Contraception

Safe and Sure

Contraception for Her and Him

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Managing editor: Anke Erath
Expert consultants: Helga Seyler, Gynecologist, Family Planning Centre Hamburg, Dr. Beate Ziegeler, Bundesinstitut für Arzneimittel und Medizinprodukte (German Institute for Pharmaceuticals and Medical Products)

Design: Medienwerkstatt Petzinka, Haarmann, Dortmund
Illustrations: Christina Hummelbeck, Dortmund
Translation: Joseph A. Smith, Nörten-Hardenberg

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Preface

Dear Readers,

This brochure has been prepared to assist both men and women in choosing an appropriate contraceptive. It provides information concerning the mechanisms of action, application, safety as well as the respective advantages and disadvantages of the individual methods. This information corresponds to the state of the art at the time this brochure was printed. It does not presume to be complete. It describes only the most popular and best-known contraceptive methods.

A brochure on contraceptives cannot replace a careful study of the package information delivered with the individual product. It also cannot replace a visit and conversation with a gynecologist or family doctor: Each product has its own peculiarities, as do the individuals who apply them. Their use should always be monitored by a physician.

The Editors

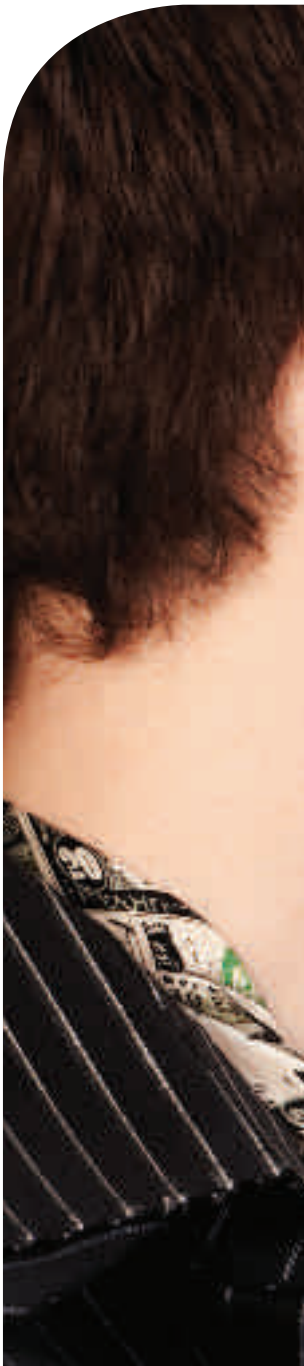
For further information on the subject of contraception, please visit our website → www.familienplanung.de

Contraception – more than just a word

Behind the term contraception lie many aspects that go beyond simple facts. First, there's the question of if and when contraception is to be implemented in one's lifeplan. Is it primarily a matter of controlling when to have children – or the desire to avoid becoming pregnant altogether?

This type of family planning has now become a nearly routine matter – luckily for both sexes.

To have children or not to have children? This question must be posed over and again. Today, enjoying a partnership in which both partners can deal emotionally, socially and materially with the subject of having children is considered the most important prerequisite to raising well-adapted, emotionally secure and happy children. Whether this means navigating conception or preventing it, it will have to be grappled with many times throughout one's lifetime.



Contraception for both **men and women**

For women, the matter of preventing pregnancy has changed tremendously in recent years. Today, they can plan more freely and independently than ever before; they can fulfill their professional needs and remain autonomous in their relationships to their partner, family and children. Modern birth control enables a relatively anxiety-free and relaxed approach to sexuality, which can be viewed as something separate from the act of conceiving and having children – something no one now would want to do without.

But more and more men are assuming responsibility for contraception in their partnerships. And even if they cannot play an active role, they want to participate directly in the decision-making. Contraception, of course, is not without its own inherent problems. This may be seen alone in the fact that the timespan in which women can become pregnant stretches for some 35 years, whereas men remain fertile for many years longer! That is indeed a long time in which circumstances can change radically. Many factors influence one's choice of contraception, ranging from one's age, type of relationship, body awareness, need for sexual spontaneity and security. Medical considerations are also important to many couples when choosing their methods of birth control. Further, the fact that only condoms and the so-called femidoms offer effective protection against sexually transmitted infections and HIV/AIDS can play a major role in one's decision.

Studies have shown that switching from one type of contraception to another type in fact increases the risk of an unwanted pregnancy since the change itself, particularly from a hormonal to a natural method, means adjusting to new habits and methods of application. Switching means of contraception thus demands more attention to details and safety measures. Which birth-control method (or a combination of methods) one chooses will, in the end, always be a compromise between one's desires and one's needs – and these can sometimes contradict each other.

What a contraceptive method must offer

Unfortunately, no single method is optimal for everyone and at all times. That would be asking too much. Securing total protection from an unwanted pregnancy is a very tall order. Ideally, the method should be safe and reliable, while at the same time free of side effects and all drawbacks; it must remain unseen, be odorless, unnoticeable, easy to use and cause no discomfort during intercourse; it should have no psychological aftereffects, be cheap and immediately interruptable – and have no lasting effects on fertility. Of course, it should also be practicable for both men and women and acceptable to all races, religions and cultures. The best would be, of course: All of the above, all at once. Most likely, no such method will ever be invented that can serve all men, all women, all couples and all circumstances. Still, there are a number of good alternatives readily available today to prevent unwanted conception. And scientists are working on even better ones. If you are presently searching for an acceptable method of birth control, you should first write down what your most important requirements are (➔ p. 90) and which type of contraception would thus best fit your present situation (➔ pp. 18ff.). The task is to weigh the advantages and disadvantages of each method and then to decide which of them would presently be the best choice. Speaking with your partner about your wishes and priorities can make this search considerably easier since then the choice would be acceptable to both sides. This brochure wants to assist you in that search, and to help to determine whether your present method is still optimal. In order to understand how each contraceptive method functions, you will need to have information about how our bodies function. The two cross-sectional figures on page 17 show us the workings of the male and female sexual organs.

The more you know about what happens in the male and female body, the better you will understand how conception occurs – and how the individual methods to prevent it function, how safe they are and which one is best for you. Because contraception is always of concern to both sexes, it is important to learn about the bodily processes of one's own sex as well as of the opposite sex.

