

# The Nature of Sex and Sexuality

Sexual behavior plays major roles in human experience. Sexual intercourse ensures that humans reproduce and therefore, ensures that the hereditary materials individuals carry, called genes, are repeatedly shuffled and dealt out in different combinations in every new individual. Sexual relationships also bring joy and intimacy that is very special to the couple.

## Vocabulary

sex  
sexuality



### Did You Know?

The genes for human traits are passed down in families from parents to children. For example, if your parents have black hair, then it is likely you and your brothers and sisters will have black hair.

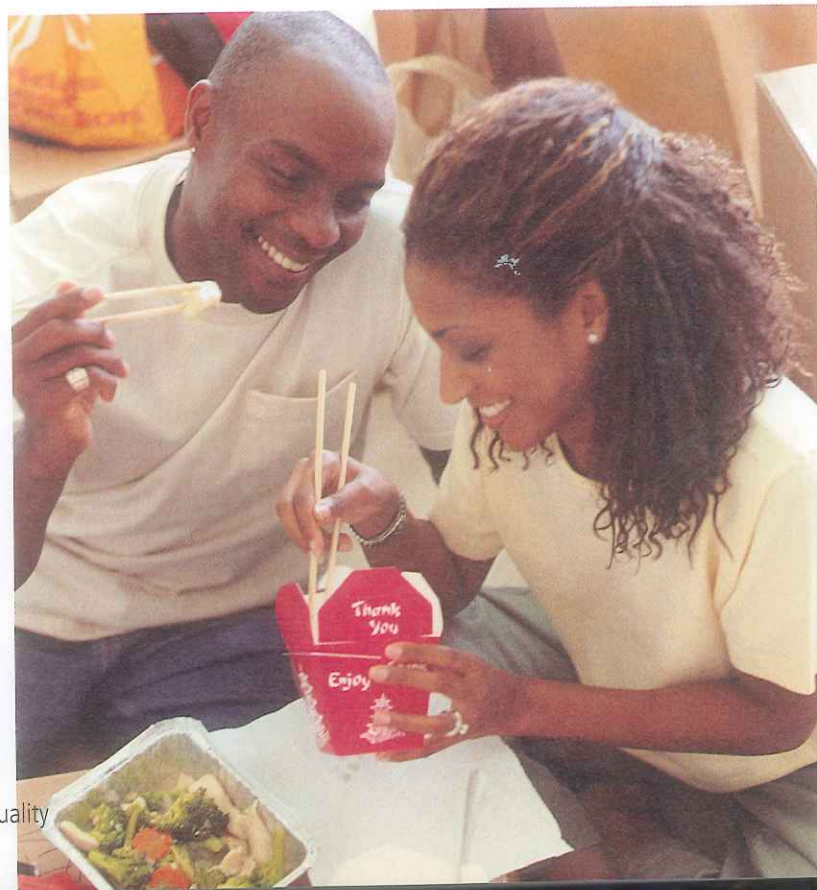
## Human Genetic Inheritance

**MAIN IDEA** ► Sexual intercourse ensures that human beings reproduce.

In the cells of your body, you have genes from your biological parents. Your genes govern physical traits such as your eye color, skin color, and hair color. They also impact non-physical traits, such as personality type, artistic or musical talent, as well as other traits.

The potential to develop these traits was passed on to you at the moment when you were conceived. Half of them came from each of your biological parents. This mixture of genes, combined with your life experience and personal choices you make, determine what sort of person you will turn out to be.

■ **Figure 21.1** *Sexual attraction motivates sexual behavior. Why does attraction between people exist?*





■ **Figure 21.2** *Sexual reproduction provides a way to mix inherited traits into new combinations. How many chromosomes do human cells contain?*

If someday you decide to have a child, you will pass on a mixture of your mother and father's traits as well as traits from your grandparents. Your child may receive your mother's brown eyes and love of learning, and your father's strong hands and musical ability. Your partner will also pass on a mixed set of traits, some from each of his or her parents. Every child is a brand-new individual, carrying a new combination of genes, and therefore, different physical and nonphysical traits. Sexual reproduction, in short, provides a way to mix inherited traits into new combinations in every generation.

Typically, human cells contain 46 chromosomes. However, the reproductive cells, including the male sperm and the female egg, carry only 23 chromosomes each. When the sperm and egg combine, they create the 46 chromosomes.

To sustain life, all species must reproduce. That is why each person's sexuality has such an influence on the person's life. Attraction leads to the continuation of life through sexual reproduction or other means, such as adoption. It is also linked with the expression of one of the highest forms of human emotion—committed, mature love.

