The Woman's Clinic

What to Expect During the Last Month of Pregnancy

During the last month of your pregnancy, you will be having pelvic exams at each visit. After these exams you may experience spotting or light bleeding with some clots. That is normal after having your cervix checked. However, if you have excessive bleeding or moderate to severe pain you should contact our office.

Once your labor begins and your contractions are every 3-5 minutes, lasting 30-40 seconds and are not relieved with rest or walking, you should go directly to the hospital. When you go the hospital, you will be examined by a nurse who will notify your doctor.

If your "water breaks" (you have a sudden gush of water) or you have sudden and/or severe abdominal pain or excessive bleeding, you should go to the hospital, whether in labor or not. You do not have to call the doctor. Should you go to the hospital at night, you will need to enter through the emergency room doors due to the all other entrances being locked. After entering the hospital, go straight to Labor and Delivery Unit.

If you have questions, please ask during your visits or call the office, day or night.

36 Week Advice

Congratulations, your little one is almost here!! It is almost over and we know you are excited, nervous, and ready. Here are some helpful pearls for the last month. This is the time to get your final questions regarding your delivery answered and discuss important decisions (i.e. Epidural, induction or no induction, etc.) with your doctor.

- During the last month of your pregnancy, you will be having pelvic exams at each visit. After these exams, you may notice some spotting. If you have excessive bleeding, you should contact our office.

- Vaginal discharge is more common at this stage of your pregnancy as well; it is sometimes confused with your water breaking. Signs of your “water breaking” are continuous leakage of fluid that is wetting your panties, or a

sudden gush of fluid with continuous leaking.

- Back/hip pain, insomnia and fatigue are very common during this last month. Tylenol will help some as well as Tylenol PM but this last month is just uncomfortable. Remember to slow down and rest when you can- your next few months after the baby is born will not be the time to "catch up."

Reasons to go to the hospital:

1. Painful contractions every 3-5 minutes, lasting 30-40 seconds, not relieved with rest or walking. *Once examined by a nurse at the hospital, your physician will be notified.*
2. Sudden gush of water or continuous trickle
3. Sudden and/or severe abdominal pain or excessive bleeding
4. Decreased fetal movement. *Your baby's movements have changed at this time and will be more rolls and nudges. Continue to perform kick counts until your delivery; you should have been given a kick count sheet at your 28-week visit. Please notify our office if you need an additional copy.*

At this point you should have pre-registered at the hospital of your choice. This allows you to report straight to labor and delivery; you do not have to go to the emergency room.

If you have questions, please ask during your visits to our office or call day or night.

Differences Between False Labor and Labor

TYPE OF CHANGE	FALSE LABOR	LABOR
Timing of Contractions	Often are irregular and do not consistently get closer together (called Braxton-Hicks contractions)	Come at regular intervals and as time goes on get closer and closer together
Change with movement	Contractions usually stop when you walk or may even stop with change of position	Contractions continue despite movement

Time your contractions for an hour. During true labor:

- The contractions last about 30-70 seconds.
- They occur at regular intervals.
- They don't go away when you move around.
- Go to the Labor and Delivery unit when contractions reach the level that you and your physician agreed upon earlier.

In the last several weeks of your pregnancy, you may feel that your abdomen gets hard and then gets soft again. As you get closer to your delivery date, you may find

that this becomes uncomfortable or even painful. These irregular cramps are called Braxton-Hicks contractions or false labor pains. False labor can occur just at the time when labor is expected to start. It is sometimes difficult to tell from true labor and you may be fooled. Don't be embarrassed by thinking labor is beginning. Sometimes labor can only be determined by a vaginal exam when changes in your cervix are detected.