The female **body**

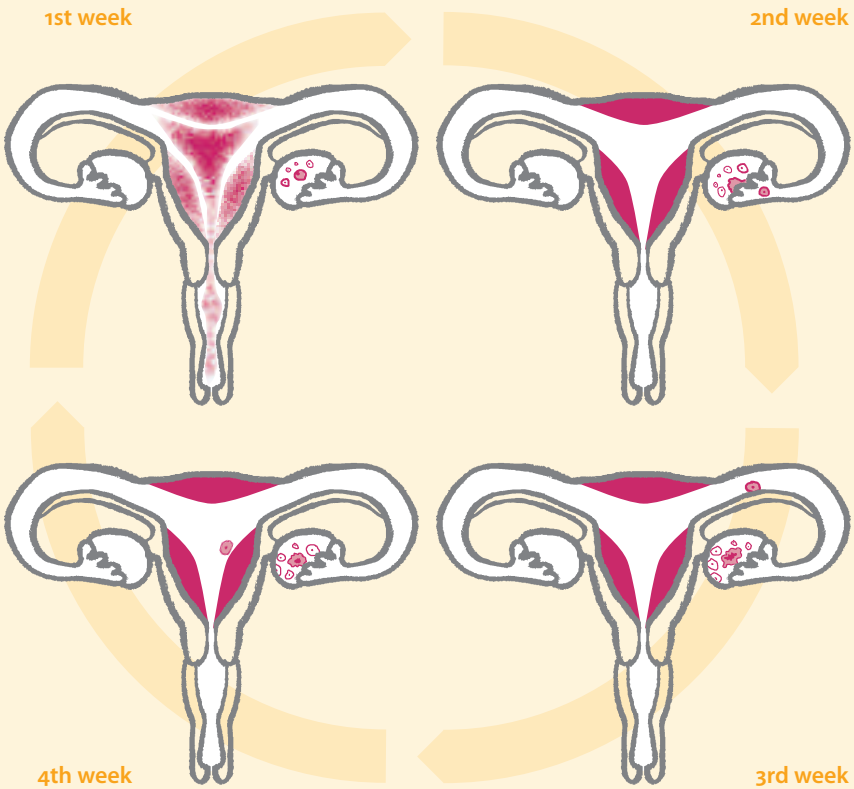
› THE REPRODUCTIVE CYCLE: The time between the first day of a woman's period and the last day preceding her next period is called her menstrual cycle. Thus, the first day of her period is also the first day of the next cycle, and the day before the next period begins is the last day of the cycle. How long a cycle lasts can vary greatly, not only between women, but also between a woman's individual cycles. Every woman has her own individual rhythm, which normally lasts between 25 and 32 days. But external circumstances such as stress, illness, climate changes, travel and environmental factors can influence the cycle and ovulation.

› OVULATION: A girl is born with about 400,000 immature eggs in her ovaries. Upon her entering puberty a new egg matures during each cycle. Once it has reached a certain degree of maturity, it is set loose from the ovary and travels into the Fallopian tube, which at this point in time is pulled over the ovary with rather frayed borders. This is what is meant by ovulation. During a typical 28-day menstrual cycle ovulation occurs about midway through the cycle, though in some women it can take place up to a few days before or after this date (➔ the temperature and mucous curves shown on p. 47). The chance of getting pregnant is highest during ovulation. Some women experience a sort of tugging in their abdomen during this event, and there may be some spotting. The mucous membranes that normally close off the woman's cervix very tightly now become looser so that the man's sperm can reach the egg. Following ovulation the egg is fertile for about 24 hours. Impregnation occurs in the outer third of the Fallopian tube, before the fertilized egg continues its journey down the tube toward the uterus. During this time, under the influence of female hormones, the uterus is filled with blood and builds up a thick layer of mucous so that the egg can be properly lodged. If the egg, however, is not fer-

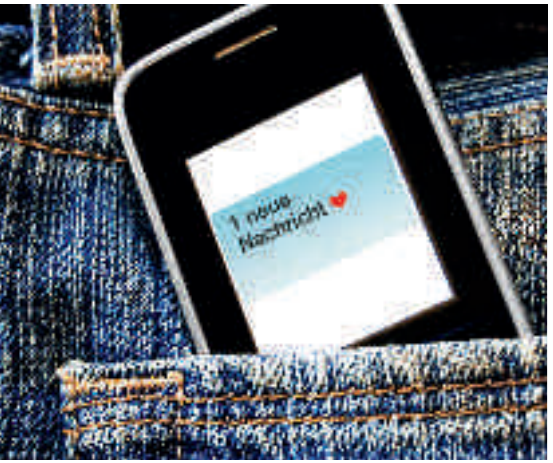
tilized, the lining of the uterus (the so-called endometrium) is shed after about 2 weeks' time and excreted during the woman's period. That is called menstruation. And so beings a new cycle.

Important: A girl can become pregnant from her very first ovulation on – even before having had a single period!

›MENSTRUATION: A girl's first period – her menarche – usually occurs in early puberty, between the age of 9 and 15. Presently, the average age at menarche is 12.3 years. It is not possible to predict when a girl will have her first period, though the body usually announces its arrival some 6 to 12 months in advance by excreting a white discharge (the so-called leukorrhea) triggered by hormones. The last menstrual cycle – the menopause – occurs equally irregularly, whereby the statistical average lies at around 52 years. Contraceptive measures are generally necessary until about 1 year after the last period, to preclude any danger of becoming pregnant.



The menstrual cycle consists of two phases: the follicular phase when the egg matures, and the luteal (or secretory) phase following ovulation. If the egg is not fertilized, the uterus lining is excreted during the next period.



The male **body**

In boys the sexual organs begin to change at the onset of puberty. The penis and testicles, the latter of which begins to produce sperm cells after receiving a hormonal "message," begin to grow. Millions of sperm cells are produced daily and stored in the epididymis.

The creation of sperm cells is a very complicated procedure and can be thrown off by disease, stress, nicotine and environmental poisons. Upon sexual arousal the tubular structures in the penis, the corpora cavernosa, fill with blood. The penis becomes erect, grows in size and becomes hard (erection). At the pinnacle of sexual arousal (orgasm) the sperm cells are discharged through muscle contractions of the penis (ejaculation). Only a very small portion of the sperm cells ever reaches the egg – which is why the body produces and sends so many on their way. However, it only takes a single sperm cell to fertilize the egg. Thus, any effective contraceptive method for the man must be able to affect all sperm cells ejaculated. Should no ejaculations occur, after a while the sperm cells are reabsorbed by the body.

Much as a young girl can be impregnated from her first ovulation on, so can a young boy impregnate from his first ejaculation on. For this reason, every male and every female must attend to the matter of contraception from the very "first time" onward.

