

# Your Body and Menstruation

Health Manual

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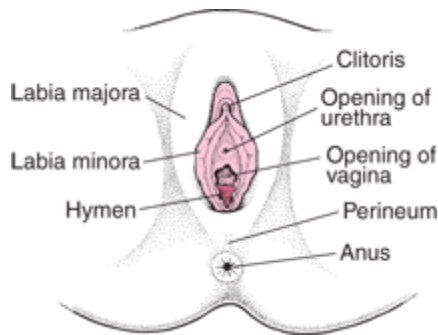
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## Woman's Reproductive System

A woman has sexual parts both outside (external) and inside (internal) her body. They are called the reproductive organs or genitals. The external parts are what you see: your vulva and anus. The internal parts are where babies are made. Every woman's body is different and looks slightly different in size, shape, and color.<sup>1</sup>

### External Reproductive Parts<sup>2</sup>



The external reproductive parts include the following:

- » **Labia majora (Outer folds):** The fatty lips that close up when the legs are together protect the inner parts.
- » **Labia minora (Inner folds):** These flaps of skin are soft, hairless, and are sensitive to touch. During sex, the inner lips swell and turn darker.
- » **Opening of vagina:** The opening of the vagina.
- » **Hymen:** The thin piece of skin just inside the vaginal opening. A hymen may stretch or tear and bleed a little when a woman works hard, plays sports, participates in other activities, or has sex for the first time. All hymens are different. Some women do not have a hymen at all.
- » **Anus:** The opening of the intestine, where waste leaves the body.
- » **Clitoris:** Small and shaped like a flower bud, the clitoris is the part of the vulva that is most sensitive to touch. Rubbing it and the area around it can make a woman sexually excited and cause her to climax.
- » **Opening of urethra:** The outer opening of the urethra, which is a short tube that carries urine from where it is stored in the bladder to the outside of the body.<sup>3</sup>

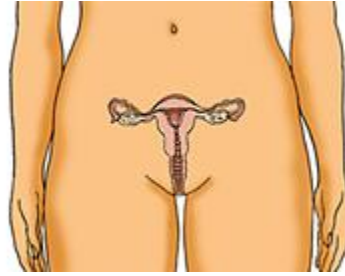
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<sup>1</sup> "Chapter 4: Understanding Our Bodies: A Woman's Reproductive System," *Where Women Have No Doctor*, Hesperian, [http://en.hesperian.org/hhg/Where\\_Women\\_Have\\_No\\_Doctor:A\\_Woman%E2%80%99s\\_Reproductive\\_System](http://en.hesperian.org/hhg/Where_Women_Have_No_Doctor:A_Woman%E2%80%99s_Reproductive_System).

<sup>2</sup> "Female External Genital Organs" The Merck Manual Home Health Handbook, [http://www.merckmanuals.com/home/womens\\_health\\_issues/biology\\_of\\_the\\_female\\_reproductive\\_system/female\\_external\\_genital\\_organs.html](http://www.merckmanuals.com/home/womens_health_issues/biology_of_the_female_reproductive_system/female_external_genital_organs.html)

<sup>3</sup> Ibid.

## Internal Genitalia



The internal reproductive parts include the following:

- » **Ovaries:** The ovaries release one egg into a woman's Fallopian tubes each month. When a man's sperm joins the egg, it can develop into a baby. A woman has two ovaries, one on each side of the womb. Each ovary is about the size of an almond or grape.
- » **Cervix:** This is the opening or "mouth" of the womb, where it opens into the vagina. Sperm can enter the womb through the small hole in the cervix. During childbirth, the cervix opens to let the baby come out.
- » **Womb (uterus):** The womb is a hollow muscle. Monthly bleeding comes from the womb. The baby grows here during pregnancy.
- » **Vagina or birth canal:** The vagina leads from the vulva to the womb. The vagina is made of a special kind of skin that stretches easily during sex and when giving birth. The vagina makes a fluid or wetness (discharge) that helps it keep itself clean and prevent infection.<sup>4</sup>

A girl is not born ready to have a baby. She is born with all of the important body parts, but they do not start working until she reaches puberty. For most of you, these parts are working properly, and you can have a baby now. The way that you know you can have a baby is because you have monthly bleeding.