Late Pregnancy Changes

Signs that You are Approaching Labor

SIGN	WHAT IT IS	WHEN IT HAPPENS
Feeling as if the baby has dropped lower	This is commonly referred to as the baby dropping. The baby's head has settled deep into your pelvis.	From a few weeks to a few hours before labor begins
Discharging a thick plug of mucus or an increase in vaginal discharge (clear or slightly bloody)	Passage of mucus plug- a thick mucus plug has accumulated at the cervix during pregnancy. When the cervix begins to open, the plug is pushed into the vagina.	Several days before labor begins or at the onset of labor
Discharging a continuous trickle or gush of watery fluid from your vagina	Rupture of Membranes- The fluid filled sac that surrounds the baby during pregnancy breaks. (Your water breaks)	From several weeks before labor begins to anytime during labor
Feeling a regular pattern of cramps or what may feel like a bad backache or gas pains	Contractions- your uterus is a muscle that tightens and relaxes. The hardening or pains you feel are from your uterus contracting. These contractions help the mouth of your womb to open and help push the baby through the birth canal.	Usually at the onset of labor

PATIENT EDUCATION

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

Labor, Delivery, and Postpartum Care • EP004

How to Tell When Labor Begins

Awaiting the birth of a baby is an exciting and anxious time. The average length of pregnancy is 280 days, or 40 weeks. However, there is no way to know exactly when you will go into labor. Most women give birth between 38 weeks and 41 weeks of pregnancy.

This pamphlet explains

- *how to plan for your baby's birth*
- *signs that labor is beginning*
- *how to tell false labor and true labor apart*

Making Plans

As you plan for the birth of your baby, you can take steps to help your labor go more smoothly. It is best to discuss your questions about labor with your health care team before the time comes:

- When should I call my doctor?
- How can I reach the doctor or nurse after office hours?
- Should I go directly to the hospital or call the office first?
- Are there any special steps I should follow when I think I am in labor?

Before it is time to go to the hospital, there are many things to think about. You may not have time to think about them once labor begins, so it is best to consider them ahead of time:

- Distance—how far do you live from the hospital?
- Transportation—is there someone who can take you at any time, or do you have to call and find someone?
- Time of day—depending on where you live, may it take longer during rush hours than at other times of the day or night?
- Home arrangements—do you have other children to take to a babysitter's home, or do you have to make any other special arrangements?
- Work arrangements—do you have a plan for how your workload will be covered and for letting your coworkers know when you have had the baby?

It may be a good idea to rehearse going to the hospital to get a sense of how long it could take. Plan a different route you can follow to the hospital if there are delays on the regular route.

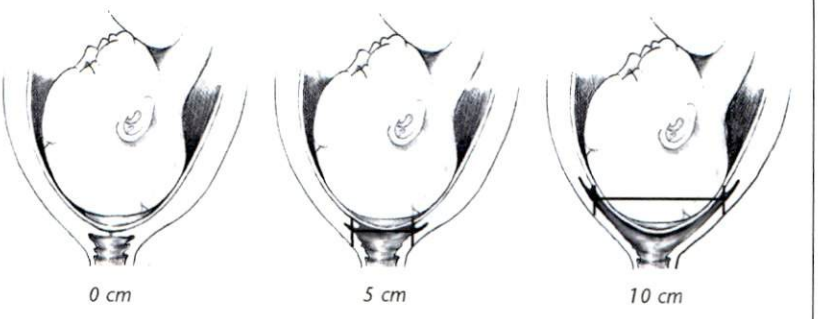
How Labor Begins

No one knows exactly what causes labor to start, although changes in hormones may play a role. Most women can tell when they are in labor. Sometimes, it is hard to tell when labor begins.

As labor begins, the cervix opens (dilates). The uterus, which is a muscle, contracts at regular intervals. When

it contracts, the abdomen becomes hard. Between the contractions, the uterus relaxes and becomes soft. Even up to the start of labor and during early labor, the baby will continue to move.

Certain changes may also signal that labor is beginning (Table 1). You may or may not notice some of them before labor begins.



As labor begins, the cervix dilates (opens). It is measured in centimeters—from 0 centimeters (no dilation) to 10 centimeters (full dilation).

True Versus False Labor

You may have periods of "false" labor, or irregular contractions of your uterus, before "true" labor begins. These are called Braxton Hicks contractions. They are normal but can be painful at times. You might notice them more at the end of the day.

It can be hard to tell false labor from true labor. Table 2 lists some differences between true labor and false labor. Usually, false contractions are less regular and not as strong as true labor. Sometimes the only way to tell the difference is by having a vaginal exam to find changes in your cervix that signal the onset of labor.

One good way to tell the difference is to time the contractions. Note how long it is from the start of one contraction to the start of the next one. Keep a record for an hour. It may be hard to time labor pains accurately if the contractions are slight. If you think you are in labor, call your doctor's office or go to the hospital.

