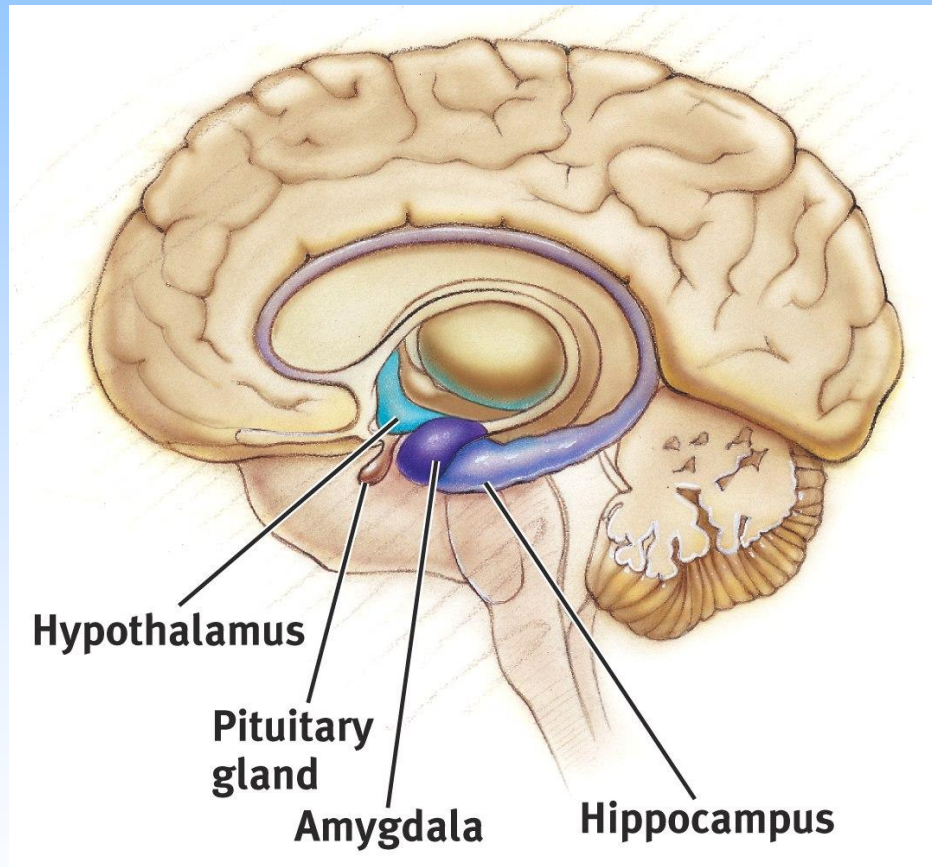
- Sexual responses may be brought under voluntary control and may be initiated by purely psychological forces, such as fantasy.
- Environmental factors, such as having been taught that sex is dirty and sinful, may also affect one's sexual response.
- Brain control of sexual response is complex and only partly understood at the present time.

Hormonal & Neural Bases of Sexual Behavior:

The Limbic System

- The **limbic system** is a set of structures that form a border between the central part of the brain and the outer part (the cerebral cortex).
 - The brain scanning technique called functional MRI confirmed that several structures in the limbic system were activated in healthy men by watching erotic films.

Limbic System of the Brain



Hormonal & Neural Bases of Sexual Behavior:

Effects of Hormones

- Sex hormones interact with the nervous system to influence sexual response.
 - Hormones present during prenatal development have important **organizing effects** and cause a relatively permanent change in the nervous or reproductive systems.
 - **Activating effects** either activate or deactivate certain behaviors.

Hormonal and Neural Bases of Sexual Behavior: Testosterone

- Testosterone has well-documented effects on libido in humans.
 - Sexual desire is rapidly lost if a man is given an antiandrogen drug.
 - Androgens are used successfully in the treatment of women who have low sexual desire.

Erogenous Zones

- Parts of the body that are sexually sensitive.
- Stroking them or otherwise stimulating them produces sexual arousal.

Erogenous Zones

- Examples:
 - Genitals
 - Breasts
 - Lips
 - Neck
 - Thighs
 - Back
 - Ears, stomach, and feet

One-Person Sex

- **Autoeroticism** - sexual self-stimulation
 - **Masturbation** - self-stimulation of genitals with the hand or some other object.
 - Some men and women masturbate as they view erotic images in magazines, on video or DVD, or on the Internet.

Sexual Fantasy

- Sexual thoughts or images that alter the person's emotions or physiological state.

