

PATIENT EDUCATION



The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

Contraception • EP185

Combined Hormonal Birth Control

Pill, Patch, and Ring

Birth control pills, the birth control patch, and the vaginal birth control ring are combined hormonal birth control methods. They contain two **hormones: estrogen and progestin**. For most women, they are safe and effective forms of birth control.

This pamphlet explains

- how combined hormonal birth control methods work
- effectiveness
- benefits and risks
- how to start using each method
- possible side effects of each method

How Combined Hormonal Methods Work

Combined hormonal birth control methods release estrogen and progestin into the whole body. These hormones prevent pregnancy mainly by stopping **ovulation** (the release of an egg from one of the **ovaries**). They also cause other changes in the body that help prevent pregnancy. The mucus in the **cervix** thickens, making it hard for sperm to enter the **uterus**. The lining of the uterus also thins.

Effectiveness

Combined hormonal methods are less effective in preventing pregnancy than the intrauterine device and the implant and more effective than barrier methods, such as condoms, the diaphragm, the cervical

cap, and the sponge. With typical use—meaning that the method may not always be used consistently or correctly—9 women out of 100 (9%) will become pregnant during the first year of using these methods. With perfect use—meaning that the method is used consistently and correctly each time—fewer than 1 woman out of 100 will become pregnant during the first year.

These methods do not protect against **sexually transmitted infections (STIs)**, including **human immunodeficiency virus (HIV)**. If you use one of these methods and are at risk of getting an STI, you also should use a male or female condom to provide STI protection.

Certain drugs may decrease the effectiveness of combined hormonal methods. These include rifampin, a drug used to treat certain infections; some

drugs used to treat seizures; and some drugs used to treat HIV. If you need to take these medications on an ongoing basis, you may need to choose another form of birth control.

Benefits and Risks

All combined hormonal methods have similar benefits and risks (see box). They are not recommended for women with certain medical conditions, such as uncontrolled high blood pressure; a history of stroke, heart attack, or blood clots (which is called **deep vein thrombosis**, or **DVT**); multiple risk factors for **cardiovascular disease**; or a history of migraine headaches with **aura**. If you have one of these conditions, using a combined hormonal method for birth control may increase your risk of serious complications. For some of these conditions, it may be better to use progestin-only forms of birth control. For others, nonhormonal birth control may be a safer option.

Benefits and Risks of Combined Hormonal Birth Control Methods

Benefits

Combined hormonal methods have several benefits in addition to protecting against pregnancy:

- They may make your period more regular, lighter, and shorter.
- They help reduce menstrual cramps.
- They decrease the risk of cancer of the uterus, ovary, and colon.
- They may improve acne and reduce unwanted hair growth.
- Combination pills can be used to treat certain disorders that cause heavy bleeding and menstrual pain, such as **fibroids** and **endometriosis**.
- Used continuously, they can reduce the frequency of migraines associated with menstruation (although they should not be used if you have migraines with aura). They also can be used to treat heavy bleeding and pain by stopping the menstrual period.

Risks

Combined hormonal birth control methods are safe for most women. However, they are associated with a small increased risk of DVT, heart attack, and stroke. The risk is higher in some women, including women older than 35 years who smoke more than 15 cigarettes a day or women who have multiple risk factors for cardiovascular disease, such as high cholesterol, high blood pressure, and **diabetes mellitus**.

Because the risk of DVT is higher in the weeks after childbirth, you will need to wait for a few weeks before starting a combined hormonal method after having a baby. You should not use combined hormonal methods during the first 3 weeks after delivery. If you are breastfeeding, estrogen may affect your milk supply. It is recommended that you wait until the fifth week after delivery to start using these methods, when breastfeeding has been well established. Whether you are breastfeeding or formula feeding, if you have additional risk factors for DVT, you should wait to use combined hormonal methods until after the first 4–6 weeks following delivery.