There also are other signs that should prompt you to call your doctor or go to the hospital:

- Your membranes have ruptured (your "water breaks"), and you are not having contractions.
- You are bleeding from the vagina (other than bloody mucus).
- You have constant, severe pain with no relief between contractions.
- You notice the baby is moving less often.

Table 1. Signs That You Are Approaching Labor

Sign	*What It Is*	*When It Happens*
Feeling as if the baby has dropped lower	*Lightening.* This is known as the "baby dropping." The baby's head has settled deep into your pelvis.	From a few weeks to a few hours before labor begins
Increase in vaginal discharge (clear, pink, or slightly bloody)	*Show.* A thick mucus plug has accumulated at the cervix during pregnancy. When the cervix begins to dilate, the plug is pushed into the vagina.	Several days before labor begins or at the onset of labor
Discharge of watery fluid from your vagina in a trickle or gush	*Rupture of membranes.* The fluid-filled sac that surrounded the baby during pregnancy breaks (your "water breaks").	From several hours before labor begins to any time during labor
A regular pattern of cramps that may feel like a bad backache or menstrual cramps	*Contractions.* Your uterus is tightening and relaxing. These contractions increase as labor begins and may cause pain as the cervix opens and the baby moves through the birth canal.	At the onset of labor

Table 2. Differences Between False Labor and True Labor

Type of Change	*False Labor*	*True Labor*
Timing of contractions	Often are irregular and do not get closer together (called Braxton Hicks contractions)	Come at regular intervals and, as time goes on, get closer together. Each lasts about 30–70 seconds.
Change with movement	Contractions may stop when you walk or rest, or may even stop with a change of position	Contractions continue, despite movement
Strength of contractions	Usually weak and do not get much stronger (may be strong and then weak)	Increase in strength steadily
Pain of contractions	Usually felt only in the front	Usually starts in the back and moves to the front

Finally...

You are nearing a special, exciting time. Although it is not possible to know exactly when labor will begin, you can be ready by knowing what to expect. Being prepared can make it easier for you to relax and focus on the arrival of your baby when the time comes.

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PATIENT EDUCATION

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

Labor, Delivery, and Postpartum Care • EP029

Breastfeeding Your Baby

More and more women are choosing to breastfeed their babies—and for good reason. Breast milk provides the perfect mix of vitamins, protein, and fat that your baby needs to grow. It also protects your baby against certain diseases. Although some women may not be able to breastfeed for a variety of reasons, for most women, breastfeeding (or "nursing") is the best way to feed their babies.

This pamphlet explains

- *benefits of breastfeeding*
- *how to breastfeed*
- *dealing with challenges*
- *a healthy lifestyle and birth control while breastfeeding*

Benefits of Breastfeeding

It is recommended that babies breastfeed exclusively at least for the first 6 months of life. This means that you should not give your baby any other liquids or foods before he or she is 6 months old (unless your baby's health care provider recommends otherwise). The longer your baby is fed breast milk, the better for you and your baby. Your baby can continue to breastfeed beyond his or her first birthday as long as you and your baby want to.

Benefits for Your Baby

Breastfeeding is best for your baby for the following reasons:

- The ***colostrum*** that your breasts make during the first few days after childbirth helps your newborn's digestive system grow and function.
- Breast milk has ***antibodies*** that help your baby's ***immune system*** fight off viruses and bacteria. Babies who are breastfed have a lower risk of respiratory infections, asthma, obesity, allergies, and colic than babies who are not breastfed. They also have fewer ear infections and less diarrhea.
- Breast milk is easier to digest than formula. Breastfed babies have less gas, fewer feeding problems, and less constipation than babies who are fed formula.
- Breastfeeding decreases the risk of ***sudden infant death syndrome (SIDS)***, especially when the mother breastfeeds exclusively for at least 6 months.
- If your baby is born ***preterm***, breast milk can help reduce the risk of many of the short-term and long-term health problems that preterm babies face.

Benefits for You

Breastfeeding is good for you as well:

- During breastfeeding, the hormone ***oxytocin*** is released. Oxytocin causes the uterus to contract and return to its normal size more quickly.
- Breastfeeding may help with postpartum weight loss. Women who breastfeed for longer than 6 months tend to weigh less than women who do not breastfeed.
- Women who breastfeed have lower rates of breast cancer and ovarian cancer than women who do not breastfeed. It also has been shown to reduce the risk of heart disease and rheumatoid arthritis.
- Breastfeeding saves time and money. You do not have to buy, measure, and mix formula.