Vibrators, Dildos, and Such

- **Dildo** - rubber or plastic cylinder, often shaped like a penis, that can be inserted into the vagina or anus.
- *Vibrators* - some shaped like a penis and others not, some are electric and some battery-operated; used for masturbation.
- *Body oils* - popular for sexual use and have a sensuous quality that heightens erotic feelings.

Two-Person Sex

- Kissing
- Touching
- Hand stimulation of the male genitals
- Hand stimulation of the female genitals

The Other Senses

- Sights
- Smells
- Sounds
- Fantasy during two-person sex

Mouth-Genital Stimulation

- **Cunnilingus** - mouth stimulation of the female genitals.
- **Fellatio** - mouth stimulation of the male genitals.
- **Sixty-Nining** - simultaneous mouth-genital stimulation; also called *soixante-neuf*.
- **Anilingus** - mouth stimulation of the partner's anus.

Genital-Genital Stimulation: Positions of Intercourse

- **Coitus** (sexual intercourse) - the insertion of the penis into the vagina.
 - Man on top - missionary position
 - Woman on top
 - Rear entry
 - Side to side
 - Other variations
- **Anal intercourse** - insertion of the penis into the partner's rectum.

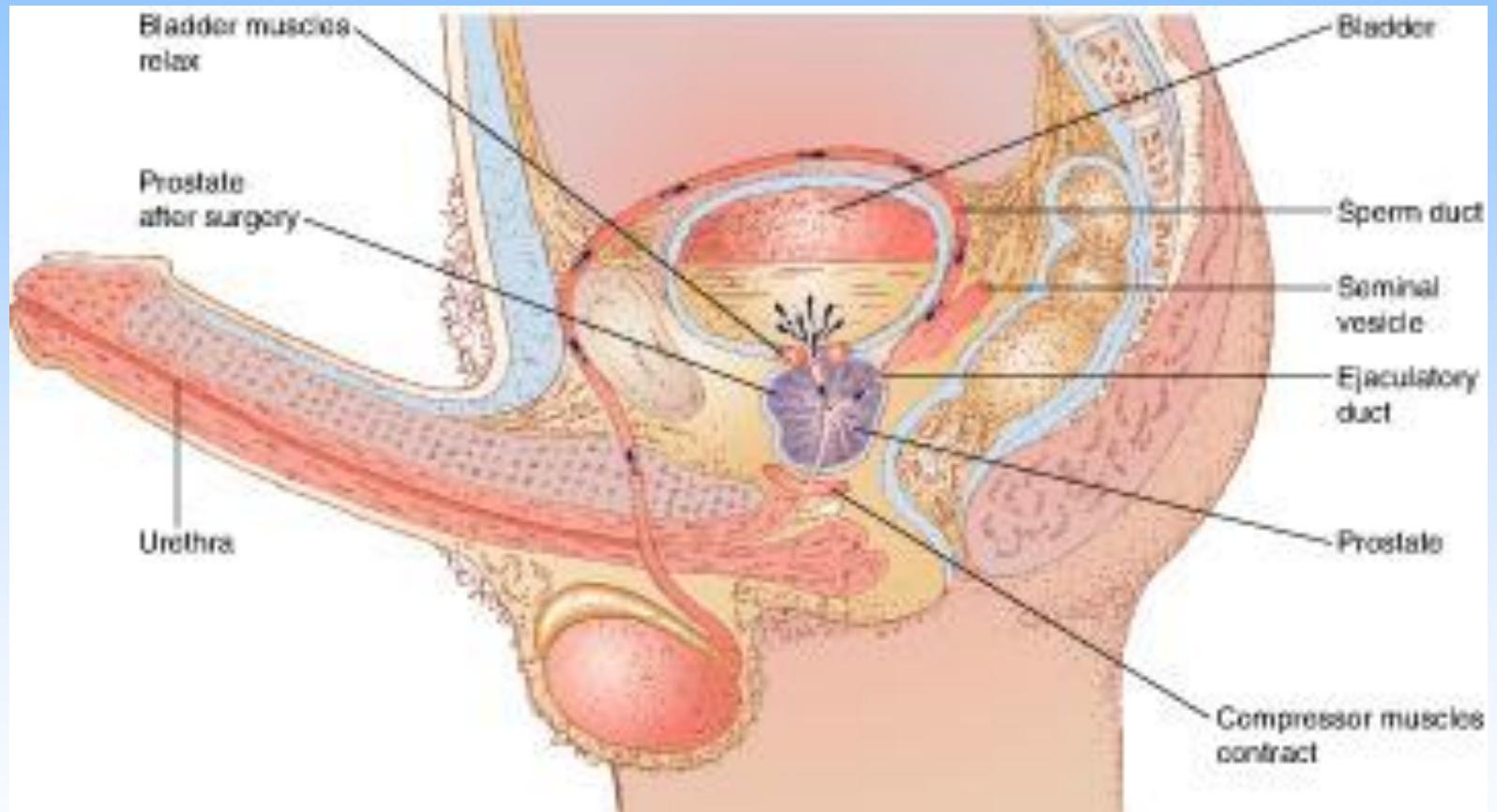
From Inexperience to Boredom: Boredom

- Possible consequence of long-term sexual relationships.
 - communicate
 - sex manuals
 - rejuvenate other aspects of relationship
 - don't expect too much from sex

From Inexperience to Boredom: Inexperience

- Not everyone is as experienced as society expects, which may cause performance anxiety.
 - accept inexperience
 - “how-to” manuals
 - communicate

