

Oral Contraceptive Pills (OCPs)

Brown Health Services Patient Education Series

What's in oral contraceptive pills?

The term "oral contraceptive" refers to two types of pills. The most common is a combination of estrogen and progestin: "combination oral contraceptives" (COC's). The second type of oral contraceptive, the Progestin-Only Pill, which is not quite as well known, is discussed in a separate handout.

Some important definitions:

"Active pills" refer to the pills in the package that contain hormones. "Inactive" or "placebo" pills are pills in the pill package that do not contain any hormone. Their presence in the pack is to help a user stay on schedule taking the pills. Inactive pills are always a different color than the active pills. During the days that the inactive pills are taken, you will likely have a period. Your contraceptive protection CONTINUES during the inactive pills.

How do they work?

They cause thickening of the cervical mucus which prevents sperm from entering the uterus, they prevent ovulation, and they thin the lining of the uterus (endometrium).

How effective are they?

COC's are about 98-99% effective if taken every day as directed. The effectiveness of the pill as a contraceptive drops when pills are taken late or missed.

Common Side Effects

- *Nausea*: Some users may experience mild nausea when starting COC's. Taking the pill at night or with food may help.
- *Breast tenderness or enlargement*: This may occur in about 30% of users. A supportive

bra may be very helpful. Generally this improves as your body adjusts over the first few months.

- *Unscheduled spotting or breakthrough bleeding*: Common the first 3 months of starting COC's. By the 3rd pack of pills, 90% of users are no longer experiencing spotting. Some users may notice some mild menstrual cramps with the spotting. This should resolve too.

NOTE: Contraceptive effectiveness is present even with spotting, as long as pills haven't been missed.

- *Missed periods or amenorrhea*: Sometimes a user who has taken all of their pills correctly will not get their period. This can happen for a variety of reasons (stress, illness, travel, rarely thyroid or other hormonal issues). A urine pregnancy test is advised before starting a new pack of pills. If you have missed pills and don't get your period, or your period is very scant, it is important to obtain a pregnancy test.
- *Mood changes*: While multiple studies have not demonstrated an increase in clinical depression from COC's, some users do report changes in their emotional status such as sadness or irritability. These should resolve within the first 3 months of taking the pill. If you feel your mood is changing while on COC's, contact your provider.
- *Decrease in sex drive*: Our sex drives are affected by almost every aspect of our lives. Fatigue, stress, emotions, and alcohol can strongly impact how interested we are in sex. The hormones in COC's may cause a decrease in sex drive in some people. If you

are noticing this persistently, please be in touch. A change to another pill or another method of contraception may be considered.

- *Changes in vaginal discharge:* A slight increase in the amount of discharge may occur in some users. Others may notice less lubrication with intercourse. Neither change is harmful. Extra lubrication can be used as needed to make sex more comfortable.
- *Contact lens wearer:* Rarely, users who wear contacts may notice some visual changes or change in lens tolerance. Consultation with your ophthalmologist can help with this.

Rare but Serious Side Effect:

- *Blood clot:* most common in the legs, abdomen, lungs, heart, eye, or brain. In the brain, a clot can cause a stroke. The risk of these events is very low in healthy young people. Some people may have an increased risk, like those with close relatives who have had a blood clot, stroke, or other clotting problems at a young age. People with migraine headaches with aura (a temporary loss of vision, or other visual or neurological symptoms prior to onset of headache) may have an increased risk for stroke when taking COC's. There is also increased risk for stroke in users who are over 35 years old, users who smoke or vape, and users who have high blood pressure, heart disease, or diabetes.

The incidence of a blood clot per 100,000 user years*

Young people—general population	4-5
COC with less than 50 mcg estrogen	12-20
Pregnant people	48-60

From Contraceptive Technology, 2007 ed.

*user year = one year in the reproductive life of a sexually active user.

The warning signs of a blood clot spell out the acronym ACHES:

- A** Abdominal pain
- C** Chest pain (also shortness of breath)
- H** Headaches (especially those that are new, severe, associated with dizziness, fainting, difficulty speaking, numbness or weakness in extremities)
- E** Eye problems (blurred vision or loss of vision)
- S** Severe leg pain (or redness/swelling in calves or thigh).

IF YOU DEVELOP any of the symptoms of “ACHES” while on COC's, please **CALL HEALTH SERVICES 863-3953 or 863-4111 for EMERGENCY** medical attention on campus; please seek medical attention immediately if you are away from campus. Developing jaundice (yellow discoloration of your eyes or skin) also warrants a call to your provider ASAP.

Other Rare Side Effects

- *High Blood Pressure:* While most studies show that today's COC's have little impact on blood pressure, one study suggested blood pressure could rise. We like to screen our patients when starting COC's, a few months after starting, and then at their annual visits.
- *Liver tumors:* COC's have been associated with an increased risk of forming benign liver tumors. This is a very rare occurrence, but you should contact your provider if you develop upper abdominal pain. Additionally, gallstones, which can form in the gallbladder have a slightly increased risk of developing in people taking COC's, especially in users with a family history prone to gallstones.
- *Cervical Cancer Risk:* The risk of developing this type of cancer is slightly increased in COC's users. Fortunately, routine Pap smears are an excellent cancer screening tool.

discuss if a follow up pregnancy test is advised.