## Human Sexuality

**MAIN IDEA** ► Sexuality remains part of who people are from birth to death. It affects many facets of life.

Sexuality is a part of a person's personality. The way you walk, think, and feel, and the ways you talk to and touch others, all are affected by your sexuality. Sexuality affects everyone regardless of age, race, and body type. Your sexuality is greatly influenced by the way you feel about yourself. This means that your thoughts, feelings, values, and self-esteem are all part of your sexuality.

*“Love does not consist in gazing at each other, but in looking outward together in the same direction.”*

— Antoine de Saint-Exupéry  
(1900–1944)  
French novelist

■ **Figure 21.3** *Sexuality is part of a person's personality. What influences your sexuality?*



### **Did You Know?**

Levels of chemicals in the brain called dopamine and norepinephrine increase and lead to the excited, elated feeling that so many of us get at the start of a new relationship.

In this book, you have read quite a bit about human sexuality, beginning with puberty, sex roles, and gender identity in Chapter 3. In Chapter 18 you read about love relationships and about the sexual pressures that accompany those relationships. In Chapter 20 you learned about conception and pregnancy. In this chapter, you will read about sexual behaviors, and also about sexual myths and problems. Finally, you will learn about sexual orientation.

## **SECTION** **1** **Review**

### **Reviewing the Vocabulary**

*Review the vocabulary on page 576. Then answer these questions.*

1. A general term often used to mean sexual intercourse is \_\_\_\_\_.
2. \_\_\_\_\_ is the quality of being sexual.

### **Reviewing the Facts**

3. **Describe.** What are the two major roles sexual reproduction plays in nature?
4. **Identify.** What two types of traits do genes govern?
5. **Explain.** How much of your genetic material was contributed by each of your parents?

### **Writing Critically**

6. **Explain.** Research online or at the library to learn more about genetics and birth traits. Explain how technology can influence a person's traits.



For more vocabulary practice, play the Concentration game at [glencoe.com](http://glencoe.com).

# Sexual Activity

## SECTION 2

As you know from reading Chapter 20, people who have developed a healthy intimate relationship may decide to commit to each other. One form of commitment between two people is marriage. Sexual activity and emotional intimacy can add fulfillment to marriage.

Touching, hugging, and kissing are intimate, pleasurable activities. These activities may also satisfy emotional needs, and therefore can be emotionally fulfilling. It is normal and natural in a committed relationship for these activities to sometimes lead to **sexual intercourse**, *the reproductive act between the sexes*. When a couple delays sexual activity for a significant period of time, they give themselves time to develop a committed, loving relationship. Forming an intimate relationship in which the couple have trust and mutual respect for each other takes time. When this occurs, the intimacy that a couple shares can be more fulfilling.

## The First Sexual Feelings

**MAIN IDEA** ► Natural curiosity often leads to masturbation, which is a way to satisfy a biological drive.

At an early age boys and girls begin to pay more attention to their appearance. They also enjoy physical sensations, such as rubbing lotions onto the skin, or playing with each other's hair. These are the natural healthy beginnings of sexual feelings and activities.

When young people reach puberty, the hormones produced by their bodies cause teens to think more about their sexual feelings. This sexual tension can become intense at times. One way to release this sexual tension is through **masturbation**, *rubbing or stimulating one's own genitals, usually until orgasm occurs*.



## Vocabulary

- sexual intercourse
- masturbation
- orgasm
- erection
- engorgement
- excitement phase
- plateau phase
- ejaculation
- resolution phase

■ **Figure 21.4** In a truly intimate relationship, closeness and caring are as important as sexual attractiveness. *Why is it important to develop emotional intimacy rather than just physical intimacy?*

Medical experts believe that masturbation is healthy and provides a way to release sexual tension and avoid the risks of sexual activity, including pregnancy and STDs. However, some people are opposed to masturbation. They believe it is wrong and harmful. In the past, people were told that masturbation caused pimples, warts, and even excessive hair growth. These are all myths—none of them are true.

It is fairly common for teens to be confused about the desire to masturbate. Some may feel guilty and ashamed because it's something they feel they must hide. They may feel that their parents and other adults do not approve.

Another way our bodies release sexual feelings and tension is through nocturnal emissions. As hormone levels increase, the buildup of pressure may lead to nocturnal emissions. In a male, semen is ejaculated. In a female, the vagina secretes moisture. Nocturnal emissions are natural. They may be accompanied by a dream that is sexual in content, also called a wet dream. Almost all teens, both males and females, experience such dreams from time to time. The **orgasm**, *muscular contractions of the sex organs*, that occurs during a wet dream is the body's normal response for releasing sexual tension and feelings. In males, an orgasm causes the release of semen from the penis and in females, the vagina will secrete moisture as well.

