



STUDENT
WELLNESS

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BIRTH CONTROL INFO KIT

- Reproductive system anatomy
- The menstrual cycle
- Birth control basics
- Cost and availability to University of Guelph students
- Emergency contraception
- Pregnancy
- Resources

AN INFOKIT BY THE WELLNESS
EDUCATION AND PROMOTION CENTRE
UNIVERSITY OF GUELPH

REPRODUCTIVE SYSTEM ANATOMY

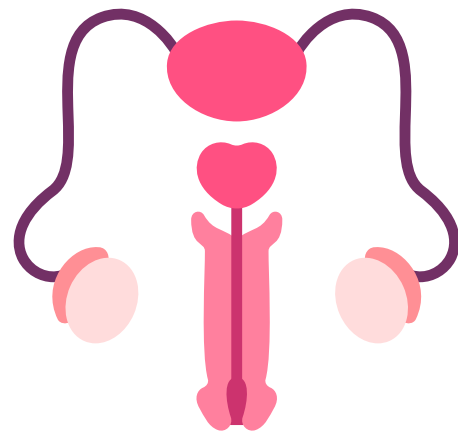
HUMAN REPRODUCTIVE ANATOMY

The regulation of reproduction through birth control methods is one of the most empowering innovations of human technology. To understand how birth control works, it is important to understand how reproductive systems work, as well as the menstrual cycle.

EXTERNAL REPRODUCTIVE SYSTEM

This reproductive system is comprised of internal elements (seminal vesicle, prostate gland, urethra, vas deferens) that facilitate external organs (penis, testes, scrotum).

People with this reproductive system begin to produce sperm at the onset of puberty, approximately around the age of 13 years, and this ability to produce sperm lasts throughout the person's entire life.



Sperm, or spermatozoa, are produced by the testicles, which are glands located within the scrotum. Sperm production is a constant process, and it takes approximately 70 days for one sperm to mature.

The process of sperm production begins in the testicles, where the sperm forms and then travels through the epididymis. Sperm then reaches the vas deferens, where it is stored until ejaculation occurs.

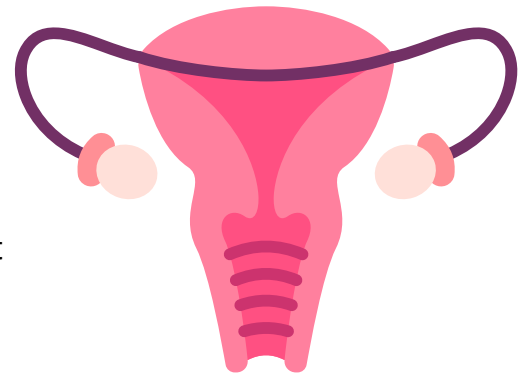
During ejaculation, liquid from the prostate gland (that works to help sperm survive after leaving the body) mixes with the sperm to form semen. Semen travels through the urethra out of the body. Sperm can swim and travel on their own, and can unite with an egg to form an embryo.

Spermatozoa are fragile, and their survival rate is very low. Each ejaculation consists of hundreds of millions of spermatozoa, but only a few will survive the journey to the fallopian tube and the egg. Once there, only one can penetrate the egg and fertilize it.

INTERNAL REPRODUCTIVE SYSTEM

This reproductive system is comprised of internal elements (fallopian tubes, ovaries, fimbriae, uterus, endometrium, cervix, and vagina).

People with this reproductive system are born with a set number of eggs, which are released monthly from the onset of menstruation until menopause.



THE MENSTRUAL CYCLE

About once a month, an egg leaves the ovaries and travels down the fallopian tubes towards the uterus. At the same time, the lining of the uterus becomes thicker with extra blood and tissue to make a cushion for a potentially fertilized egg.

If an egg is fertilized with sperm the fertilized egg will attach itself to the uterus where it will slowly develop into a fetus. If the egg is not fertilized, the lining of the uterus begins to break down so it can be shed (along with the egg that was not fertilized).

A period happens when the body gets rid of the extra blood and tissue that's no longer needed. Then the cycle starts all over again.

PHASES OF THE MENSTRUAL CYCLE

There are three phases to the menstrual cycle: menstruation, the follicular phase and the luteal phase. Ovulation divides the follicular and luteal phases of the menstrual cycle.

MENSTRUATION

This is the part of the cycle commonly referred to as the 'period'. At this point in the cycle the unfertilized egg has been released and the thickened uterine lining (endometrium) is being shed along with the unfertilized egg.

Menstruation is the beginning of the menstrual cycle and takes up about the first week or one to seven days of the cycle. Everyone's cycles vary, so bleeding can occur for anywhere from one to seven days which is considered average.

Remember no one's cycle is the same so bleeding time and full cycle time can change as your body changes or as your health and stress levels change. Some things that can happen during menstruation is abdominal cramping and back pain as well as bloating, breast tenderness and fatigue from lack of iron because of blood loss. Exercising and eating well can help lessen these.

FOLLICULAR PHASE

This phase is also called the proliferative phase because estrogen causes the uterine lining to grow, or proliferate. In this phase the uterine wall becomes thicker. Follicle-stimulating hormone (FSH) causes ovarian follicles to be stimulated and an egg to start to mature.

Once the egg has reached its mature state it is released from the ovary into the fallopian tube. This portion of the cycle takes place directly after menstruation and lasts from when bleeding ends to about the 15th day of the cycle or when ovulation finishes.