Fertilization

Fertilization – and thus pregnancy – occurs when the male sperm cells enter the vagina of the female in the form of semen and then progress to travel through the uterus to the woman's Fallopian tubes. If the two – sperm and egg – happen to come together at the right time, they merge. The egg can be fertilized for ca. 24 hours after leaving the ovary on its path to the uterus. The sperm cells, however, can "wait" even longer on the egg to arrive: In the protective environment of the uterus or the Fallopian tubes they can survive and thus still fertilize the egg for up to 2 to 5 days (and in rare cases even 7 days).

That means: Unprotected intercourse even days before ovulation can result in fertilization and pregnancy! Even sim-

ple petting can transport sperm cells into the vagina via the hands. Remember: some sperm cells are emitted by the penis even before ejaculation (so-called preseminal fluid). Here, too, safety is of absolute priority.

Hormones

Hormones are the body's transmitters, usually carrying messages from the glands. The most important hormones for sexuality and reproduction are formed in the so-called gonads – in women the ovaries, in men the testicles. In women these are estrogen and progesterone; the most important male hormone is testosterone.

These female hormones and their derivatives are what is used in some drug-based contraceptives, such as the "pill," the minipill, the IUC and the hormone implant, to prevent pregnancy.

The central controlling organ for hormone production is the pituitary gland, which directs the hormones to the ovaries and testicles and triggers them to take certain actions. In women, this causes the egg to mature so that the woman ovulates and produces further hormones. The gonads and the brain communicate continually through hormones traveling through the circulation system. The two hormones estrogen and progesterone are produced in the ovaries.

Estrogens are responsible, among other things, for building up the lining of the uterus. Progesterone fulfills a number of roles, but above all it tries to prevent the egg, which may or may not be fertilized, from being discharged by the uterus. It also sees to it that the uterus is well supplied with blood and has all the nutrients it needs. These are the prerequisites for a successful pregnancy.

If the egg is not fertilized, the level of progresterone falls after about 14 days, triggering the woman's period, and the reproductive cycle begins anew with a new maturing egg in the ovary.

Pregnancy and **prenatal development**

Once the egg and the sperm cell have united, growth commences at a high rate. The cells of the fertilized egg divide continually. The small ball of cells then travels to the uterus where it lodges itself in the lining after about a week. Now the entire female organism begins to prepare itself for pregnancy. The first and often most obvious sign that a woman is pregnant is the absence of her subsequent period (➔ pp. 10ff.).

The time between fertilization of the egg and the birth of the child is approximately 266 days (ca. 9 calender months), although births that occur 2 weeks before or after this calculated time are still considered "normal." The child's organs and limbs develop in the first 3 months of the pregnancy. During this time any diseases or disruptions experienced by the mother may have very negative effects on the developing fetus. A pregnant woman should avoid alcohol, nicotine and all unnecessary medicines during this time and also try to reduce her overall stress level.

To minimize these risk factors, it is of great importance that a woman determine early on whether she is pregnant. Biologically speaking, a woman's fertility decreases with age; the best age to become pregnant is between the age of 20 and 30. The most important factor, however, is not age but the woman's inner attitude.

If the pregnancy is in the planning, it is recommended that the woman begin taking folic acid supplements (0.4 mg/day) about 4 weeks before fertilization to reduce the risk of certain birth defects (neural tube defect or spina bifida). (➔ for more information, see the website www.familienplanung.de/schwangerschaft/die-schwangerschaft/gesundheit-und-ernaehrung/ernaehrung/)

Visits to the gyncologist

A woman using hormones or a copper coil (IUD) as contraception should visit her gynecologist regularly every 6 months for a control examination. A routine examination as part of yearly cancer screening is suggested for all women 20 years and older.

Before the first visit to a gynecologist, young women should determine for themselves whether they would prefer going to a male or female doctor. Sometimes it is helpful to talk with peers and get recommendations on a practice or a counseling service.

A woman should see her gynecologist as soon as possible at the following signs:

- Itching and smelly discharge from the vagina
- Bleeding between periods
- Problems urinating or defecating
- Abdominal pain
- If there is severe pain on nonmenstrual days
- If pain occurs regularly after intercourse
- If bleeding occurs regularly after intercourse
- If menstrual bleeding goes on for longer than 10 days
- If the menstrual cycle is repeatedly too short (less than 25 days)
- If menstrual bleeding produces large blood loss
- If the period is more than 30 days overdue
- If no signs of puberty and menstrual activity occur by age 15
- If headaches and vision disturbances occur when taking the contraceptive pill.

Many women describe their first visit to the gynecologist as unpleasant. That is understandable. Nevertheless, regular control visits, especially as one grows older, are vital. The best thing is to prepare oneself for the gynecological examination, which the doctor will explain in detail.

The gynecologist will first ask some questions – think about the answers before you go:

- When did you get your first period?
- How regular is your period?
- How long does a normal period last?
- How heavy is the bleeding?
- When was your last period?
- What contraceptives are now being used or have been used in the past?
- Do you have any serious diseases or health problems? Any such problems in your family?
- Have you ever been pregnant/had a child before?

Then the doctor carries out the actual gynecological examination, which does not take long nor does it hurt. The gynecologist inserts two so-called speculums (a mirrored instrument used to examine inner cavities) into the vagina to look at the state of the vagina itself and the cervix. In girls and women who have not yet had intercourse there is a certain chance of being "deflowered," that is, of having the hymen broken. If it is important to you that the hymen remain intact, talk to your gynecologist about this in advance. The gynecologist is also able to do the examination by placing two fingers in the woman's vagina and using the other hand to palpate the uterus, ovary and Fallopian tubes from the outside. In adult women the doctor will generally also examine the breasts and armpits and prepare a smear from the mucous surrounding the cervix.

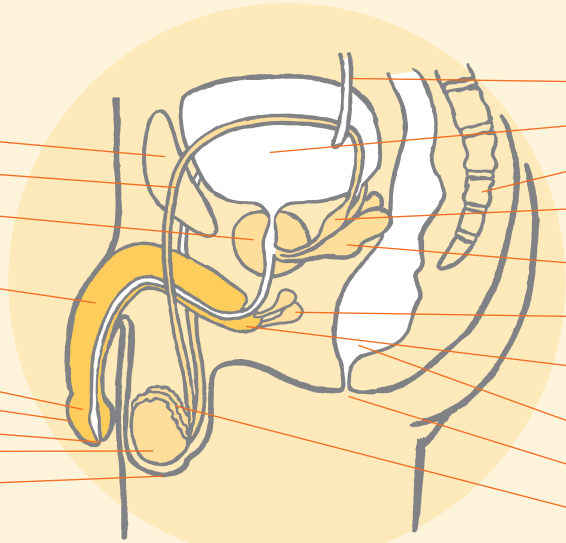
A tip in this regard: Many women find this examination unpleasant. Wearing a longshirt or a long t-shirt that remains on during the exam often provides the feeling of being protected.