How to Breastfeed

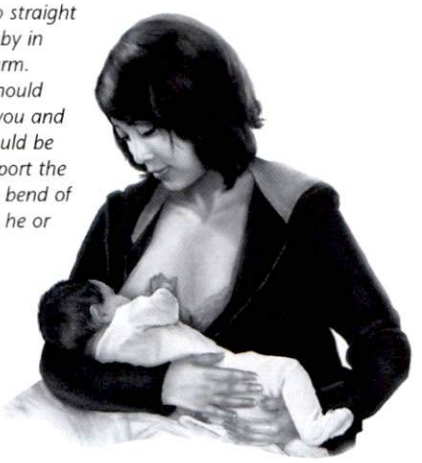
Although breastfeeding is a natural process, it may take some practice and patience to master. Mothers and babies have to learn together.

Getting Started

Babies are born with all the instincts they need to breastfeed. A healthy newborn usually is capable of breastfeeding without any specific help within the first hour of birth. Those who do so may have an easier

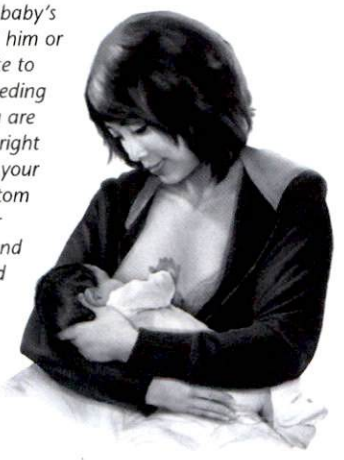
Good Positions for Breastfeeding

Cradle hold. *Sit up straight and cradle your baby in the crook of your arm. The baby's body should be turned toward you and his or her belly should be against yours. Support the baby's head in the bend of your elbow so that he or she is facing your breast.*



Side-lying position. *Lie on your side and nestle your baby next to you. Place your fingers beneath your breast and lift it up to help your baby reach your nipple. This position is good for night feedings. It also is good for women who had a cesarean birth because it keeps the baby's weight off the incision. Put your lower arm forward to hold your head, and place a pillow between your knees to keep you from rolling over.*

Cross-cradle hold. *As in the cradle hold, nuzzle your baby's belly against yours. Hold him or her with the arm opposite to the side you are breastfeeding from. For instance, if you are breastfeeding from your right breast, hold the baby in your left arm. The baby's bottom rests in the crook of your left arm and your left hand supports the baby's head and neck. This position gives you more control of the baby's head. You may need to support the baby's head with pillows. It is a good position for a newborn who is learning how to nurse.*



Football hold. *Tuck your baby under your arm like a football. Sit the baby up at your side, level with your waist, so he or she is facing you. Support the baby's back with your upper arm, and hold his or her head level with your breast. This hold is good for breastfeeding twins and for women who had cesarean births.*

time breastfeeding than babies who are not breastfed immediately after birth. To help give you a good start, tell your health care provider during pregnancy that you want to breastfeed. When you are admitted to the hospital in labor, remind your health care team that you plan to breastfeed. Immediately after the birth, your baby should be placed in direct skin-to-skin contact with you if possible.

Get Your Baby "Latched On"

To begin breastfeeding, the baby needs to attach to or "latch on" to your breast. A nurse or lactation consultant (a health care provider with special training in breastfeeding) can help you find a good position (see box "Good Positions for Breastfeeding"). Cup your breast in your hand and stroke your baby's lower lip with your nipple. This stimulates the baby's rooting reflex. The rooting reflex is a baby's natural instinct to turn toward the nipple, open his or her mouth, and suck. The baby will open his or her mouth wide (like a yawn). Pull the baby close to you, aiming the nipple toward the roof of the baby's mouth. Remember to bring your baby to your breast—not your breast to your baby.

Check the Baby's Latch

The baby should have all of your nipple and a good deal of the ***areola*** in his or her mouth. The baby's nose will be touching your breast. The baby's lips also will be curled out on your breast. The baby's sucking should be smooth and even. You should hear the baby swallow. You may feel a slight tugging. You may feel a little discomfort for the first few days. You should not feel severe pain. If you do, talk to your nurse or lactation consultant.