A girl generally has her first monthly bleeding between the ages of 11 and 17. If a woman does not have her monthly bleeding by 17, she should see a doctor. A woman will generally stop having her monthly bleeding completely when she approaches older age (generally between age 40 and 60).

The menstrual cycle, including monthly bleeding is a part of every woman's life; it is natural and not shameful. It is the process of fertility and is part of being a woman. Through the menstrual cycle, a woman's body provides hormones that keep her healthy and help prepare her body for pregnancy.

## Hormones

Hormones are chemicals the body makes that control how and when the body grows. During the years when she can have a baby, hormones cause a woman's body to prepare for possible pregnancy each month. They also tell her ovaries when to release an egg (one egg every month). So hormones determine when a woman can get pregnant. Many *family planning methods* work to prevent pregnancy by controlling the hormones in a woman's body. Hormones also

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<sup>4</sup> Ibid.

cause changes during pregnancy and breast-feeding. For example, hormones keep a pregnant woman from having her monthly bleeding, and after childbirth they also tell the breasts to make milk.

When a woman is near the end of her reproductive years, her body slowly stops producing estrogen and progesterone. Her ovaries stop releasing eggs, her body stops preparing for a pregnancy, and her monthly bleeding stops forever. This change is called menopause.

The amount and kind of hormones produced by a woman's body can also affect her moods, sexual feelings, weight, body temperature, hunger, and bone strength.<sup>5</sup>

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<sup>5</sup> Ibid.

# Menstruation

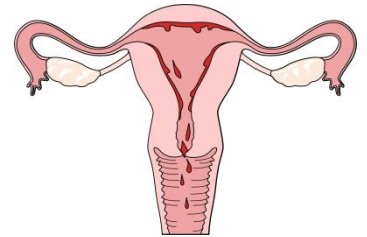
About once each month during her reproductive years, a woman has a few days when a bloody fluid leaves her womb and passes through her vagina and out of her body. This is called “monthly bleeding,” a “monthly period” or “menstruation.” This monthly bleeding happens when a woman is not pregnant. Our menstruation cycle is what prepares our bodies for pregnancy.

## The Steps of a Woman’s Monthly Cycle

Every month, a woman’s body prepares for the possibility of having a baby. This is called our menstrual cycle. The menstrual cycle is controlled by chemicals called hormones produced by a woman’s body. The entire cycle lasts from the beginning of one period (monthly bleeding) to the day before your next period (bleeding) starts. Most women bleed every 28 days, but some bleed as often as every 20 days or as seldom as every 45 days. The cycle is different for each woman.

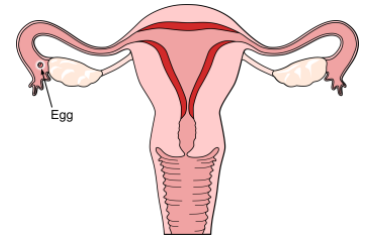
### PHASE 1

The first day of your monthly bleeding is the first day of a new cycle. Your monthly bleeding will normally last around five days but can be as short as two days or as long as seven. After menstruation, a woman’s uterus begins to get ready for pregnancy in case a sperm fertilizes the egg. About the same time, her hormones start preparing an egg to be released from the ovary.



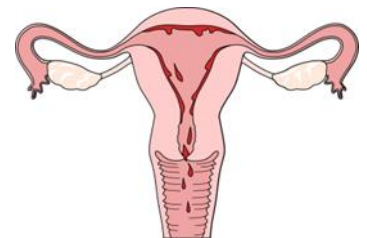
### PHASE 2

At about the middle of the cycle, ovulation occurs (an egg is released from the ovary). Over the next few days, the egg will travel down the Fallopian tube. If the egg is fertilized, it will attach to the lining of the uterus where it slowly develops into a baby. It is during this second phase of a woman’s cycle—usually days 8 through 19—when a woman is most likely to become pregnant. During this time of fertility, a man’s sperm can fertilize the woman’s egg *if they have sex without condoms or other contraceptive methods*.



### PHASE 3

When a woman’s egg is *not* fertilized by a man’s sperm, she does not get pregnant and will have her monthly bleeding to remove the egg from her body. This is the beginning of a new cycle.



### MONTHLY BLEEDING AND FERTILITY

A woman is usually **not** fertile (does not get pregnant) on the first 7 days of her cycle and the last 10 to 14 days. A woman has a good chance of becoming pregnant if she has sex on the fertile days in the middle of her cycle, days 8 to 19 of her cycle.