All women, regardless of their age, have the right to say and ask whatever they want to under such circumstances. Make your needs known! It is your body! It is suggested that all women also have a test done every year for chlamydia infection, a sexually transmitted disease, even if they are experiencing no symptoms. (➔ see www.familienplanung.de/schwangerschaft/die-schwagerschaft/beschwerden-und-krankheiten/krankheiten-und-infektionen/chlamydien-infektion/). In 2008 this test became part of the regular prevention measures paid for by health insurance for women 25 years and younger (➔ see www.g-ba.de).

Young women who are insured through the national insurance program have the right to have their contraception paid for up through the age of 20, inasmuch as it is prescribed by a physician. For women under 18, the usual prescription fee is waived, but it must be paid by all women 18 and over. The contraceptive means covered include all hormonal preparations such as the contraceptive pill and mini-pill, hormone IUD, hormone implant (a subcutaneous rod), 3-month depot, vaginal ring and contraceptive patch. But other, mechanical methods such as the copper coil (IUD) can also be prescribed by one's doctor. The woman should decide which method is best for her by speaking to her gynecologist.

Further information on the reproductive biology of men and women may be found in the brochure entitled "Ein 'kleines Wunder'. Die Fortpflanzung" ("Reproduction: A Small Wonder"), which may be ordered directly from BZgA (order no. 13621001).

MALE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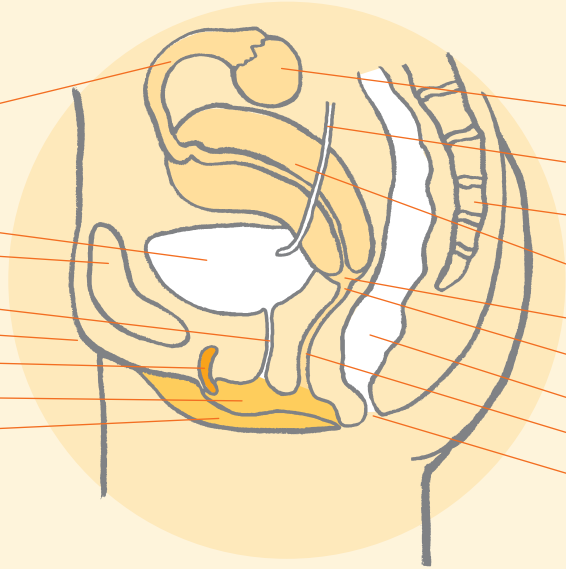
bulbourethral (Cowper's) gland
bulbospongiosus muscle
rectum
anus
epididymis

FEMALE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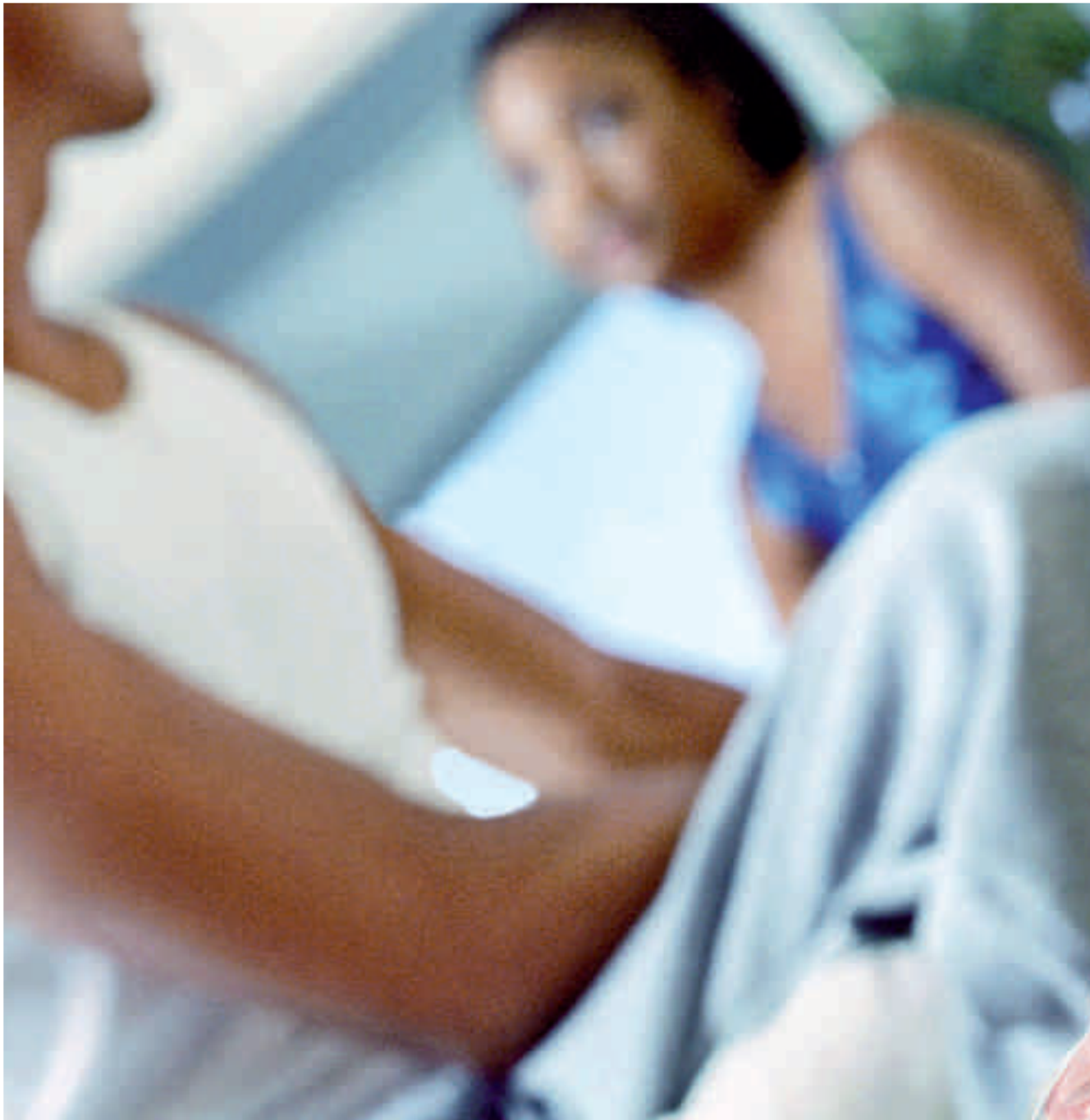


The various **contraceptive methods**

In the following you will find a detailed discussion of the various different methods of contraception. You will learn about their respective modes of action and application as well as their benefits and disadvantages.

