



## Human Sexual Response And Cycles

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### ABSTRACT

Knowing how your body responds during each phase of the cycle can enhance your relationship and help you pinpoint the cause of any sexual problems. The human sexual response cycle refers to the structured series of changes the body goes through physically, psychologically, and emotionally when becoming aroused and engaging in sexual activity. The sexual response cycle has four phases: excitement, plateau, orgasm, and resolution. Both men and women experience these phases, although the timing usually is different and the intensity of the response varies from person to person.

**Keywords:** Cycle, Humans, Response, Sexuality,

### INTRODUCTION

The sexual response cycle refers to the sequence of physical and emotional changes that occur as a person becomes sexually aroused and participates in sexually stimulating activities, including intercourse and masturbation. Knowing how your body responds during each phase of the cycle can enhance your relationship and help you pinpoint the cause of any sexual problems. The sexual response cycle has four phases: excitement, plateau, orgasm, and resolution. Both men and women experience these phases, although the timing usually is different. For example, it is unlikely that both partners will reach orgasm at the same time. In addition, the intensity of the response and the time spent in each phase varies from person to person. Understanding these differences may help partners better understand one another's bodies and responses, and enhance the sexual experience.

Both men and women can experience these phases, although the timing may be different. For example, it is highly unlikely that both partners will reach orgasm at the same time. In addition, the intensity of the response and the time spent in each phase varies from person to person. Many women will not go through the sexual phases in this order.

Some of these stages may be absent during some sexual encounters, or out of sequence in others. A desire for intimacy may be a motivation for sexual activity in some individuals. Understanding these differences may help partners better understand one another's bodies and responses, and enhance the sexual experience.

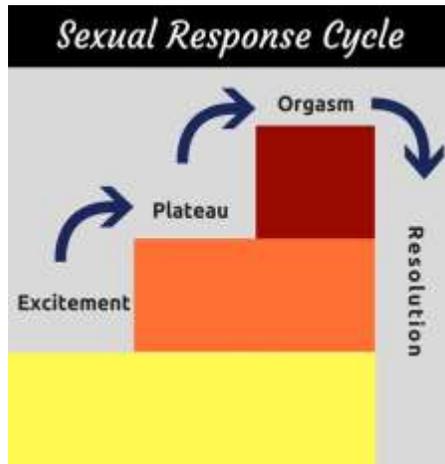
Several physiologic changes may occur during different stages of sexual activity. Individuals may experience some, all or none of these changes.

### Objective of the Study

The study is aimed at investigating the human sexual response and cycles. The study seeks to

1. Understand basic biological mechanisms regulating sexual behavior and motivation.

2. Recognize the contributions that Masters and Johnson's research made to our understanding of the sexual response cycle.
3. Demonstrate the usefulness and importance in the study of human sexual response.



### What Are The Phases Of The Sexual Response Cycle?

The sexual response cycle has been described as having four phases:

#### Excitement Phase

The **excitement phase** (also known as the **arousal phase** or **initial excitement phase**) is the first stage of the human sexual response cycle, which occurs as a result of physical or mental erotic stimuli, such as kissing, making out, fantasizing or viewing erotic images, that leads to sexual arousal. During this stage, the body prepares for sexual intercourse, initially leading to the plateau phase (John Archer; & Barbara Lloyd 2002). There is wide socio-cultural variation regarding preferences for the length of foreplay and the stimulation methods used (Gray, 1980). Physical and emotional interaction and stimulation of the erogenous zones during foreplay usually establishes at least some initial arousal.

#### Excitement in both sexes

Between both sexes, the excitement phase results in an increase in heart rate, breathing rate, and a rise in blood pressure (Gray, JP 1980). A survey in 2006 found that sexual arousal in about 82% of young females and 52% of young males arises or is enhanced by direct stimulation of nipples, with only 7–8% reporting that it decreased their arousal (Rosenthal, 2012). Vasocongestion of the skin, commonly referred to as the sex flush, will occur in approximately 50-75% of females and 25% of males. The sex flush tends to occur more often under warmer conditions and may not appear at all under cooler temperatures.