The risk of DVT also may be slightly higher in women taking pills containing a progestin called drospirenone than women who take combination pills containing other types of progestin. Some research suggests a slight increase in the risk of DVT in women using the patch compared with women using combination pills. However, the risk of DVT is higher during pregnancy and in the weeks after childbirth than when taking drospirenone-containing pills or using the patch.

Remember—combined hormonal methods are safe for most women. Just be sure to discuss your individual risks with your health care professional before choosing one of these methods.

Starting a Combined Hormonal Method

You can start a combined hormonal birth control method at any time during your menstrual cycle as long as you and your health care professional are reasonably sure you are not pregnant and you follow these directions:

- If it has been more than 5 days since your period started when you begin using a combined hormonal method, you need to avoid sexual intercourse or use an additional birth control method for the next 7 days. If it has been less than 5 days since your period started, you do not have to avoid sexual intercourse and no additional birth control is needed.
- If you are switching from another form of birth control, simply stop using the method at the same time you start using the combined hormonal method. If it has been more than 5 days since your period started, use an additional birth control method or avoid sexual intercourse for the next 7 days. If you have an IUD, you can 1) wait until you have been taking the pill for 7 days to have it removed, 2) have it removed at the same time you start the pills and use another form of birth control or avoid sexual intercourse for the first 7 days, or 3) use **emergency contraception** at the time of IUD removal.

Combined Hormonal Birth Control Pills

Most women who take the birth control pill take a combined hormonal pill. There is a birth control pill that contains only progestin, but it works differently than combined hormonal pills.

In the United States, combined hormonal pills must be prescribed by a health care professional. There are many different brands of combined hormonal pills. They differ in the dosages and in the forms of estrogen and progestin they contain. If one brand of pill causes side effects, another brand can be tried.

Keep in mind that while you are taking a combined hormonal method, your menstrual period will be different. Combined hormonal methods do not cause the lining of the uterus to thicken. The bleeding that occurs during your period usually is lighter and lasts for a shorter time.

Continuous-dose pills are combined hormonal pills that are taken for an extended period. These pills reduce the number of menstrual periods a woman has or stop them altogether.

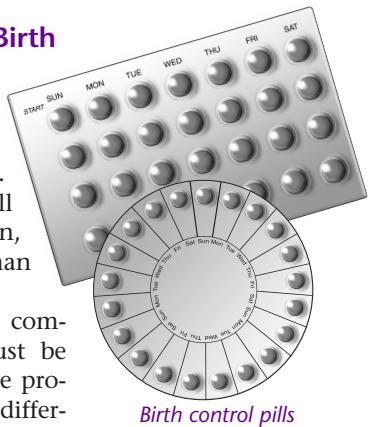
How to Use It

How you take the pill depends on the type of pill you are using:

- 21-day pills—Take one pill at the same time each day for 21 days. Wait 7 days before starting a new pack. During the week you are not taking the pill, you will have your period.
- 28-day pills—Take one pill at the same time each day for 28 days. Depending on the brand, the first 21 pills or the first 24 pills contain estrogen and progestin. The remaining pills may be estrogen-only pills; pills that contain a dietary supplement, such as iron, but no hormones; or inactive (containing no hormones or supplements) pills. During the days you are taking the hormone-free pills, you will have your period.
- 90-day pills—Take one pill at the same time each day for 84 days. Depending on the brand, the last seven pills either contain no hormones or contain estrogen only. With both brands, you will have your period on the last 7 days every 3 months.
- 365-day pills—Take one pill at the same time each day for a year. In time, your bleeding may become lighter and may even stop.

Important Information

Pills need to be taken correctly to be most effective. You should take a pill every 24 hours. It may be helpful



to link taking your pill with something you do every day, such as brushing your teeth. Smart phone apps with alarms that remind you to take your pills are available. Do not skip pills for any reason—even if you bleed between periods or feel sick.