## Sexual Intercourse

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**MAIN IDEA** ► Sexual stimulation often leads to male erection and female engorgement.

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Although it is a simple, physical act, sexual intercourse is also complex. The two people who engage in it bring to it their moods, ideas, self-concepts, feelings about their relationship, and everything else that makes them unique. This section is about the physical events of sexual intercourse.

Sexual stimulation usually results in erection of the penis in males. An **erection** is *the state of a normally soft tissue when it fills with blood and becomes firm*. Fluid moves down the male's urethra, neutralizing the acid left there by urine and creating a safe environment for sperm. Females experience **engorgement**, or *swelling*, of the clitoris and surrounding tissues, and a tipping upward of the uterus. Lubricating fluids begin to flow within the vagina.

During the early phase of the male's erection, a drop or so of fluid leaves the penis. This fluid generally does not contain sperm but can transmit STDs. Sperm can easily travel, even from the outside of the vagina, into the uterus. To prevent pregnancy, any semen must be prevented from touching the vagina.

# The Stages of the Sexual Response

**MAIN IDEA** ► The four stages of the sexual response are excitement, plateau, orgasm, and resolution.

The mystery of why a sexual response occurs lies in the human brain. Among the organs that respond to the brain's instructions are the clitoris and vagina in a female, and the penis in a male. For both genders, the four phases of sexual response include excitement, plateau, orgasm, and resolution. Each phase may differ from person to person and may vary in the same person from time to time. A person can stop during any phase of the cycle with no physical harm to the body.

## Excitement

The **excitement phase**, *the early state of sexual arousal*, may begin even before physical contact occurs. A loving couple may kiss and then touch one another in ways that feel good. This can lead to erection in the male and engorgement in the female. During this time, the couple can enjoy the emotions of tenderness, love, and gratitude, as well as feelings of sexual pleasure and arousal.

## Plateau

If sexual stimulation continues, the partners move into the plateau phase. The **plateau phase** is *the period of intense physical pleasure preceding orgasm*. In this phase the lower third of the vagina constricts, the uterus tilts forward, and the penis enlarges further. The clitoris withdraws under its foreskin as it becomes more sensitive.

## Orgasm

With continued stimulation, orgasm occurs. Orgasm is a reflex—an involuntary and pleasurable response that follows stimulation of the genitals. In females, orgasm involves involuntary rhythmic contractions of the clitoris, uterus, the outer portion of the vagina, and the surrounding muscles. In males, it involves muscle contractions in the penis, testicles, anus and surrounding areas as well as ejaculation. **Ejaculation** is *the expelling of semen from the penis, brought about by the involuntary muscular contractions of orgasm*. Orgasm lasts just a few seconds. Sexual intercourse usually ends with the male's orgasm because very soon after ejaculation occurs, the male's erection begins to soften. The female's orgasm can occur prior to, along with, after her partner's, or not at all.

## Resolution

In the phase called the **resolution phase**, *the phase of relaxation that follows orgasm*, the physical changes of arousal reverse. Tensed muscles relax. Congested blood vessels and swollen tissues return to normal. In most males, the ability to achieve another erection and orgasm requires some period of time, called the refractory period. This can last for a few minutes to several hours and is completely normal. Some females can experience one orgasm after another.

## SECTION 2 Review

### Reviewing the Vocabulary

Review the vocabulary on page 579. Then answer these questions.

1. The reproductive act is called \_\_\_\_\_.
2. \_\_\_\_\_ is the stimulating of one's own genitals, usually until orgasm occurs.
3. \_\_\_\_\_ means swelling.
4. The stage of relaxation that follows orgasm is called \_\_\_\_\_.
5. \_\_\_\_\_ is the expelling of semen from the penis, brought about by the involuntary muscular contractions of orgasm.

### Reviewing the Facts

6. **Explain.** When young people reach puberty, how can hormones affect sexual feelings?
7. **Analyze.** What do medical experts believe about masturbation?
8. **Name.** Which organs respond to the brain's instructions during the sexual response?
9. **Identify.** What are the four phases of the sexual response?
10. **Describe.** What happens to the female's body in the plateau phase?

### Writing Critically

11. **Personal.** List some ways that sexual tension can be released without engaging in sexual intercourse.



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