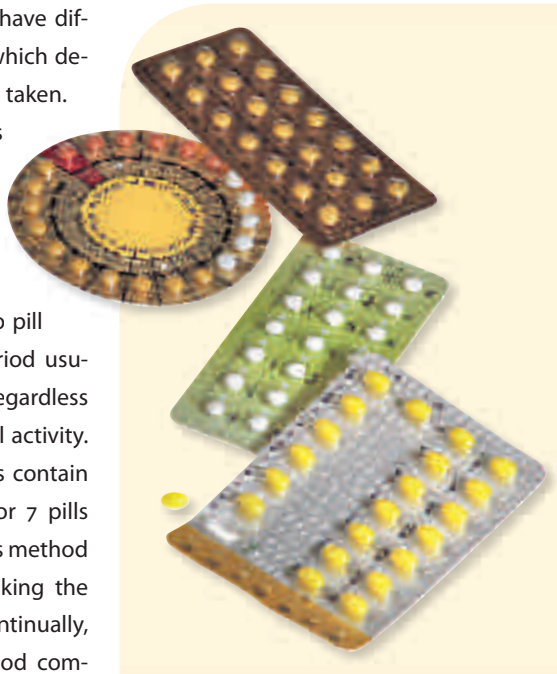
The **contraceptive pill**

The contraceptive pill ("the pill") is still considered to be one of the safest and most popular contraceptive means available to prevent pregnancy. Especially girls and younger women tend to take the pill. Today, there are many different types, though all contain some amounts of the two female hormones estrogen and gestagen. Only the so-called minipill contains only one ingredient, gestagen; it is described separately below. The newest pills have in part very low doses of hormones and have thus fewer side effects than was previously the case. Nevertheless, the pill – regardless of which type – remains a drug that, like every other drug, should not be swallowed lightly.

› EFFECTS/USE: The hormones contained in the pill (with the exception of the minipill, →see p. 23 below) have three different effects: First, they inhibit ovulation, making fertilization impossible. Second, they change the mucous surrounding the cervical canal so that the sperm cells cannot enter. And third, they prevent the proper build-up of the lining of the uterus, so that the fertilized egg cannot lodge in the uterus.

› AVAILABLE COMPOUNDS: The various compounds available have different amounts of homones, which determines how they are to be taken. The so-called one-phase pills have the same amount of estrogen and gestagen in each pill: This type of pill is taken every day for 21 or 22 days in a row. Then, for 6 or 7 days, no pill is taken and the woman's period usually sets in. The pills are taken regardless of the woman's normal cyclical activity. Some one-phase pill packages contain 28 pills, whereby the last 6 or 7 pills have no active ingredients. This method avoids making mistakes in taking the pills. The pills are taken continually, without interruption, the period commencing when the row of ineffective pills is taken.

A new product came to the market in 2008 – a "24+4" rhythm: After taking 24 pills containing hormones, the woman takes 4 hormone-free pills and then starts a new package. The varying combination of estrogen and gestagen in these pills attempts to replicate the woman's normal cycle. However, these pills must be taken very diligently: Taking the pills in the wrong order can disrupt the contraceptive effect.



› SAFETY: Today it is normal to begin taking the pills on the first day of the menstrual cycle. This guarantees that the contraceptive effect is present from the very first day onward. It also provides protection even during the week-long period of bleeding. If a pill is forgotten, there is no danger of pregnancy as long as the forgotten pill is taken within 12 hours. A missed minipill, on the other hand, has to be taken within the next 2 hours to still be effective. In either case, the row of pills is then continued without interruption. However, that should not happen all too often, and if it does then some additional form of contraception such as a condom should be used for the next week or so until the hormone concentration has once again been established at a level necessary to prevent conception. Problems can also occur when the woman is simultaneously taking other medicines, such as laxatives, antibiotics, pain pills or tranquilizers, antiinflammatory drugs, St. John's wort, etc.) or when a bout of stomach flu with vomiting and diarrhea has been experienced. To avoid unwanted pregnancy, experience shows that it is best to use an additional contraceptive (e.g., a condom) in such cases for up to 7 days after their completion.

When going on vacation, particularly if jetlag is involved, discuss the proper use of the pill in advance with your gynecologist.

It is generally not recommended that a woman stop taking the pill periodically to check whether her cycle is functioning normally. This only serves to confuse the entire hormonal system. Even after having taken the pill for extended periods of time a woman should have no problem subsequently getting pregnant by choice. In some cases, however, it can take up to 6 months for the body to return to its normal rhythm and experience ovulation.

+ BENEFITS: By taking the pill a woman can feel relatively safe and protected from getting pregnant. This contraceptive method is especially well suited for girls and young women who want to prevent their getting pregnant under all circumstances. Women taking the pill have somewhat shorter and less intense periods than normal. Many girls and young women also get very clear skin while taking the pill. Scientific studies have also shown that the pill protects against certain types of cancer (particularly of the uterus and ovaries).

In Germany women up through the age of 20 who are insured by the statutory health insurance have the right to receive the pill free of charge. Besides paying a prescription fee from age 18 on, however, they may have to make copayments if the price of the particular pill prescribed is higher than the standard fixed sum allotted.

New studies reveal that women over 35 also can safely take the pill as long as they are healthy, do not smoke and use the low-dose types.

− DISADVANTAGES: The contraceptive pill is a high-potency drug. Even if it has been constantly improved over the past years, it can still have adverse side effects, such as nausea with vomiting, weight gain, lack of sexual interest, spotting, mood swings and a feeling of tenderness in the breasts. In rare situations more dangerous side effects have been reported. For example, after early and extended use of the pill a woman's risk of getting breast cancer increases slightly. Further, the pill can, under some circumstances, pose a danger to a woman's cardiovascular system. For this reason, it should be taken only by healthy women and must be prescribed by a doctor. The pill is not an

appropriate method of contraception in the presence of certain liver conditions as well as with an inclination toward thromboses (forming of blood clots inside the blood vessels, usually in the legs or pelvic area). In women with diabetes each case must be decided on its own merit. In any case women taking the pill should not smoke under any circumstances. And women with an increased risk of developing thrombosis or who are taking hormonal contraception for the first time should consult their doctor about the method best suited for them.