When the mature egg is released this is called ovulation which takes place at about 14 days into the cycle separating the Follicular and Luteal phase. This is the most fertile time of the month for a person to get pregnant.

Sperm can fertilize the ready egg in the fallopian tube during a 6 to 12 hour period. Fertilization happens when a sperm enters the egg and the embryo starts to form. The egg then travels through the fallopian tube to the uterus.

LUTEAL PHASE

This phase is also called the secretory phase. During this phase the ovary produces progesterone which is released to enrich the uterine lining. Therefore, the uterine lining will be a tissue rich with nutrients and blood vessels in case the egg becomes fertilized.

Towards the end of the phase hormone levels (estrogen and progesterone) drop if the egg has not been fertilized. This causes the thickened lining to separate from the wall of the uterus. This lining is then shed in menstruation. The Luteal Phase is the last phase of the cycle, and ends when menstruation begins. It lasts from the end of ovulation (day 15 or so) to the end of the cycle, or about 13 to 15 days.

DID YOU KNOW?

- Bodies with internal reproductive systems are able to have children from the time they begin to release eggs (approximately between ages of 11-14; first menstruation) to the onset of menopause (around 52 years).
- People with internal reproductive systems can conceive only during the three days (approximately) surrounding ovulation each month (2 days before and on the day of ovulation).
- The egg can only be fertilized by semen in a time period of 6-12 hours.
- A person with an internal reproductive system can become pregnant without being sexually aroused and reaching orgasm.
- At birth, the internal reproductive system has approximately 300,000-400,000 egg cells in the ovaries. Of this amount, only 300-500 will be released during the reproductive years of a person's life.

BIRTH CONTROL BASICS

Birth control options fall within the following categories:

HORMONAL METHODS:

Make the body think that the ovaries are producing hormones while they are, in fact, resting and not producing eggs. Most hormonal methods stop ovulation.

BARRIER METHODS:

Prevent the sperm and the egg from meeting

CHEMICAL METHODS (SPERMICIDES):

Destroy sperm upon contact

SURGICAL METHODS:

Interrupt the transportation route of eggs or sperm

EMERGENCY CONTRACEPTION:

Delays egg release

COST AND AVAILABILITY TO UNIVERSITY OF GUELPH STUDENTS

All undergraduate students and full-time graduate students automatically pay for the Student Health Plan with their UofG tuition every year. This covers the majority of contraceptives, and many of these are available on campus in Student Health Services at Student Wellness in the J. T. Powell Building.

Most require a prescription from a doctor, which you can get by making an appointment with one of the doctors at Student Health Services.

Emergency Contraception can usually be picked-up without an appointment with a physician. Simply register for the nurses' line when you come by Student Health Services.



BIRTH CONTROL OPTIONS FOR U OF G STUDENTS

The following are available at Student Health Services with a prescription and are covered by your U of G Student Health Plan:

ORAL CONTRACEPTION (AKA THE PILL)

- *Alesse, Demulen, Linessa, Marvelon, Minovral, Synphasic, Tricyclen Lo, Triquilar, Yasmin, and Yaz*

THE PATCH

- *Evra*

THE RING

- *NuvaRing*

IUD/IUS

- *Mirena*
- *Jaydess*
- *Kyleena*

CONDOMS (EXTERNAL)

External condoms are available for free at Student Health Services, as well as at the Wellness Education and Promotion Centre in the J.T. Powell Building.

EMERGENCY CONTRACEPTION

Emergency contraception does not require a doctor's prescription. Visit the nursing station at Student Health Services for access to emergency hormonal contraception. Emergency contraception is generally \$25-40 at the pharmacy.

Visit mystudentplan.ca or book an appointment with a doctor at Student Health Services or more information. 519-824-4120 X52131



PLAN B: EMERGENCY ORAL CONTRACEPTIVE

WHAT IS IT?

The Emergency Contraceptive Pill or morning after pill is an emergency method of birth control. This method involves taking a high dose of hormone pills within a 72 hour period following unprotected sex, a broken condom, or missed or late birth control pills.

- This method will not stop pregnancy from an earlier sexual contact.
- This method will not cause an abortion
- This method will not protect from pregnancy during the remainder of the month.
- Other forms of contraception such as condoms are recommended until the onset of the next menstrual period

HOW DOES IT WORK?

The high dose of hormone pills prevents ovulation and also disrupts the lining of the uterus to prevent a fertilized egg from implanting.

WHAT ARE COMMON SIDE EFFECTS OF THE PILL?

- Nausea
- Abdominal pain
- Fatigue
- Headache
- Vomiting
- Irregular menstrual bleeding

These side effects usually disappear within one day after treatment.





CAMPUS RESOURCES:

- Counselling Services: 519-824-4120 X53244
- Student Health Services: 519-824-4120 X52131
- Wellness Education Centre & Student Support Network: 519-824-4120 X53327

COMMUNITY RESOURCES:

- Distress Centre: 519-821-3760
- Youth Line: 519-821-5469
- SHORE Centre (formerly known as Planned Parenthood Waterloo-Wellington): 519-743-9360

NATIONAL RESOURCES:

- Centre for Addiction and Mental Health (CMHA) (Waterloo-Wellington): 519-884-9757
- Good2Talk: 1-866-925-5454
- Here 24/7: 1-844-437-3247