

Ovulation

For women, the possibility of pregnancy begins in the ovaries, those two almond-shaped glands attached to either side of the uterus.

The ovaries come fully stocked. A woman is born with 1 to 2 million eggs – more than a lifetime's supply. The eggs begin dying off almost immediately and she never produces any more.

Altogether, a woman probably releases about 400 eggs over the course of her reproductive years, beginning with her first period and ending with menopause (usually between ages 45 and 55).

During the middle of her menstrual cycle, most likely sometime between the 12th and 16th days, an egg reaches maturity in one of her two ovaries, then is released and quickly sucked up by the opening of the nearest fallopian tube. (These two 4-inch canals lead from the ovaries to the uterus.)

This release, called [ovulation](#), starts the conception clock ticking. The average egg lives only about 24 hours, so it has to be fertilized soon for conception to happen. If the egg meets up with a healthy sperm on its way to the uterus, the two can join and begin the process of creating a new life.

If not, it ends its journey at the uterus, where it either dissolves or is absorbed by the body. When pregnancy doesn't occur, the ovary eventually stops making estrogen and progesterone (hormones that help maintain a pregnancy), and the thickened lining of the uterus is shed during a woman's period.

Sperm

While women are busy maturing a single egg at the leisurely pace of about one a month, men are almost constantly at work producing millions of microscopic sperm, whose sole purpose in life is to penetrate an egg. While women come complete with all of the eggs they'll ever need, men aren't born with ready-made sperm. They have to produce them on a regular basis – from start to finish it takes 64 to 72 days to create a new sperm cell.

The average sperm lives only a few weeks in a man's body, and about 250 million are released with each ejaculation. That means new sperm are always in production.

Sperm begin developing in the testicles, the two glands in the scrotal sac beneath the penis. (See illustration above.) The testicles hang outside a man's body because they're quite sensitive to temperature.

To produce healthy sperm, they have to stay around 94 degrees Fahrenheit – about four degrees cooler than normal body temperature. The sperm are stored in a part of the testicle called the epididymis before mixing with semen just prior to ejaculation.

Despite the millions of sperm produced and released in each ejaculate, only one can fertilize an egg – this is the case even for twins. The gender of the resulting embryo depends on which type of sperm burrows into the egg first. Sperm with a Y chromosome make a boy baby, and sperm with an X chromosome make a girl.

Which sperm gets to the egg first?

Once the sperm is released, a great deal of activity is taking place inside a woman's body. Those millions of sperm have begun their quest to find the egg, and it's not an easy journey.

The first obstacle is the acid level in the vagina, which can be deadly to sperm. Then there's the cervical mucus, which can be an impenetrable net except on the one or two days [when a female is most most fertile](#). Then it miraculously loosens up so a few of the strongest swimmers can get through.

But that's not all – the sperm that survive still have a long road ahead. In all, they need to travel about 7 inches from the cervix through the uterus to the fallopian tubes.

If they don't find an egg in the fallopian tubes at the time of intercourse, the sperm can live in the woman's reproductive tract for three to five days. Only a few dozen sperm ever make it to the egg. The rest get trapped, lost – perhaps heading up the wrong fallopian tube – or die along the way.

For the lucky few who get near the egg, the race isn't over. They have to work frantically to penetrate the egg's outer shell and get inside before the others.