During the female sex flush, pinkish spots develop under the breasts, then spread to the breasts, torso, face, hands, soles of the feet, and possibly over the entire body (John Archer; & Barbara Lloyd 2002). Vasocongestion is also responsible for the darkening of the clitoris and the walls of the vagina during sexual arousal. During the male sex flush, the coloration of the skin develops less consistently than in the female, but typically starts with the epigastrium (upper abdomen), spreads across the chest, and then continues to the neck, face, forehead, back, and sometimes, shoulders and forearms. The sex flush typically disappears soon after orgasm occurs, but this may take up to two hours or so and, sometimes, intense sweating will occur simultaneously. The flush usually diminishes in reverse of the order in which it appeared (Masters & Johnson 1981)

An increase in muscle tone (myotonia) of certain muscle groups, occurring voluntarily and involuntarily, begins during this phase among both sexes (Masters & Johnson 1981). Also, the external anal sphincter may contract randomly upon contact (or later during orgasm without contact).

### **Excitement in males**

In males, the beginning of the excitement phase is observed when the penis becomes partially or fully erect, often after only a few seconds of erotic stimulation (John Archer; & Barbara Lloyd (2002). The erection may be partially lost and regained repeatedly during an extended excitement phase. Both testicles become drawn upward toward the perineum, notably in circumcised males where less skin is available to accommodate the erection. Also, the scrotum can tense and thicken during the erection process.

### **Excitement in females**

In females, the excitement phase can last from several minutes to several hours. The onset of vasocongestion results in swelling of the woman's clitoris, labia minora and vagina. The muscle that surrounds the vaginal opening grows tighter and the uterus elevates and grows in size. The vaginal walls begin to produce a lubricating organic liquid. Meanwhile, the breasts increase slightly in size and nipples become hardened and erect.

### **Plateau Phase**

The plateau phase is the period of sexual excitement prior to orgasm. The phase is characterised by an increased circulation and heart rate in both sexes, increased sexual pleasure with increased stimulation and further increased muscle tension. Also, respiration continues at an elevated level. Prolonged time in the plateau phase without progression to the orgasmic phase may result in sexual frustration.

#### **Plateau in males**

During this phase, the male urethral sphincter contracts (so as to prevent urine from mixing with semen, and to guard against retrograde ejaculation) and muscles at the base of the penis begin a steady rhythmic contraction. Males may start to secrete seminal fluid or pre-ejaculatory fluid and the testicles rise closer to the body.

#### **Plateau in females**

The plateau stage in females is basically a continuation of the same changes evident in the excitement stage. The clitoris becomes extremely sensitive and withdraws slightly, and the Bartholin glands produce further lubrication. The tissues of the outer third of the vagina swell, and the pubococcygeus muscle tightens, reducing the diameter of the opening of the vagina. Masters and Johnson refer to the changes that take place during the plateau stage as the orgasmic platform. For those who never achieve orgasm, this is the peak of sexual excitement.

### **Orgasm Phase**

Orgasm is experienced by both males and females, ending the plateau phase of the sexual response cycle. Orgasm is accompanied by quick cycles of muscle contraction in the lower pelvic muscles, which surround both the anus and the primary sexual organs. Orgasms are often associated with other *involuntary* actions, including vocalizations and muscular spasms in other areas of the body and a generally euphoric sensation. Heart rate is increased even further. Tantric sex practices may seek to diminish the goal of achieving orgasm, which is frequently a common goal of sexual intercourse.

#### **Orgasm in males**

In males, orgasm is usually associated with ejaculation. Each ejection is accompanied with continuous pulses of sexual pleasure, especially in the penis and loins. Other sensations may be felt strongly among the lower spine or lower back. The first and second convulsions are usually the most intense in sensation and produce the greatest quantity of semen. Thereafter, each contraction is associated with a diminishing volume of semen and a milder sensation of pleasure.