## **MONTHLY BLEEDING AFTER PREGNANCY**

When you are pregnant, your monthly bleeding stops because you have a fertilized egg growing in your uterus. Your body no longer needs to produce eggs to be fertilized or remove them by bleeding.

After you give birth, your monthly bleeding will not start right away. During that time, you are not fertile and are unlikely to become pregnant, especially if you are breast-feeding and giving your baby no other liquid or food.

## **Premenstrual Pain and Pain with Monthly Bleeding**

### **PREMENSTRUAL SYNDROME**

Some women and girls feel uncomfortable a few days before their monthly bleeding begins. They may have one or more of a group of signs that are known as premenstrual syndrome (PMS). Symptoms vary in type and severity from woman to woman. They may include any of the following:

- » Acne
- » Swollen or tender breasts
- » Trouble with concentration or memory
- » Change in appetite
- » Feeling tired
- » Upset Stomach
- » Trouble sleeping
- » Constipation
- » Joint or muscle pain
- » Headache or backache
- » Diarrhea
- » Bloating

Many women have at least one of these signs each month, and some women may have all of them. A woman may have different signs from one month to the next. For many women, the days before their monthly bleeding starts are a time of unrest. But some women say they feel more creative and better able to get things done.

A woman can do a number of things to help reduce her PMS symptoms. Every woman's body is different, and so each woman must find what helps her most.

### **PAIN WITH MONTHLY BLEEDING**

During monthly bleeding the womb squeezes in order to push out the lining. The squeezing can cause pain in the lower belly or lower back, sometimes called cramps. The pain may begin before bleeding starts or just after it starts.

### **METHODS FOR REDUCING PAIN**

Common ways of reducing the pain and discomfort experienced before and during your monthly bleeding are the following:

Bloating may be relieved by:

- » Eating less salt
- » Avoiding caffeine
- » Drinking clear fluids, such as water

Pain from cramps and tiredness may be reduced by:

- » Eating whole grains, peanuts, fresh fish, meat and milk or other foods that are high in protein

- » Exercising, such as walking, to help reduce cramping
- » Rubbing your lower belly to help tight, cramping muscles relax
- » Drinking tea made from raspberry leaves, ginger, or chamomile
- » Using a hot compress or hot water bottle
- » Doing your daily work as normal
- » Taking a mild pain medicine if needed

### Severe Pain during Menstruation<sup>6</sup>

Dysmenorrhea, also known as painful menstruation, is one of the most common health care problems in women during their reproductive years. Although some pain during menstruation is normal, excessive pain is not. Approximately 30 to 50 percent of all women suffer from painful menstruation.

There are a number of ways that a woman can reduce her pain during menstruation:

- » Apply a warm cloth to your lower belly area, just below the belly button.
- » Lightly massage your lower belly area in a circular motion.
- » Eat light but frequent meals.
- » Follow a diet rich in complex carbohydrates, such as whole grains, fruits, and vegetables, but low in salt, sugar, alcohol, and caffeine.
- » Keep your legs raised while lying down, or lie on your side with your knees bent.
- » Try vitamin B6, calcium, and magnesium supplements, especially if your pain is from PMS.
- » Take warm showers or baths.
- » Walk or exercise regularly, including pelvic rocking exercises.
- » In some situations self-care is not sufficient to reduce the pain. In this case, it is important to talk to a doctor to take medications. A doctor may prescribe birth control pills, anti-inflammatory medicines, or pain relievers.

### Irregularity during Menstruation

Sometimes the ovary does not release an egg. When this happens, the body makes less progesterone, which can cause changes in how often and how much a woman bleeds. Girls whose monthly bleeding has just begun or women who have recently stopped breast-feeding may only bleed every few months, or have very little bleeding, or too much bleeding. Their cycles usually become more regular with time.

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<sup>6</sup> "Dysmenorrhoea," Health 24, [www.health24.com/medical/Head2Toe/777-778-783,11943.asp](http://www.health24.com/medical/Head2Toe/777-778-783,11943.asp).

## Feminine Hygiene during Menstruation

Staying clean and protecting your body from infection is very important during menstruation. There are a number of things that a woman should do during menstruation.

During menstruation it is important to wash the body, including the genital area daily with warm, clean water and mild soap. Always pat the area dry after cleaning it.