Benefits

- *Menstrual cycle changes:* Taking COC's will regulate the menstrual cycle. Menstrual cramps become markedly reduced for most users, and periods become lighter and shorter.
- *Improved acne:* Some users report taking COCs improves acne. While responses can vary between individuals, some people take this medicine primarily to treat their acne.
- *Decreased ovarian and uterine cancer risk:* COC users have a substantially lower risk of developing ovarian or uterine cancer.

How do I start using the pill?

There are 3 main ways to start. If you use the "Sunday Start" or "First Day Start" you will be protected right away. For "Quick Start" it will take 7 DAYS for your pills to be effective as a contraceptive. You will need to use a backup method of contraception during these FIRST 7 DAYS: you can use condoms or abstain from intercourse. This 7 DAY period of time is only necessary during your FIRST PACK of pills. However, we do recommend using condoms consistently with COC's to protect against sexually transmitted infections.

1. Traditional "Sunday Start": If your period begins on Mon, Tue, Wed, Thur, Fri, or Sat, start your pill on that Sunday. If your period starts on Sunday, start that Sunday. The only advantage is your period will occur during the week, not the weekend.
2. "First Day Start": Start your first pill on the first day of your next period. You will continue to have your period this first week of pills.
3. "Quick Start": Start your first pill on the day of your appointment. If you have had unprotected sex since your last period, you should discuss the need for emergency contraception with your clinician and also

Is extended and continuous use of contraceptive pills okay?

It is an option to extend the use of active hormones continuously over several cycles, decreasing the number of times you will experience a withdrawal bleed (period). Research shows that there is absolutely no harm in having fewer menstrual bleeds and many positives.

The advantages of extended use of OCPs include less period-associated discomfort (bloating, cramps, headaches, gastrointestinal upset) as well as protection against anemia.

There are pills that are packaged for continuous use, but any monophasic OCP can be used this way. Unscheduled bleeding/spotting often occurs during the first few months of extended OC use, but then resolves. If troublesome unscheduled bleeding occurs after the first 21 days of hormone use, one approach is to stop the OC for three days to allow withdrawal bleeding, and then resume the pill for at least 21 days of continuous use. This approach of scheduling a short hormone-free interval can be repeated whenever bothersome breakthrough bleeding occurs, without concern about backup contraception, as long as the patient has taken at least 21 days of active pills continuously before proceeding with a hormone-free interval. Over time, breakthrough bleeding episodes should become spaced out and stop.

Take the pill every day!

Be aware that to be effective, the pill needs to be taken every day. The first week of pills in each pack are the MOST important in preventing you from ovulating that cycle. Try to plan carefully to pick up your prescription from the pharmacy so you have it the day you need to start. To help remember, try to link taking your pill with something you do

everyday: brushing your teeth or eating a certain meal, or by setting an alarm.

What should I do about late or missed pills?

- If you remember your pill late, take it as soon as you remember, and take the rest of the pills at the usual time. No backup method is needed. No emergency contraception (EC) is needed.
- If you completely miss 1 pill, you should take the pill you missed together with today's pill and use condoms or abstinence for the next 7 days. No EC is needed.
- If you miss more than 1 pill, you should take today's pill and the last forgotten pill today (2 tablets in 1 day). Use condoms or abstinence for the next 7 days. May need EC.

What if I am vomiting or have diarrhea?

If you vomit within 2 hours of taking a pill or have severe vomiting and diarrhea for 2 or more days, you should treat it the same as missed pills—see above, but feel free to contact your provider to discuss.

What medicines will affect my COCs?

The following medicines are some of those that may DECREASE the effectiveness of COC's:
Topamax, Lamictal, Tegretol, Nevirapine, Trileptal, Phenobarbital, Dilantin, Mysoline, Rifampin, St. John's Wort, Provigil, Ethosuximide, Griseofulvin, Troglitazone, Vigabatrin.

The following medicines will NOT DECREASE the effectiveness of COC's: Ampicillin, Biaxin, Cipro, Doxycycline, Diflucan,, Zarontin, Kepra, Sabril, Zonegran, Lyrica, Klonopin, Bafitril.

There is a lot of conflicting information surrounding this issue. In particular, your prescription insert will list "antibiotics" as decreasing pill effectiveness. There is general agreement that the above mentioned antibiotics do not require back up methods, contrary to the product labeling. It is important that you inform your medical provider that you are taking the pill so that they can check for any interactions when they prescribe a new medication.

Do I need to stop taking the pill from time to time?

There is no evidence that taking a break from the pill is helpful to your body. If you want to stop taking the pill, the best point to stop is at the end of a pack.

Remember, you can become pregnant as soon as you stop taking the pills.