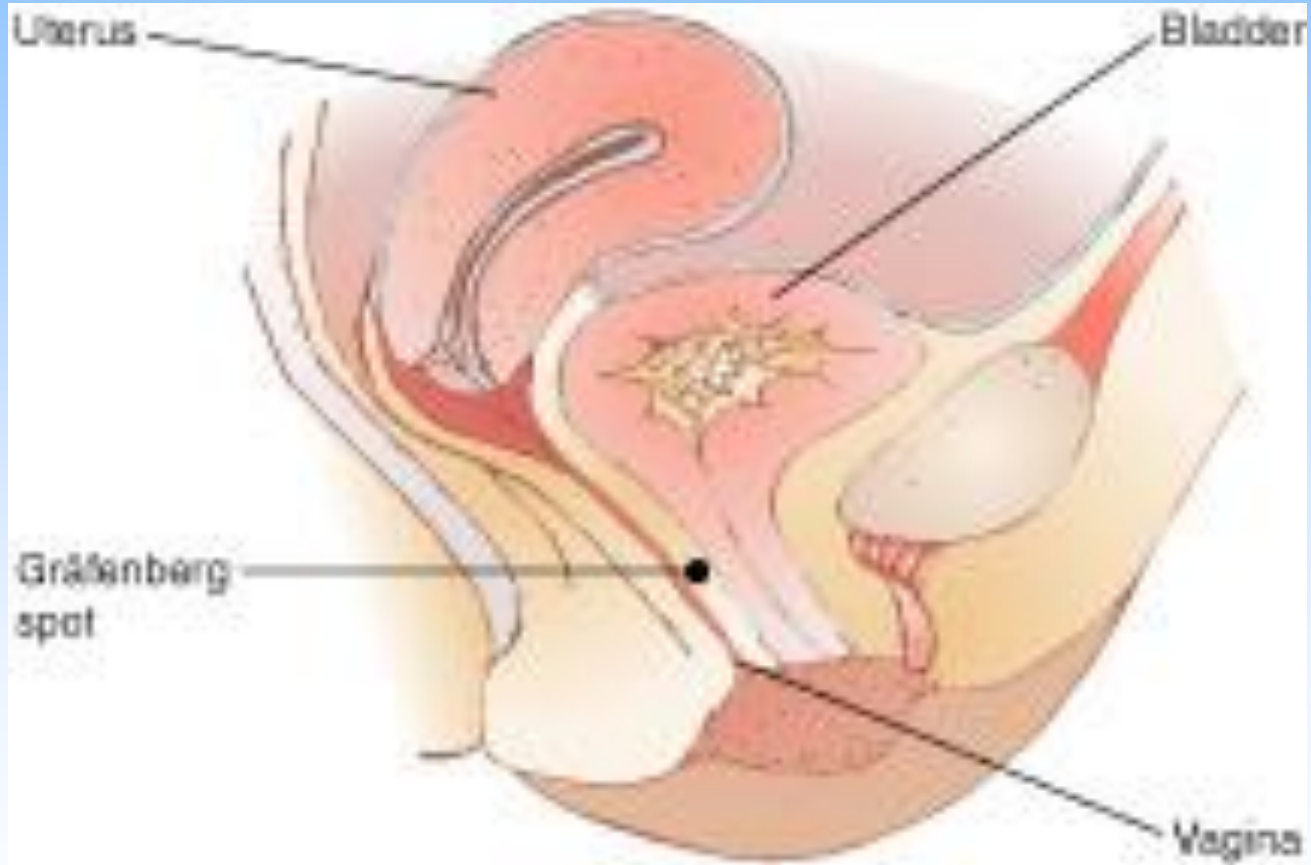
Retrograde Ejaculation



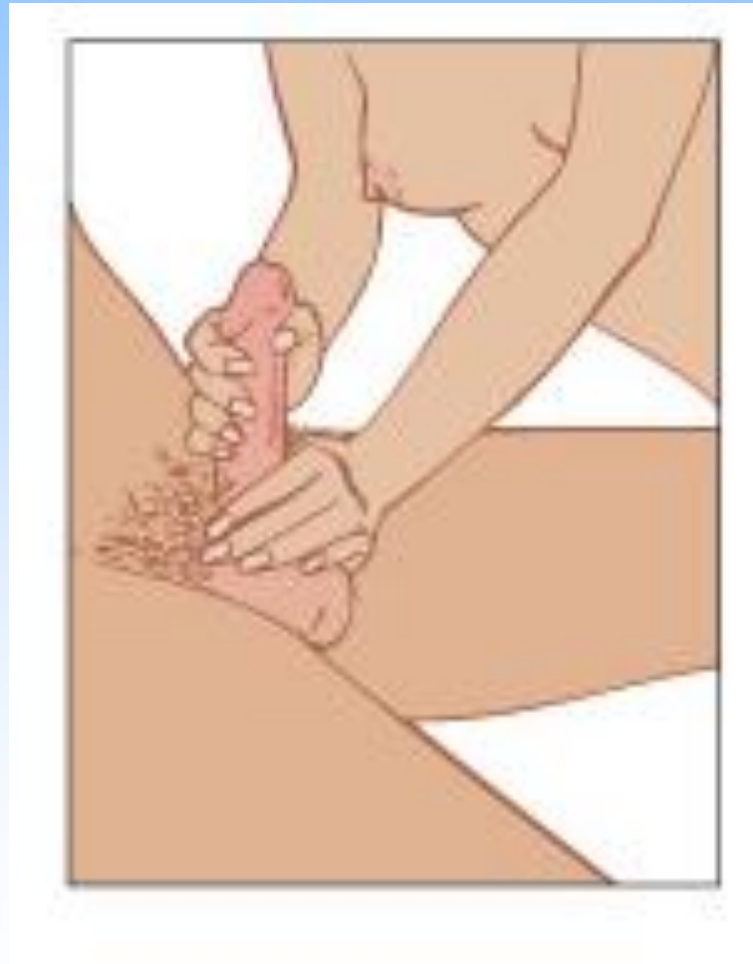
Hormonal and Neural Bases of Sexual Behavior: G-Spot

- The **Grafenberg spot (G-spot, female prostate, or Skene's glands)** is located on the top side of the vagina, about halfway between the pubic bone and the cervix.
 - Stroking it produces sexual pleasure.