A higher risk of thrombosis is present in:

- Smokers
- Women who have a history of thrombosis in the family (parents, siblings)
- Women who have already experienced thrombosis or suffer from varicose veins
- Women who are very overweight (obesity)
- Women who have just given birth
- Women who suffer from a congenital lack of the proteins C and S.

Women taking the pill should be aware that there is a slightly higher risk of thrombosis during the first year. How high the risk is depends on the amount of estrogen and the type of gestagen in the pill one is taking. Yet the overall risk for the formation of dangerous blood clots is low. For women who have taken the pill for a longer period of time and have experienced no side effects, there is no reason to stop its use. They should speak with their physician about how best to lower their risk. The most important thing is to have an honest conversation and to determine together which sort of pill is best suited for them. For this reason, prescription of the pill is allowed only after a consultation (or sometimes even an examination) by a gynecologist and should be followed up every six months by a control visit. If these safety precautions are attended to, there is generally no reason to worry. Some women experience the daily routine of having to remember to swallow the pill as negative. At first the body has to get used to the hormones. With the low-dosage combinations available today some spotting may occur at the beginning, but it does not affect the contraceptive safety and generally disappears after about 1–2 months. Some women taking the pill experience an increase in yeast infections and weight gain. If this is the case or if any other irregularities occur, a doctor should

be consulted. Sometimes it suffices to change the particular type or brand of pill being taken.

Read carefully the package leaflet or instructions provided by the doctor/pharmacy, which also include detailed information on what side effects may occur with the respective pill. In any case, if she experiences discomforts, a woman should not make any spontaneous decisions: If she stops taking the pill without setting up some other additional means of contraception she is risking getting pregnant. And postponing one's period indefinitely by simply continuing to take the pill without interruption should be done only in exceptional cases, as such irregularities can overtax one's body and cycle considerably.

The **minipill**

› EFFECTS/USE: The minipill contains only gestagen, which has the effect of preventing the proper build-up of the uterus lining and thickens the cervical mucous. In many women it also prevents ovulation altogether.

The minipill must be taken every day at the same exact time, without interruption. If it is taken more than 2 hours after this time, its contraceptive effect can no longer be guaranteed. In the compound mentioned below with desogestrel, intake can be delayed for up to 12 hours.

› SAFETY: The minipill does not have the triple-action effect of the other types of contraceptive pill, i.e., it generally does not prevent ovulation. For this reason, its safety is not considered as high as the other combination pills.

BENEFITS: The minipill has fewer side effects than the combination pill, but its reliability is not as high since it does not always prevent ovulation. Women who are nursing a child and want to take precautions on a hormonal basis are often prescribed the minipill, since the normal pill would cause the baby to absorb too many hormones. Also the presense of estrogen might reduce the amount of milk the mother's body produces.

DISADVANTAGES: The minipill very often leads to spotting and irregularities in a woman's overall cycle. For this reason it is generally prescribed only in special cases, e.g., for women who do not tolerate estrogen very well. Because it has to be taken very precisely, it demands a disciplined regimen from its user, which is not always easy in daily life.

The **new minipill**

The new minipill contains a low dose of the gestagen desogestrel, which has a three-pronged effect: It prevents ovulation, it prevents the proper build-up of the uterus lining, and it thickens the cervical mucous, thereby reducing the ability of sperm cells to reach the uterus. It is generally considered very safe, comparable to the combination pills. The contraceptive effect of the new minipill is not reduced if taken no more than 12 hours late.

The **condom**

Before the introduction of the pill and IUD, the condom was the most widely used type of contraception. Today it has once again taken second place on the list, especially because of its ability to protect against HIV infection and to reduce the risk of infection from other sexually transmitted diseases (STDs).
Like the femidom, the condom is the only contraceptive that can prevent infection stemming from an STD and protect against an unwanted pregnancy. For persons starting sexual contact with a new partner or for someone with multiple partners the condom is still the ideal method of preventing pregnancy and lowering the risk of becoming infected with HIV or STDs.

› EFFECTS/USE: Use of the condom is easy to understand but does need some practice. The closed rubber-tube-like device is closed at one end and is rolled over the erect penis so that semen can be stored at the end and does not come into contact with the woman's vagina, thus preventing insemination (if used properly, of course). The penis and the vagina have no direct contact with each other. This is how the condom lowers the risk of infection from nearly all STDs.

› SAFETY: The contraceptive efficacy depends greatly on proper handling. Proper use of a condom should be practiced in advance to prevent errors from occurring in the heat of the moment.

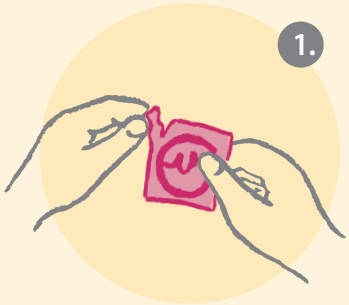
The most common errors are as follows:

- Wrong-sized condom: Condoms that are too small can break or burst; condoms that are too large can easily slip off during sex and land in the vagina or rectum.
- Damage to the condom: usually upon opening the package with scissors or sharp nails, etc.
- Slipping the condom on too vigorously: it should be rolled onto the penis carefully.
- Putting the condom on wrong: the rolled-up part should lie on the outside and not on the inside. If you discover this, don't turn it over and reuse it!
- Putting the condom on without pressing out the air: leave enough space at the tip for the semen.
- Poor hold or fit: the condom can slide off when the penis is withdrawn from the vagina.
- Using condoms together with substances that contain fat or oils (e.g., lotions, cremes, vaseline, medicines or salves for the genital area) to ensure lubrication: These can damage the condom and make it permeable for sperm. Always use only water-soluble lubricatives, available in pharmacies or drug stores.

Used properly, however, the condom is a very safe method of contraception. These errors can easily be avoided if one attends to a few basic rules.

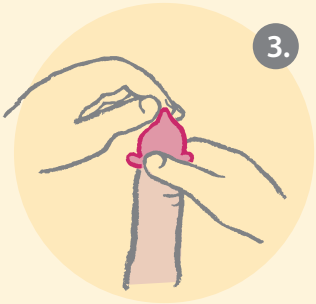
› USING A CONDOM

The condom must be rolled over the erect penis at the proper moment: before it comes into contact with the vagina! There is otherwise always the danger of the presence of some sperm cells reaching the vagina before actual ejaculation.