To absorb the monthly bleeding, a woman might use a piece of cloth or a sanitary pad. These two options are discussed below.

- » **A piece of cloth:** It can be very dangerous to use scraps of cloth, such as factory waste, that are not clean to absorb menstrual blood. Cloth carries bacteria that may cause an infection. Also, sometimes cloth is treated with chemicals that can irritate your skin and cause a rash. If you use cloth for bleeding, it is important to make sure the cloth has been washed before you use it and to change the cloth at least four or five times a day. Always wash your hands before and after handling the cloth. If you reuse the cloth, be sure to wash and dry it thoroughly. It is important to dry the cloth in sunlight to kill any bacteria.



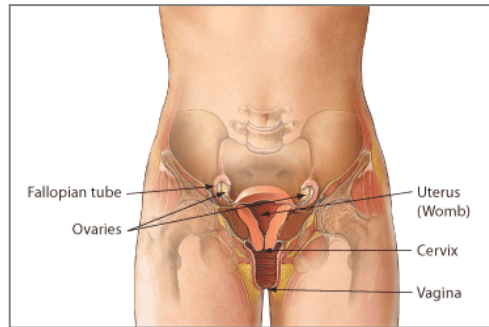
- » **Sanitary pads:** Use sanitary napkins regularly and change them at least four or five times a day. Always wash your hands before and after handling a sanitary napkin. Make sure you dispose of the napkin in a trash container. If you are using a reusable sanitary pad, be sure to wash and dry the pad thoroughly in sunlight.





# Reproductive Tract Infections

Reproductive tract infections (RTI) are infections of the genital tract that affect both women and men. In women, overgrowth of endogenous microorganisms normally found in the vagina may cause RTIs. Most of the serious health problems caused RTIs are preventable.<sup>7</sup>



## Pelvic Inflammatory Disease<sup>8</sup>

Pelvic inflammatory disease (PID) refers to infection of the uterus (womb), Fallopian tubes (tubes that carry eggs from the ovaries to the uterus), and other reproductive organs that causes symptoms such as lower abdominal pain. PID can also occur if a person has certain STDs, especially chlamydia and gonorrhea. PID can damage the Fallopian tubes and tissues in and near the uterus and ovaries. It can have serious consequences, including infertility, ectopic pregnancy (a pregnancy in the Fallopian tube or elsewhere outside of the womb), abscess formation, and chronic pelvic pain.

Sexually active women in their childbearing years are most at risk of suffering from PID. Women younger than 25 are more likely to develop PID than those older than 25, partly because the cervix of teenage girls and young women is not fully matured, increasing their susceptibility to the STDs that are linked to PID.

The more sex partners a woman has, the greater her risk of developing PID. Also, a woman whose partner has more than one sex partner is at greater risk of developing PID.

### SYMPTOMS

Symptoms of PID vary from mild to severe. When PID is caused by chlamydial infection, a woman may be more likely to experience only mild symptoms even when serious damage is being done to her reproductive organs. Chlamydia can also cause Fallopian tube infection without any symptoms. Because of its vague symptoms, PID often goes unrecognized by women and their health care providers. Some common symptoms include:

- » Lower abdominal pain
- » Fever
- » Unusual vaginal discharge that may have a foul odor
- » Painful intercourse

<sup>7</sup> *Reproductive Tract Infections: An introductory Overview*, Population Council, <http://www.popcouncil.org/pdfs/RTIFacsheetsRev.pdf>

<sup>8</sup> "Pelvic Inflammatory Disease," CDC, [www.cdc.gov/std/pid/stdfact-pid.htm](http://www.cdc.gov/std/pid/stdfact-pid.htm).

- » Painful urination
- » Irregular menstrual bleeding
- » Pain in the upper right abdomen (rare)

### **TREATMENT AND PREVENTION**

PID can be cured with several types of antibiotics. The following help to prevent PID:

- » Given the link between PID and STD's, preventing STDs or getting early treatment for STDs reduces the risk of PID.
- » Use latex male condoms during intercourse.
- » Have sex with one partner who doesn't have any STDs.
- » Do not douche.