If the baby is not latched on well, start over. To break the suction, insert a clean finger between your breast and your baby's gums. When you hear or feel a soft pop, pull your nipple out of the baby's mouth.

Do Not Watch the Clock

Let your baby set his or her own schedule. Many newborns breastfeed for 10–15 minutes on each breast, but some may feed for longer periods. A baby who wants to breastfeed for a long time—such as 30 minutes on each side—may be having trouble getting enough milk (see box "Is My Baby Getting Enough Milk?") or may be just taking his or her time to feed.

Breastfeed on Demand

When babies are hungry, they will nuzzle against your breast, make sucking motions, or put their hands to their mouths. Crying usually is a late sign of hunger. It is recommended that you breastfeed at least 8–12 times in 24 hours, or about every 2–3 hours, in the baby's first weeks of life. When full, the baby will fall asleep or unlatch from your breast.

Switch Sides

When your baby empties one breast, offer the other. Do not worry if your baby does not continue to breastfeed. The baby does not have to feed at both breasts in one feeding. At the next feeding, offer the other breast first. You may want to attach a safety pin to your shirt or bra to remind yourself which breast to start with at the next feeding.

Is My Baby Getting Enough Milk?

For the first few weeks, check for these signs to tell if your baby is feeding enough. Your baby should

- breastfeed at least 8–12 times in 24 hours
- be happy and content for an average of 1–3 hours between feedings
- wet six or more diapers a day
- have three or four bowel movements a day by the time he or she is 5–7 days old; during the first month, the baby may have a bowel movement after each feeding
- gain an appropriate amount of weight at each well-baby visit with your pediatrician

If you are concerned your baby may not be getting enough milk, tell your health care provider.

Avoid Pacifiers

Until your baby gets the hang of breastfeeding, experts recommend limiting pacifier use to only a few instances. You may only want to give a pacifier to help with pain relief (while getting a shot, for instance). After about 4 weeks, when your baby is breastfeeding well, you can use the pacifier at any time. Pacifier use at nap or sleep times may help reduce the risk of SIDS.

Dealing With Challenges

When you start breastfeeding your baby, you may find getting started challenging or have some difficulty at first. It is normal for minor problems to arise in the days and weeks when you first begin breastfeeding. The good news is that with a little help, most problems can be overcome. If any of the following problems persist after trying these tips, call your health care provider or ask to see a lactation specialist:

- Nipple pain—Some soreness or discomfort is normal when beginning breastfeeding. Nipple pain or soreness that continues past the first week or does not get better usually is not normal. Nipple pain may be caused by the baby not getting enough of the areola into his or her mouth and instead sucking mostly on the nipple. Check the positioning of your baby's body and the way he or she latches on. Make sure the baby's mouth is open wide and has as much of the areola in the mouth as possible. Applying a small amount of breast milk to the

nipple may speed up the healing process. Try different breastfeeding positions to avoid sore areas.

- Engorgement—When your breasts are full of milk, they can feel full, hard, and tender. Once your body figures out just how much milk your baby needs, the problem should go away in a week or so. To ease engorgement, breastfeed more often to drain your breasts. Before breastfeeding, you can gently massage your breasts or express a little milk with your hand or a pump to soften them. Between feedings, apply warm compresses or take a warm shower to help ease the discomfort.
- Blocked milk duct—If a duct gets clogged with unused milk, a hard knot will form in that breast. To clear the blockage and get the milk flowing again, try breastfeeding long and often on the breast that is blocked. Apply heat with a warm shower, heating pad, or hot water bottle.
- Mastitis—If a blocked duct is not drained, it can lead to a breast infection called mastitis. Mastitis can cause flu-like symptoms, such as fever, aches, and fatigue. Your breast also will be swollen and painful and may be very warm to the touch. If you have these symptoms, call your health care provider. You may be prescribed an ***antibiotic*** to treat the infection. You may be able to continue to breastfeed while taking this medication.

A Healthy Lifestyle While Breastfeeding

While you are breastfeeding, it is important to maintain the healthy nutritional and lifestyle habits you had during pregnancy. Remember, almost everything you put into your body also goes to your baby in your breast milk.