Read the directions that come with your pills carefully so that you know what to do if you are late taking a pill or if it has been more than 24 hours since you have taken a pill. It differs with each type and the number of pills missed. You also may want to call your health care professional. With some types of pills and depending on how many pills are missed, you may need to use a backup method of birth control or consider emergency contraception.

Your pills may not work well if you have vomiting or diarrhea. Follow the directions that come with your pills. Depending on how long the diarrhea or vomiting continues and the type of pills you are taking, you may need to use a backup method of birth control or consider emergency contraception.

Possible Side Effects

Most side effects are minor and often go away after a few months of use. Possible side effects include the following:

- Headache
- Nausea
- Breast tenderness
- **Breakthrough bleeding**

Breakthrough bleeding usually is a temporary side effect as the body adjusts to a change in hormone levels. It may last longer than a few months with continuous-dose pills.

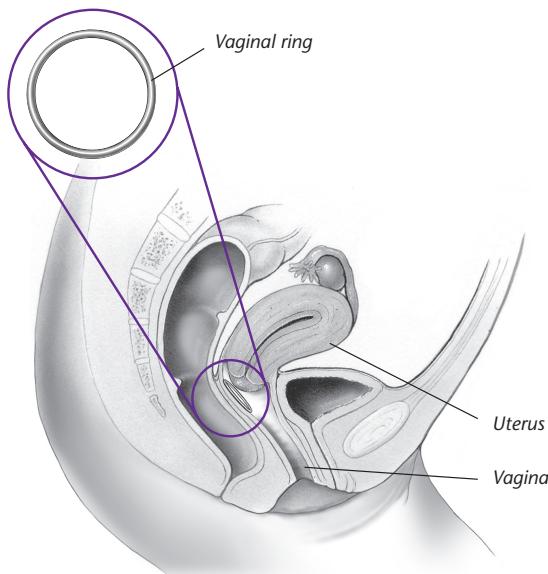
Some women are concerned about weight gain while taking combined hormonal birth control pills. Researchers have found no scientific link between taking these pills and weight gain.

Vaginal Ring

The vaginal ring is a flexible, plastic ring that is placed in the upper vagina. It releases estrogen and progestin that are absorbed through the vaginal tissues into the body. A health care professional must prescribe the vaginal ring, but you insert it yourself.

How to Use It

You fold the ring and insert it into the vagina. It stays there for 21 days. You then remove it and wait 7 days before inserting a new ring. During the week the ring is not used, you will have your period. To use the ring as a continuous-dose form of birth control, insert a new ring every 21 days with no ring-free week in between. In time, your period may become lighter and even stop. If you forget to insert the vaginal ring on time or if it comes out, follow the directions that came with your ring.



Possible Side Effects

Most side effects are minor and often go away after a few months of use. Possible side effects include the following:

- Headache
- Nausea
- Breast tenderness
- Vaginal discharge
- Vaginal irritation
- Breakthrough bleeding

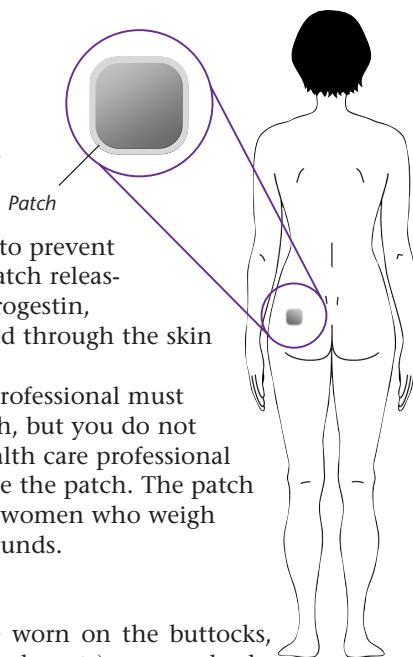
Skin Patch

The contraceptive skin patch is a small (1.75 square inch) adhesive patch that is worn on the skin to prevent pregnancy. The patch releases estrogen and progestin, which are absorbed through the skin into the body.