### Urinary Tract and Kidney Infections

A urinary tract infection (UTI) is a bacterial infection of the bladder and occasionally of the higher parts of the urinary tract. It is caused by a variety of bacteria, but most commonly, the organism responsible is *Escherichia coli* (*E. coli*). *E. coli* is present in the large intestine of all healthy men and women. Some women are more susceptible to a UTI than others, and the reason is not always apparent.<sup>9</sup>

Certain factors increase the chance of infection. The female urethra (urinary opening) lies just under the clitoris and is continually rubbed during sexual intercourse. If intercourse is particularly vigorous or prolonged or if the vagina is not well lubricated during intercourse, then a woman is more likely to develop a UTI.

### **SYMPTOMS**

If someone has a UTI, she may experience some or all of the following symptoms:

- She may feel the need to urinate frequently.
- Blood may be present in the urine.
- Generally, she may feel a painful burning sensation when urinating, discomfort or pressure in the lower abdomen, or pain in the pelvic area or back.
- The urine often has a strong smell, looks cloudy, or contains blood.
- Occasionally, sufferers develop a fever.

If a UTI goes untreated, it can develop into a kidney infection. Kidney infections tend to affect the whole body and be more severe. Symptoms of a kidney infection include the following:

- Symptoms of lower UTIs that persist longer than a week
- An increased need to urinate at night
- Chills and persistent fever (typically lasting more than two days)

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<sup>9</sup> "Urinary Tract Infection," Smith College Student Information, [www.smith.edu/health/factorinarytract.html](http://www.smith.edu/health/factorinarytract.html).

- Pain that runs along the back at about waist level
- Vomiting and nausea<sup>10</sup>

### TREATMENT

In order to cure a UTI or a kidney infection, it is important to take antibiotics. The number of days the antibiotics are prescribed depends of the length and severity of symptoms. It is important to take the medication exactly as prescribed and for the full number of days prescribed even after you start to feel better. In some cases a medication can be prescribed to make urinating more comfortable until the antibiotic begins to work.

### PREVENTION

There are a number of ways to reduce the possibility of developing a UTI:

- » Urinate immediately after sexual intercourse.
- » Always urinate when there is an urge to do so.
- » Do not wait more than three or four hours between urination.
- » Wipe from the front to back after urinating or after each bowel movement.
- » Stay hydrated by drinking water.
- » Do not follow anal intercourse with vaginal intercourse.
- » If necessary, use a water-soluble lubricant during intercourse.
- » Wear clean cotton underwear.
- » Avoid feminine hygiene sprays.
- » Build up resistance to infection by eating healthy foods and getting plenty of rest.

### Yeast Infection

A vaginal yeast infection is irritation of the vagina and the area around it called the vulva. Yeast infections are caused by overgrowth of the fungus *Candida albicans*. Small amounts of yeast are always in the vagina; but when too much yeast grows, infection becomes possible. Yeast infections are very common. About 75 percent of women have one during their lives, and almost half of women have two or more vaginal yeast infections.<sup>11</sup> There are a number of factors that raise the risk of developing a yeast infection, such as:

- » Stress
- » Lack of sleep
- » Illness
- » Poor eating habits, including eating extreme amounts of sugary foods
- » Pregnancy
- » Menstruation
- » Diseases such as poorly controlled diabetes and HIV/AIDS

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<sup>10</sup> National Kidney and Urologic Diseases Clearinghouse, <http://kidney.niddk.nih.gov/>

<sup>11</sup>“Yeast Infection,” The National Women’s Health Information Center, US Department of Health and Human Services, <http://womenshealth.gov/publications/our-publications/fact-sheet/sexually-transmitted-infections.cfm>

## **SYMPTOMS**

The most common symptom of a yeast infection is extreme itchiness in and around the vagina. Other symptoms include:

- » Burning, redness, and swelling of the vagina and the vulva
- » Pain when urinating
- » Pain during sex
- » Soreness
- » A thick, white vaginal discharge
- » A rash on the vagina

## **TREATMENT**

Yeast infections are easily cured through antifungal medicines. One home solution is to mix three tablespoons of vinegar with one liter (quart) of boiled and cooled water. Soak a piece of clean cotton in the mixture, and insert it into the vagina every night for three nights. Remove the cotton each morning.

## **PREVENTION**

Yeast infections can be prevented by wearing loose clothing and underclothing made of cotton, rather than polyester or nylon. These let air flow around the genitals. Other ways of preventing yeast infections include:

- » Avoid douches.
- » Change sanitary napkins often during your period.
- » Change out of wet swimsuits and exercise clothes as soon as possible.