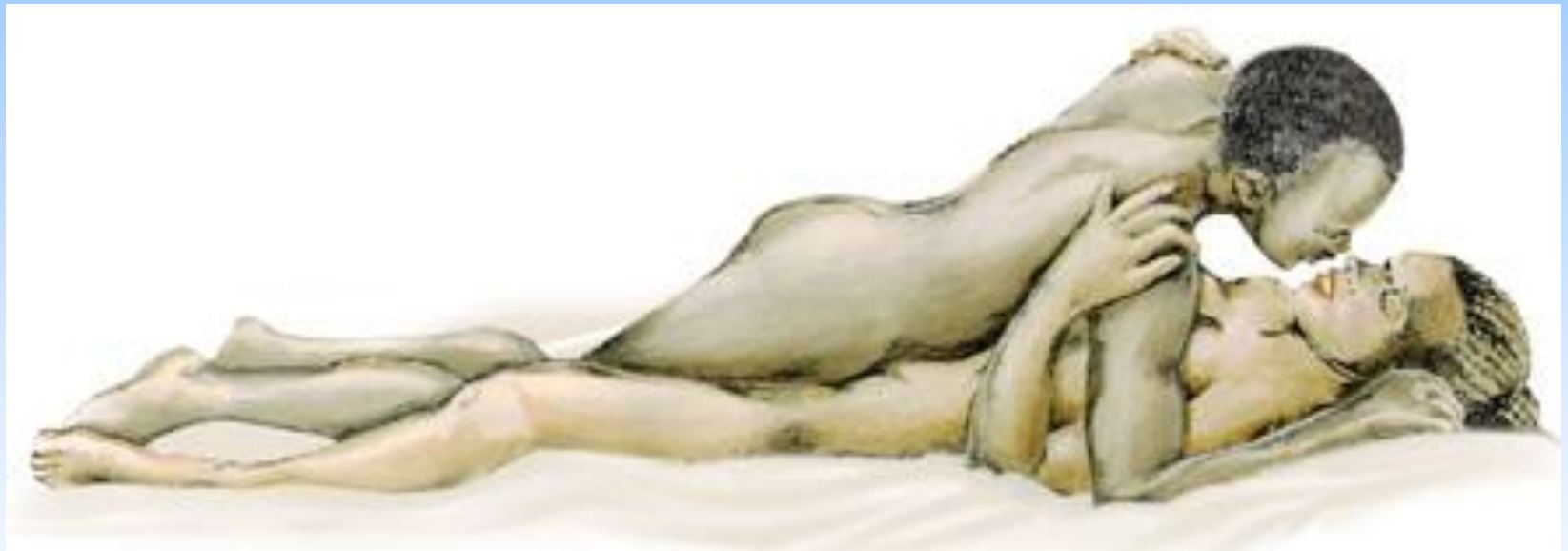
G-spot



Hand Stimulation of the Penis



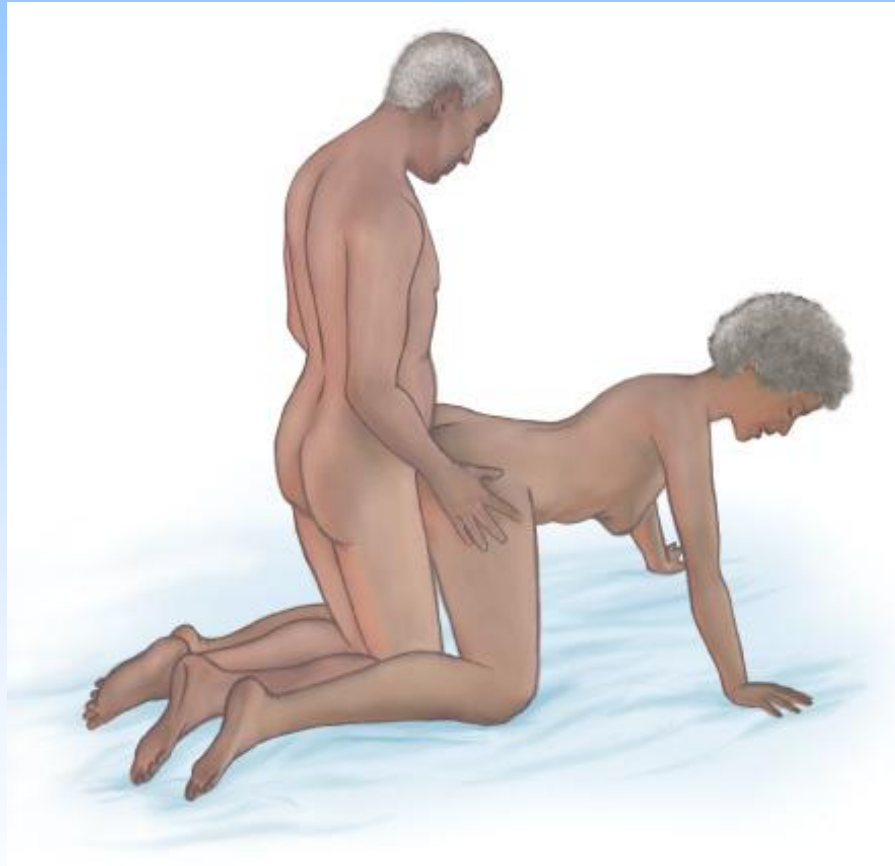
Man-on-Top Intercourse Position



Woman-on-Top Intercourse Position



Rear-Entry Intercourse Position



Side-to-Side Intercourse Position



Sixty-Nine Position



Techniques of Lesbian and Gays

- Mutual masturbation
- Use of dildo to stimulate partner
- Fellatio
- Cunnilingus
- Anal sex
- Interfemoral intercourse - a man moves his penis between partner's thighs.
- Tribadism - a woman lies on top of another and moves rhythmically in order to produce sexual pleasure.

Female-to-Female Sexual Expression



Male-to-Male Sexual Expression