A health care professional must prescribe the patch, but you do not need to visit a health care professional to apply or remove the patch. The patch is less effective in women who weigh more than 198 pounds.

How to Use It

The patch can be worn on the buttocks, chest (except the breasts), upper back or arm, or abdomen. You wear a patch for a



week at a time for a total of 3 weeks in a row. During the fourth week, a patch is not worn, and you will have your period. After week 4, a new patch is applied and the cycle is repeated. You apply the patch on the same day of the week even if you still are bleeding. To use the patch as a continuous-dose form of birth control, apply a new patch every week on the same day without skipping a week. In time, your period will become lighter or even stop.

The patch is made to be worn for a week at a time. It should not come off during regular activities, such as bathing, exercising, or swimming. If you forget to put on a patch or if the patch comes off, follow the directions that came with your patch.

Possible Side Effects

Most side effects are minor and often go away after a few months of use. Possible side effects include the following:

- Skin irritation
- Breast tenderness
- Headache
- Breakthrough bleeding

Finally...

For most women, combined hormonal birth control methods are safe and effective ways to prevent pregnancy. They are easy to use, convenient, and reversible. Talk with your health care professional if you are interested in any of these methods.

Glossary

Aura: A sensation or feeling, such as flashing lights, a particular smell, dizziness, or seeing spots, experienced just before the onset of certain disorders like migraine attacks or epileptic seizures.

Breakthrough Bleeding: Vaginal bleeding at a time other than the menstrual period.

Cardiovascular Disease: Disease of the heart and blood vessels.

Cervix: The lower, narrow end of the uterus at the top of the vagina.

Deep Vein Thrombosis (DVT): A condition in which a blood clot forms in veins in the leg or other areas of the body.

Diabetes Mellitus: A condition in which the levels of sugar in the blood are too high.

Emergency Contraception: Methods that are used to prevent pregnancy after a woman has had sex without birth control, after the method she used has failed, or if a woman is raped.

Endometriosis: A condition in which tissue that lines the uterus is found outside of the uterus, usually on the ovaries, fallopian tubes, and other pelvic structures.

Estrogen: A female hormone produced in the ovaries.

Fibroids: Benign growths that form in the muscle of the uterus.

Hormones: Substances made in the body by cells or organs that control the function of cells or organs. An example is estrogen, which controls the function of female reproductive organs.

Human Immunodeficiency Virus (HIV): A virus that attacks certain cells of the body's immune system and causes acquired immunodeficiency syndrome (AIDS).

Ovaries: The paired organs in the female reproductive system that contain the eggs released at ovulation and produce hormones.

Ovulation: The release of an egg from one of the ovaries.

Progestin: A synthetic form of progesterone that is similar to the hormone produced naturally by the body.

Sexually Transmitted Infections (STIs): Infections that are spread by sexual contact, including chlamydia, gonorrhea, human papillomavirus (HPV), herpes, syphilis, and human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

Uterus: A muscular organ located in the female pelvis that contains and nourishes the developing fetus during pregnancy.

This Patient Education Pamphlet was developed by the American College of Obstetricians and Gynecologists. Designed as an aid to patients, it sets forth current information and opinions on subjects related to women's health. The average readability level of the series, based on the Fry formula, is grade 6–8. The Suitability Assessment of Materials (SAM) instrument rates the pamphlets as "superior." To ensure the information is current and accurate, the pamphlets are reviewed every 18 months. The information in this pamphlet does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

Copyright February 2018 by the American College of Obstetricians and Gynecologists. All rights reserved.

ISSN 1074-8601

To order print copies of Patient Education Pamphlets, please call 800-762-2264 or order online at sales.acog.org.

American College of Obstetricians and Gynecologists
409 12th Street, SW
PO Box 96920
Washington, DC 20090-6920