Chapter 11: The Reproductive System and Sexual Health

The Reproductive System
- Responsibility: Continue the species
- Structure:
  - Pair of Gonads
  - Accessory organs, ducts, hormones, etc.

Sexual Autonomy and Functions
- 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

Menstrual Cycle

<table>
<thead>
<tr>
<th>Phase</th>
<th>Events</th>
<th>Days of the Cycle*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menstrual phase</td>
<td>Menstruation; endometrium breaks down</td>
<td>1–5</td>
</tr>
<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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</tbody>
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Summary:
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

Summary:
Sexual Response

- **Sex drive**, also known as sexual desire or libido, is a biological urge for sexual activity
- Testosterone is the principal 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

Sexual Response

- 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

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 scatology
  - 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

Sex and Culture: Issues for the 21st Century

- Issues today include:
  - Hooking up
  - Abstinence
  - Cybersex
    - Internet pornography
    - Sexting
    - Revenge porn
    - Teledildonics
  - Party and play: the use of recreational drugs for sexual pleasure

Sex and Culture: Issues for the 21st Century

- **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

Review

- 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?

Summary: