

# Ejaculation

1. Stimulation of sensitive nerve endings in the genitals **activates the ejaculation center in the spinal cord segments T<sub>11</sub>-L<sub>2</sub> due to the influence of sympathetic** nerves.
2. The sympathetic causes **contraction of the ductus deferens**, which transports sperm from the epididymis **to the urethra in the prostate**. At this point the *ductus deferens* joins the *ductus excretorius*, which supplies 50-80 % of the liquid component of ejaculate produced in the *glandula vesiculosa*.
3. At the same time, the ***sphincter urethrae internus muscle contracts***, due to the sympathetic effect, which prevents the retrograde passage of ejaculate into the bladder.
4. This is followed by the contraction of the ***bulbospongiosus muscle*** together with the ***ischiocavernosus muscle***, which **expels the ejaculate from the urethra** with rhythmic contractions. Sexual excitement (including erection) subsides within 1-2 minutes.

File:Glandula vesiculosa.jpg  
Glandula vesiculosa  
(posterior and inferior  
view)

## Ejaculate

The volume varies between 2.5-4.5 ml.

### Ingredients:

1. **Sperm and vas deferens secretion 10%**
2. **Seminal vesicle secretion 60%**
3. **Prostate secretion 30%**
4. **The smallest part is the mucus of the bulbourethral glands**

The pH of the ejaculate is about 7.5 (**an alkaline environment** increases the production of sperm). The alkaline secretion of the seminal vesicles contains **nutrients** (fructose) and hormones (prostaglandins), which help the sperm move. **Prostatic fluid** is milky cloudy and contains calcium, phosphate ions, fibrinogen and profibrinolysin. After being expelled into the vagina fibrinogen turns into fibrin - the formed coagulum keeps the ejaculate in the posterior parts of the vagina. Serine protease (PSA, prostate specific antigen) dissolves the coagulum within 15-30 minutes and sperm motility increases again.

The content of live (and motile) sperm is essential. There are **35-200 million** of them in 1 ml of ejaculate. If the number falls below 20 million, the man is practically **infertile**. They move 3 mm/min in the female genitalia. They can reach the fallopian tubes 10-60 minutes after intercourse (that's also where fertilization most often occurs). They can survive in the female reproductive system for **several days**. Frozen ejaculate can be stored for several years.

## Links

### Related articles

- Accessory gonads
- mechanism of erection
- premature ejaculation
- evaluation of spermiogram

### Resources

- ČIHÁK, Radomír – GRIM, Miloš. *Anatomie*. 2nd edit and supplement edition edition. Grada, 2002. vol. 2. pp. 488. ISBN 80-247-0143-X.
- HUDÁK, Radovan – KACHLÍK, David. *Memorix anatomy*. 2. edition. Triton, 2013. ISBN 9788073877125.
- KOLEKTIV, Kittnar. *Lékařská fyziologie*. 2. edition. Grada Publishing a.s., 2011. pp. 790. ISBN 9788024730684.