THE REPRODUCTIVE SYSTEM AND SEXUAL HEALTH
THE REPRODUCTIVE SYSTEM

Responsibility: Continue the species

Structure:
- Pair of Gonads
- Accessory organs, ducts, hormones, etc.
Male and female sex organs arise from the same undifferentiated tissue during the prenatal period.

The presence of hormones influences the development of male or female organs.

The sex organs of males and females are similar, and their purpose and functions are complementary.
FEMALE SEXUAL AND REPRODUCTIVE ANATOMY
FEMALE REPRODUCTIVE SYSTEM

Responsibility: Protect and nurture developing offspring from conception until birth

Ovaries produce eggs and release sex hormones
**TABLE 16.3 Phases of the Menstrual Cycle**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Events</th>
<th>Days of the Cycle*</th>
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</thead>
<tbody>
<tr>
<td>Menstrual phase</td>
<td>Menstruation; endometrium breaks down</td>
<td>1–5</td>
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<tr>
<td></td>
<td>Follicle matures in ovary; endometrium rebuilds</td>
<td>6–13</td>
</tr>
<tr>
<td>Proliferative phase</td>
<td>Endometrium begins to thicken, ovulation occurs</td>
<td>14</td>
</tr>
<tr>
<td>Progestational phase</td>
<td>Lining of endometrium develops to receive a possible embryo</td>
<td>15–28</td>
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</table>
MALE SEX ORGANS AND REPRODUCTIVE ANATOMY

Testes produce sperm and secrete hormones

Descend into scrotum for temperature regulation
Sperm mixed with secretions from:
- Seminal vesicles (fructose for energy)
- Prostate (buffer)
- Bulbourethral glands (mucous rich fluid)

Mixture is called semen

Typical ejaculation: 150-350 million sperm
SPERM

Head
- Nucleus with DNA; covered with enzyme containing cap

Midpiece
- Mitochondria to supply energy

Tail
- Propels sperm forward
**SEXUAL RESPONSE**

*Sex drive*, also known as sexual desire or libido, is a biological urge for sexual activity.

Testosterone is the principle hormone responsible for the sex drive in both men and women.

Testosterone is produced by the testes in males and by the adrenal glands in both sexes.

People typically seek to satisfy the sex drive through physical stimulation and release, either with a partner or through masturbation.
SEXUAL AROUSAL

Sexual arousal on the physiological level involves vasocongestion and myotonia

Vasocongestion: the inflow of blood to tissues in the erogenous areas

Myotonia: the voluntary or involuntary muscle tension that occurs in response to sexual stimulation
Erection: penis stiffens and lengthens due to dilated blood vessels and pooling blood

Ejaculation: forceful expulsion of semen

Muscle contractions in uterus move sperm into oviduct

Egg may be fertilized if ovulation has recently occurred or will soon occur
HUMAN DEVELOPMENT

Egg and Sperm make a zygote

Zygote develops via cleavage into morula

Sperm entering an oviduct (SEM x500)
BABY GROWTH

Morula becomes an embryo surrounded by amnion

Placenta forms
SEXUAL DEVELOPMENT AND HEALTH ACROSS THE LIFESPAN

The biology of sexual and reproductive development is directed by hormones:

- **Androgens**: male sex hormones secreted by the testes
- **Estrogen and progestins**: produced by ovaries
SEXUAL DEVELOPMENT AND HEALTH ACROSS THE LIFESPAN

Stages of sexual development:

- In boys, voice deepens, facial hair grows, and onset of ejaculation occurs at puberty
- In girls, breasts develop, body fat increases, and onset of menstruation occurs at puberty
- Menopause: cessation of menstruation
- Men do not experience a dramatic change in reproductive capacity in midlife like women
SEXUALITY AND DISABILITY

Most people with disabilities can have a rewarding sex life

As an example, a person with a spinal cord injury may not be able to have an orgasm, but he or she may be able to have intercourse, experience sensuous feelings in other parts of the body, or have a child

As in any relationship, the key is nurturing emotional as well as sexual intimacy
TYPICAL AND COMMON FORMS OF SEXUAL EXPRESSION

Rather than thinking in terms of “normalcy,” social scientists think of behavior as typical or less typical.

The following are typically considered acceptable forms of sexual expression:

- Celibacy
- Erotic touch (foreplay)
- Kissing
- Self-stimulation (masturbation)
- Oral-genital stimulation (cunnilingus/fellatio)
- Anal intercourse
- Sexual intercourse (coitus)
ATYPICAL SEXUAL BEHAVIORS AND PARAPHILIAS

Most atypical sexual behaviors cause no harm and are consensual

- Use of sex toys
- Enacting sexual fantasies
- Phone sex
- Bondage and discipline
ATYPICAL SEXUAL BEHAVIORS AND PARAPHILIAS

Paraphilias are mental disorders, and many are illegal

- Exhibitionism
- Voyeurism
- Telephone scatologia
- Sexual sadism, masochism
- Pedophilia

Treatment focuses initially on reducing the danger to the patient and potential victims, and then on strategies to suppress the behavior.
FEMALE SEXUAL DYSFUNCTIONS

Disturbance in sexual drive, performance, or satisfaction that may occur at any point in the sexual response cycle

- Pain during intercourse (vaginismus)
- Sexual desire disorder
- Female sexual arousal disorder
- Orgasmic dysfunction

There is new interest in female sexuality among scientists, sex therapists, and pharmaceutical companies
MALE SEXUAL DYSFUNCTIONS

Disturbance in sexual drive, performance, or satisfaction in men that may occur at any point in the sexual response cycle

- Pain during intercourse
- Sexual desire disorder
- Erectile dysfunction (ED)
- Ejaculation dysfunction

Treatment often relies on testosterone and other medications; correcting unhealthy lifestyles and working on relationships is also important.
MALE SEXUAL DYSFUNCTIONS

Misuse of ED drugs has recently come to the attention of health experts

- Taken by young men who mistakenly believe they will quickly and easily attain an erection that will allow them to have sex for hours
- Any effect these drugs seem to have is more likely a placebo effect
- Combining ED drugs with alcohol or illicit substances can be life-threatening
PROTECTING YOUR SEXUAL HEALTH

One of the biggest threats to one’s sexual health is sexually transmitted infections

Safer sex practices prevent the exchange of body fluids during sex

The behaviors listed below can help reduce your risk of contracting an infection:

- Using condoms and dental dams, which provide a barrier against bacterial or viral transfer
- Having sex that does not involve genital contact
- Practicing abstinence: no sexual contact
- Communicating about sex: take the time to tell your partner your sexual health history and find out about his or hers
Issues today include:

- Hooking up
- Abstinence
- Cybersex
  - Internet pornography
  - Sexting
  - Revenge porn
  - Teledildonics
- Party and play: the use of recreation drugs for sexual pleasure
Sex addiction is compulsive, out-of-control sexual behavior that results in negative consequences

- Internet particularly problematic for those with sex addiction
- Not included in the DSM, but it is listed as needing more research

“Sexual anorexia” is the flip side of sex addiction
What is sexual health in terms of human biology and culture, and what are common varieties of sexual behavior?

What are sexual dysfunctions in males and in females?

What are the best ways to protect your sexual health?

What are important sex-related issues in the 21st century?