

# HOW OVULATION WORKS

1

## HYPOTHALAMUS

This region of the brain connects the nervous and hormonal systems. It can be thought of as “command central” for ovulation. The hypothalamus releases gonadotropin-releasing hormone (or GnRH) in a precisely timed pattern, kicking off the ovulatory cycle.

2

## PITUITARY

The GnRH triggers the pituitary gland to release two very important hormones, luteinizing hormone (or LH) and follicle-stimulating hormone (or FSH). Known as “gonadotropins,” these hormones prompt the development of an ovarian follicle, a tiny pocket of fluid that will hold the microscopic egg.

3

## OVARY

The ovary contains all of the follicles. Stimulation by LH and FSH from the pituitary gland causes cells in the follicles to produce estrogen, which leads to ovulation, or the follicle’s release of a mature egg. After ovulation, the follicle transforms into a “corpus luteum” and begins to produce another hormone, called progesterone, to prep the body for a possible pregnancy.

4

## FALLOPIAN TUBES

Once the egg has been released, it enters the Fallopian tube. If sperm are present around the time of ovulation, the egg will be fertilized in the Fallopian tube. The fertilized egg can develop into an embryo.

FSH

LH

6

## UTERUS

After implanting in the endometrium, the embryo remains in the uterus where it develops throughout pregnancy. The uterus enlarges and adapts to accommodate the growing fetus.

5

## ENDOMETRIUM

The endometrium is the lining of the uterus. The estrogen and progesterone produced in the ovaries before, during, and after ovulation cause the endometrium to thicken. This allows the embryo to implant and for a pregnancy to begin. If the egg is never fertilized, this lining disintegrates along with the egg and passes out of the body during menstruation.

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## CERVIX

The cervix is the passage from the uterus to the vagina. Through the cervix, sperm can enter to fertilize the egg, menstrual blood can exit if the egg is not fertilized, or a baby can be delivered (after it dilates greatly, of course!).