Eating Right

When you are pregnant, your body stores extra nutrients and fat to prepare for breastfeeding. The following tips will help you meet the nutritional goals needed for breastfeeding:

- You need an extra 450–500 calories a day while breastfeeding. For a woman whose weight is in the normal range, this works out to be about 2,500 total calories per day.
- Eat a variety of foods, including whole grains, fruits and vegetables, low-fat dairy products, lean meats, poultry, and seafood.
- Your health care provider may recommend that you continue to take your prenatal multivitamin supplement while you are breastfeeding. The baby's health care provider may recommend that you give your baby 400 international units of vitamin D daily in drop form. This vitamin is essential for strong bones and teeth.
- Stay hydrated by drinking plenty of fluids and drink more if your urine is dark yellow. It is a good idea to drink a glass of water every time you breastfeed.
- Avoid foods that may cause stomach upset in your baby. Common culprits are gassy foods, such as cabbage, and spicy foods.
- Drinking caffeine in moderate amounts should not affect your baby. A moderate amount of caffeine is about 200 milligrams a day, which is the amount in two to four cups of brewed coffee. Remember that tea, chocolate, and soft drinks also contain caffeine.
- If you want to have an occasional alcoholic drink, wait at least 2 hours after you drink to breastfeed.
- Always check with your health care provider before taking prescription or over-the-counter medications to be sure they are safe to take while breastfeeding.

Avoiding Smoking and Drug Use

Just like during pregnancy, you should not smoke while you are breastfeeding. If you or someone you live with smokes, get help to quit right away. Babies exposed to cigarette smoke have an increased risk of asthma. Cigarette smoke also has been linked to an increased risk of SIDS.

Illegal drugs such as cocaine, marijuana, heroin, and methamphetamines can be harmful to your baby if you use them while breastfeeding. Taking prescription drugs (such as codeine, tranquilizers, or sleeping pills) for nonmedical reasons also can be harmful. If you need help with quitting smoking or stopping drug use, talk with your health care provider or ask about a substance abuse hotline in your area.

Birth Control

It is important to use a birth control method before you begin having sexual intercourse again. The ideal time to choose a method is while you are still pregnant. Talk to your health care provider about your options.

In general, methods that contain ***estrogen***, such as combination birth control pills, the vaginal ring, and the skin patch, should not be used during the first month of breastfeeding. Estrogen may decrease your milk supply. Once breastfeeding is established, estrogen-containing methods can be used.

Progestin-only methods, including pills, the implant, and the injection, do not affect the milk supply. These methods usually can be started immediately after childbirth while you are still in the hospital. The intrauterine device (IUD) is among the most effective reversible birth control options available. A copper or hormonal IUD can be inserted by your health care provider immediately after the birth of your baby.

The lactational amenorrhea method (LAM) is a natural method of preventing pregnancy. It can be used for just the first 6 months after childbirth and only if your menstrual period has not returned. It requires

"full or nearly full breastfeeding," which means that nearly all of the baby's nutritional requirements are obtained by breastfeeding. LAM can be an effective way to prevent pregnancy if you are very committed to breastfeeding and follow the instructions carefully. It also can be used in combination with another method of birth control. If you are interested in using this method, talk with your health care provider or a lactation specialist.

Returning to Work

By law, your employer is required to provide a reasonable amount of break time and a place to express milk as frequently as needed for up to 1 year following the birth of a child. The space provided by the employer cannot be a bathroom, and it must be shielded from view and free from intrusion by coworkers or the public. You also will need a safe place to store the milk properly (see box "Storing Breast Milk").

During an 8-hour workday, you should be able to pump enough milk during your breaks. Using a double pump that pumps both breasts at the same time is even quicker.

Storing Breast Milk

- After pumping, you can refrigerate your milk, store it in a cooler, or freeze it for later. You can store breast milk at room temperature for 3–4 hours (optimal) up to 6–8 hours (acceptable under very clean conditions).
- Store breast milk in small amounts (2–4 ounces) to avoid waste. Store milk in clean glass or BPA-free plastic bottles or special milk collection bags.
- Breast milk can be kept in the refrigerator (39°F or below) for 3 days (optimal) up to 5–8 days (acceptable under very clean conditions). It can be frozen (0°F) for 6 months (optimal) up to 1 year (acceptable under very clean conditions).
- To thaw frozen breast milk, put the bottle or bag in a bowl of warm water. You also can let milk slowly thaw in the refrigerator. Do not use a microwave because it destroys the milk's disease-fighting qualities and can scald you and your baby. Never refreeze milk that has been thawed.