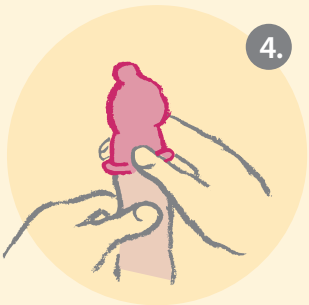


Carefully open the package.

Pull back the foreskin, inasmuch as present.

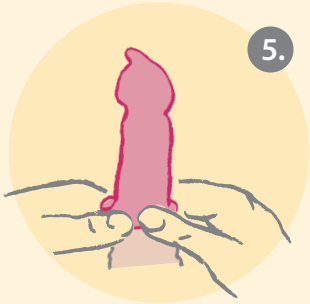


Take the tip of the condom between the index finger and the thumb in order force out any air and to make room to collect the semen. Then place the still rolled-up condom on the tip of the penis with the rolled-up part on the outside. If the condom is initially put on incorrectly, with the rolled-up part on the inside, then a new one must be used as the old one could already be contaminated with semen.



Carefully unroll the condom with one hand all the way down to the base of the penis.

Continue to hold on to the top part of the condom with the other hand. The condom should unroll easily. If that is not the case, use the proper size or form. Never tug on the condom!



The tip of the condom with the reservoir for the semen should not sit too tightly, leaving enough space for the semen.

After ejaculating do not wait for the penis to become limp once again, but hold onto the condom at the base of the penis (so that it can't slip off) and carefully pull the penis out of the woman's vagina.

After slipping the condom off the penis, remember there can be semen on the fingers or the hand. **No semen must be allowed to make its way into the vagina if fertilization is to be prevented!**

If the condom should manage to slip off unexpectedly or tear, the woman should go to her gynecologist or to a counseling center as soon as possible to check whether fertilization has taken place and whether the so-called "morning-after pill" can be used (➔ see p. 70).

If an HIV infection in one's partner cannot be excluded, there are some measures that can be implemented to reduce the risk of becoming infected oneself. Examples are showering off the penis (pull the foreskin back completely), urinating and forcing the sperm out of the vagina or rectum. Internally flushing the vagina or rectum is not recommended as the risk of infection is increased by possible small injuries. Following oral sex, any infected semen should be spit out immediately and the mouth disinfected with high-proof alcohol of some sort. Do not brush the teeth! If there is an imminent danger of infection with HIV (e.g., if you are certain your partner is a carryier of HIV), go as soon as possible to your physician or to a counseling center (AIDS center) to be counseled about being treated with high-potency drugs (so-called PEP).

What else to watch out for:

- Use only quality condoms from well-known manufacturers with a seal of quality (e.g., in Europe the CE label with the number of a certified testing center). Condoms also generally have an expiration date printed on them. These measures guarantee a high level of safety.
- When on vacation, take enough high-quality condoms along with you since the ones you find away from home may not have the same high quality you're used to.
- Condoms do not tolerate heat very well. Don't let them lie around in the sun.
- Always check the expiration date before using. Condoms are usually good for about 4–5 years.
- Don't store condoms where they can be damaged – in pockets, purses, cosmetic bags, etc.
- Condoms are meant to be used only once. Used condoms belong in the waste basket, not in the toilet.

BENEFITS: Condoms protect not only against unintentional pregnancy, they are also the only contraceptive to offer effective protection against sexually transmitted diseases such as HIV. With a little practice they are easy to use and can be readily purchased most everywhere.

The condom also does no damage to the body, and it has no side effects or after effects. Even in the rare case of an allergy to the latex in the condom, one can purchase special condoms made of polyurethane in drug stores and pharmacies which have no known allergenic properties. Further, condoms must be used only when intercourse actually takes place – and it is the only form of contraception employed solely by the man, who can in this way actively participate in a couple's contraceptive efforts. For both men and women with several simultanous relationships the condom offers important protection against sexually transmitted infections. In couples that have a relaxed and open sex life with each other, one can even make the use of condoms part of the foreplay and not experience it as an interruption to one's desires.

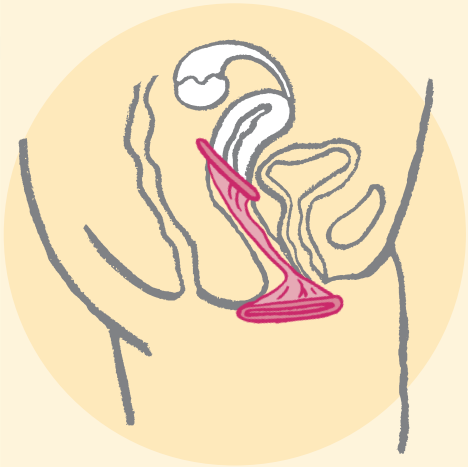
DISADVANTAGES: The condom must actually be used in intimate situations! Left in your purse or pocket it is of no use to anyone and does not prevent pregnancy. If you tend to forget about birth control during sex, then another method may be better suited for you.
Especially when you are just getting to know someone can it be awkward to have to talk about using a condom. Women who rely on condoms are depending on the man taking and accepting responsibility.

Not everyone is comfortable demanding the use of a condom – but that is your right! It is not a token of your love to fail to protect yourself against an infection.

A note:
A major factor in the safety offered by a condom is picking the right size for your own pesonal needs. Particularly adolescents are not served well with the standard sizes available. If you need more information on the proper size and fit of condoms, go to the website **www.kondometer.de**

Another note:
There is also an anonymous hotline available from the BZgA (German Federal Centre for Health Education), daily from 10 a.m. under the number **01805-555444** (EUR 0.14/minute from a landline, max. EUR 0.42 from a cell phone). It can answer all your questions concerning HIV/Aids, safer sex and other sexual matters of interest.

Injectable contraception for the man: The research on a hormonal means of contraception for males was stopped in 2007, so that it will presumably not become available any time in the near future.



Using the female condom

The Female condom (Femidom)

In Germany at least the condom for females is not easy to come by in supermarkets and drug stores. It is, however, available under various labels in pharmacies and on the internet. A prescription is not necessary.

› EFFECTS/USE: The female condom consists of a plastic sheath connected to flexible rings at each end, each of which looks like a diaphragm (➔ p. 38). One ring is inserted into the vagina and held tight between the pubis (pubic bone) and the rear part of the vagina (the co-called vaginal vault) so that it completely covers the cervix. The other ring remains on the outside of the vagina over the labia (lips of the vulva), which keeps it from slipping into the vagina. This "pipe"-like construction is covered on both the inside and outside with lubricant. The female condom stops any sperm from entering the cervix and going into the uterus.

