

Female Reproductive System

by Sophia

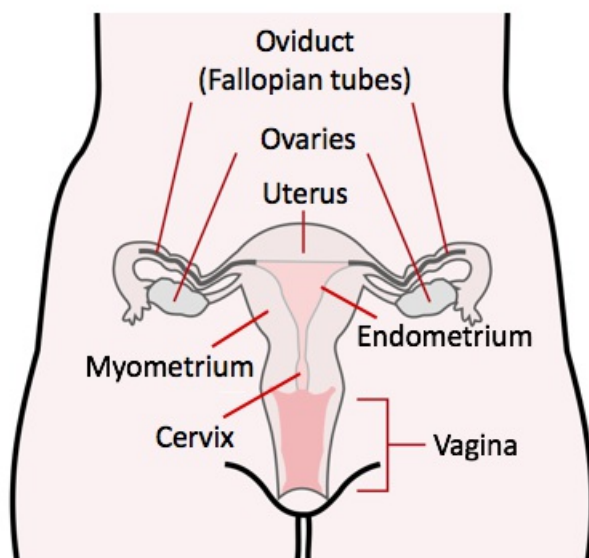


WHAT'S COVERED

In this lesson, you will learn how to identify organs and glands associated with the female reproductive system. Specifically, this lesson will cover:

1. Female Reproductive System Overview

The **female reproductive system** is a body system specific to females that plays a role in the development of offspring, from the development of reproductive cells (eggs) to the time of conception all the way to birth. Please refer to the diagram below as you work your way through this lesson.



Egg cells are the female version of **gametes**. In the process of reproduction, the mother and the father each contribute half of embryo's DNA ($\frac{1}{2} + \frac{1}{2} = 1$). Cells that have half the typical amount of DNA are called gametes; female gametes are eggs, and male gametes are sperm.

Oogenesis is the word used for the formation of an egg and takes place in the ovaries. An egg is released from the ovary into the oviduct, where it can become fertilized. If it doesn't, the egg will still move toward the uterus. If the egg is not fertilized, it will be expelled through menstruation out through the cervix and then out the vagina.



TERMS TO KNOW

Female Reproductive System

The female reproductive system's primary job is to mature and release oocytes (eggs)—a process called oogenesis; the secondary functions are to gestate, nourish and deliver the child; the primary organs are the ovaries while the accessory organs are the vagina, cervix, uterus, fallopian tubes and breasts.

Gametes

Cells (eggs in females, sperm in males) which contain half the DNA the rest of the body's (somatic) cells have; thus, when two gametes (a sperm and an egg) combine, each with half the normal amount of DNA, the resulting embryo has the full complement of DNA.

Oogenesis

The process by which egg cells are formed.

2. Ovaries & Oviducts

A female has two **ovaries** (one on each side), and the ovaries produce and release egg cells called **oocytes**. The process of releasing a developing egg (oocyte) from the ovary is called ovulation. An oocyte is an immature egg cell that is produced in the ovaries; the oocyte won't become a mature **ovum** (the plural of "ovum" is "ova") unless they become fertilized.

During ovulation, an oocyte will be released from the ovaries and will move into the **oviduct**, or fallopian tube. As egg cells move through the fallopian tubes, they may encounter sperm. This is where fertilization occurs.



TERMS TO KNOW

Ovaries

Female reproductive organs that produce oocytes.

Oocytes

Immature egg cells that are released from ovaries.

Ovum

A mature egg cell (the plural of "ovum" is "ova").

Oviduct

A duct that connects ovaries to the uterus through which egg cells travel, also called "fallopian tubes."

3. Uterus

From there, regardless of if the egg becomes fertilized or not, it will travel toward the **uterus**. The uterus is the location for the development of a fertilized egg, which will eventually become an embryo.

The myometrium is a muscular layer of the uterus and will expand quite a bit if a baby is developing within the uterus, creating room for the developing embryo and fetus.

The **endometrium** is the inner lining of the uterus; it lies between the myometrium and the space within the uterus (where the baby develops). This is where the embryo would implant if the egg was fertilized and would begin its development.

The **cervix** is the lower part of the uterus that leads out to the **vagina**. The vagina is essentially the birth canal and leads from the cervix to the outside. The vagina is essentially where a baby exits the mother and where sperm is first introduced.



TERMS TO KNOW

Uterus

An organ of the female reproductive system in which fertilized eggs develop into an embryo.

Endometrium

The inner lining of the uterus.

Cervix

The lower portion of the uterus which opens to the vagina.

Vagina

The organ of the female reproductive system which serves as the location where sperm enter and also serves as the birth canal.



SUMMARY

This lesson has been an overview of the structure and function of the **female reproductive system**. Specifically, this lesson focused on the **ovaries**, the **oviduct**, the **uterus**, and oogenesis.

Keep up the learning and have a great day!

Source: THIS WORK IS ADAPTED FROM SOPHIA AUTHOR AMANDA SODERLIND



ATTRIBUTIONS

- [Female Reproductive System](#) | Author: Wikipedia | License: Public Domain



TERMS TO KNOW

Cervix

The lower portion of the uterus which opens to the vagina.

Endometrium

The inner lining of the uterus.

Female Reproductive System

The female reproductive system's primary job is to mature and release oocytes (eggs) - a process called oogenesis. The secondary functions are to gestate, nourish and deliver the child. The primary organs

are the ovaries while the accessory organs are the vagina, cervix, uterus, fallopian tubes and breasts.

Gametes

Cells (eggs in females, sperm in males) which contain half the DNA the rest of the body's (somatic) cells have. Thus, when two gametes (a sperm and an egg) combine, each with half the normal amount of DNA, the resulting embryo has the full complement of DNA.

Oocytes

Immature form of ova (eggs cells) that are released from ovaries.

Oogenesis

The process by which egg cells are formed.

Ovaries

Female reproductive organs that produce oocytes.

Oviduct

A duct that connects ovaries to the uterus through which egg cells travel; also called "fallopian tubes".

Ovum

A mature egg cell (the plural of "ovum" is "ova").

Uterus

An organ of the female reproductive system in which fertilized eggs develop into an embryo.

Vagina

The organ of the female reproductive system which serves as the location where sperm enter and also serves as the birth canal.