#### **Orgasm in females**

Women also experience uterine and vaginal contractions. Orgasms in females can vary widely from individual to individual. They are commonly associated with an increase in vaginal lubrication, a tightening of the vaginal walls and overall pleasure. For some women, there is also a possibility of female ejaculation (also called "squirting").

### **Resolution Phase**

The resolution phase occurs after orgasm and allows the muscles to relax, blood pressure to drop and the body to slow down from its excited state. The refractory period, which is part of the resolution phase, is the time frame in which usually a man is unable to orgasm again, though women can also experience a refractory period.

### **Resolution in males**

Masters and Johnson described the two-stage detumescence of the penis: In the first stage, the penis decreases from its erect state to about 50 percent larger than its flaccid state. This occurs during the refractory period. In the second stage (and after the refractory period is finished), the penis decreases in size and returns to being flaccid (Masters & Johnson, 1981). It is generally impossible for men to achieve orgasm during the refractory period (Trost, 1989). Masters and Johnson argue that this period must end before men can become aroused again.

Although, due to the refractory period, it is rare for men to achieve *multiple orgasms*, some men have reported having multiple, consecutive orgasms, particularly without ejaculation. Multiple orgasms are more commonly reported in very young men than in older men. In younger men, the refractory period may only last a few minutes, but last more than an hour in older men.

### **Resolution in females**

According to Masters and Johnson, women have the ability to orgasm again very quickly, as long as they have effective stimulation. As a result, they are able to have *multiple orgasms* in a relatively short period of time. Though generally reported that women do not experience a refractory period and thus can experience an additional orgasm, or multiple orgasms, soon after the first, (Trost JE 1989). Some sources state that men and women experience a refractory period because women may also experience a period after orgasm in which further sexual stimulation does not produce excitement. For some women, the clitoris is very sensitive after climax, making additional stimulation initially painful. After the initial orgasm, subsequent orgasms for women may also be stronger or more pleasurable as the stimulation accumulates (John Archer; & Barbara Lloyd 2002).

### **Similarities and Differences In Sexual Responses Between Male And Female**

Masters and Johnson argue that, despite some minor differences, sexual responses in both men and women are fundamentally similar (John Archer; & Barbara Lloyd 2002). However, researchers have argued that there are many differences between men and women in terms of their response. First, Masters and Johnson put forth one model for men, but three different models for women. They stated that men's sexual response only differs in terms of duration; showing different models would, thus, be repetitive. Women, on the other hand, they state can have responses that differ in both intensity and duration (Both, 2003). These variations can pose problems because psychologists have argued that not everyone fits this model; for example, most women do not orgasm during penetrative sexual intercourse (Rosenberg et al 2006). Masters and Johnson also equate a man's erection with a woman's vaginal lubrication during the excitement phase; Roy Levin states that this observation is false. A woman's clitoris is the anatomical parallel to a man's penis. As a result, clitoral swelling would be the equivalent of a man's erection (Zilbergeld, 1992).

Another aspect is the lack of concordance between subjective sexual arousal and genital arousal. Research by Meredith, Chivers and Michael Bailey indicates that men tend to show category-specific arousal; that is, they are sexually aroused by their preferred gender. However, women show category non-specificity: Their genitals show arousal to both preferred and non-preferred genders (Both et al, 2003). Even though women reported being subjectively aroused to, for example, a man and woman engaging in sexual activity, their genitals also show sexual arousal to two men engaging in sexual activity, two women doing so, and even non-human animals having sex (Robinson, 1976)

Overall, Masters and Johnson's model appears to be a better example of men's sexual response than women's (Laan, & Both, 2008)

## CONCLUSION

The human sexual response cycle refers to the structured series of changes the body goes through physically, psychologically, and emotionally when becoming aroused and engaging in sexual activity. Most current models of the sexual response cycle include sexual desire, arousal, and orgasm.

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