Finally...

Breastfeeding is the healthiest way to feed your baby. Before giving birth, let your health care provider know of your desire to breastfeed so that you can get the support you need from the very start. Keep in mind that many new mothers have problems breastfeeding at first. Do not be afraid to ask for help if you need it.

Glossary

Antibiotic: A drug that treats infections.

Antibodies: Proteins in the blood produced in reaction to foreign substances, such as bacteria and viruses that cause infection.

Areola: The darker skin around the nipple.

Colostrum: A fluid secreted in the breasts at the beginning of milk production.

Estrogen: A female hormone produced in the ovaries.

Immune System: The body's natural defense system against foreign substances and invading organisms, such as bacteria that cause disease.

Oxytocin: A hormone used to help bring on contractions of the uterus.

Preterm: Born before 37 weeks of pregnancy.

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

Sudden Infant Death Syndrome (SIDS): The unexpected death of an infant and in which the cause is unknown.

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PATIENT EDUCATION

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

Contraception • EP185

Combined Hormonal Birth Control Methods: Pills, Patches, and Rings

*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 thins, making it less likely that a fertilized egg can attach to it.

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***.

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 provider before choosing one of these methods.

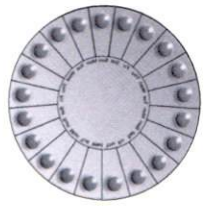
Starting a Combined Hormonal Method

You can start a combined hormonal birth control method at any time during your menstrual cycle as long as you and your health care provider 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.



Birth control pills

In the United States, combined hormonal pills must be prescribed by a health care provider. 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 provider. 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.

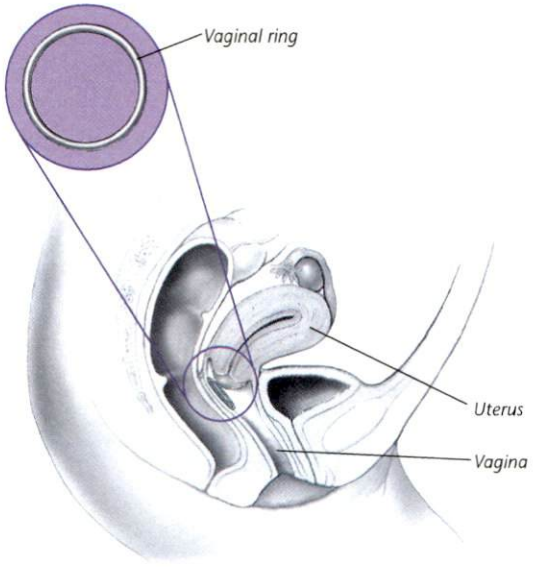
Some women are concerned about weight gain while taking combined hormonal birth control pills. Researchers have found no scientific link between taking these pills and weight gain.

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 provider 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



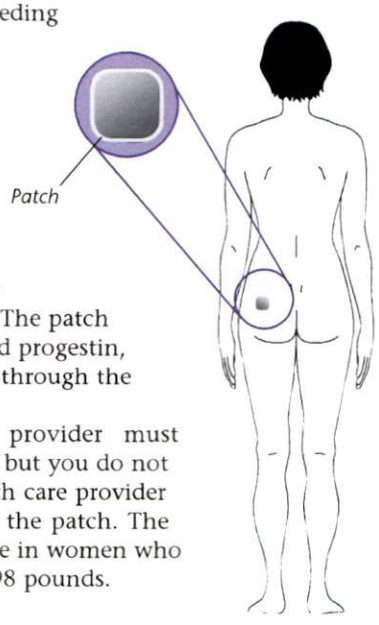
between. In time, your period may become lighter and even stop. If you forget to insert the vaginal ring on time or if it comes out, follow the directions that came with your ring.

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 provider must prescribe the patch, but you do not need to visit a health care provider 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 provider 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: 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: Two glands, located on either side of the uterus, 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 infection, herpes, syphilis, and infection with 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.

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