› SAFETY: Used properly, the female condom is just as effective as the male condom.

BENEFITS: Although the male condom offers good protection again sexually transmitted infections, the female condom offers the woman a way of protecting herself if her partner does not want to or fails to use a condom. Like the male condom, the female condom is the only means of contraception that protects against infection from sexually transmitted diseases including HIV/Aids. It can be inserted before the act of intercourse begins.

DISADVANTAGES: Proper use of the female condom requires inserting two rings to exactly the proper position, which is not easy at first. Like the male condom, it can be used only once. The female condom is available on the internet under various different names and from different makers.

The copper coil (IUD)

› EFFECTS/USE Why this intrauterine device works as it does is not completely understood. The copper apparently changes the nature of the mucous around the cervix and in the uterus.

The spiral itself is made of plastic. With the exception of the hormone spiral (➔ p. 31) the shaft of the spiral is always wrapped with a very thin copper coil. This means of contraception, also called an IUD, is manufactured in several different forms and sizes (ca. 2.5–3.5 cm). An IUD must be inserted by a gynecologist through the cervix and into the uterus. The best time to do so is in the last few days of the woman's period, which also reduces the risk of inserting an IUD when the woman is already pregnant. The gynecologist checks the position immediately, and regular checkups using ultrasound should be carried out every 6 months. Whether one's health insurance pays for these visits varies. One can test the proper position by checking after one's period has passed that the safety thread of the spiral, which hangs out of the cervix by about 2 cm, is still there.

› SAFETY The IUD is a very safe means of contraception. The only drawback is the somewhat higher rate of rejection in some women who have yet to bear a child, which of course can translate into a higher failure rate.

BENEFITS: As long as the IUD has been properly fitted in the woman's uterus, she basically doesn't have to worry about getting pregnant any more. Modern IUDs have to be replaced only every 5 years or so. Most women consider it a major advantage of the IUD that they continue to experience their normal menstrual cycle. Especially women who have already given birth experience few problems with the IUD.

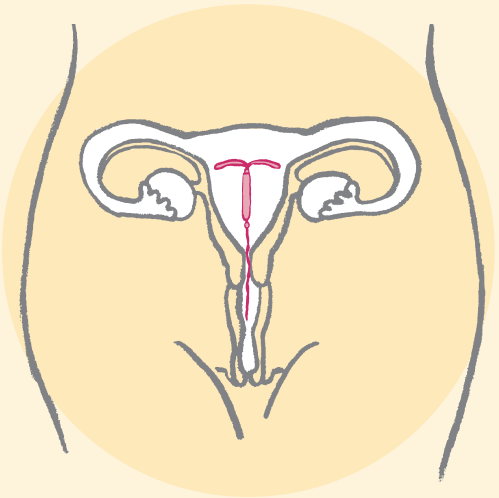
DISADVANTAGES: In some women the IUD can cause very heavy menstrual bleeding and menstrual cramps. This may be a hint that the coil is not (or no longer) properly positioned. When this occurs, the woman should go to her gynecologist to have it checked. At the

very beginning the IUD is sometimes washed out with the menstrual blood – which is why one should periodically check for the presence of the safety thread and have it controlled regularly by a gynecologist.

Especially young girls and women have a higher risk of pelvic infection in the first few months, which is increased if they have multiple sexual partners. This risk can be reduced by ensuring that no infections, particularly with chlamydia or gonorrhea, are present at the cervix when inserting the coil the first time.

If the women does get pregnant despite having used an IUD, tubal pregnancies (aka ectopic pregnancy, where the egg is fertilized outside the uterus) may occur more frequently. Thus, if a woman with an IUD does become pregnant, she should have her gynecologist exclude the possibility of a tubal pregnancy. If the pregancy is normal, however, then the coil should still be removed since it can otherwise cause an infection over the course of the pregnancy. Although miscarriage occurs when the coil is removed in one-fifth of all cases, the danger of miscarriage is even larger if the coil is not removed. There is, however, no greater risk of the child having a birth defect: Children born to mothers with intact IUDs are usually healthy.

Women who have yet to give birth should weigh the pros and cons of using the IUD as means of contraception, also with an eye toward ensuring later fertility.



The hormone IUD

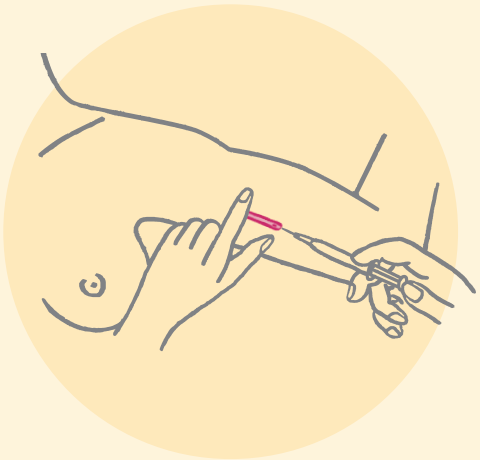
› EFFECTS/USE: The hormone IUD (also called intrauterine system, IUS, or intrauterine contraceptive, IUC) is an IUD outfitted with a small hormone depot that releases the hormone called levonorgestrel. This sort of IUD makes the mucous around the cervix thicker and thus impassable for sperm during ovulation. Should sperm cells nevertheless get through, they are generally inhibited in their movement. The hormone IUD also inhibits the proper buildup of the uterus lining, thus stopping any ferilized egg from nesting in the uterus. The hormone IUD can be left in place for up to 5 years. As with the normal IUD, it has to be inserted by a gynecologist.

› SAFETY: Research studies show that the hormone IUD has a very high rate of safety (and thus a low rate of failure).

BENEFITS: The benefits are the same as with the normal copper IUD. One advantage of the hormone IUD lies in reduced bleeding in women who normally have very heavy menstrual bleeding. Up to 50% of women with a hormone IUD stop having a period altogether after a few months' time.

DISADVANTAGES: Women with a hormone IUD usually experience irregular periods over long periods of time. Especially during the first few months after insertion can spotting, headaches, tenderness in the breasts, mood swings and sometimes acne occur, though these side effects usually disappear after a while. In some women periods stop occurring altogether.

The hormone IUD too can lead to pelvic infections or perforations of the uterus. Other risks include a higher risk of breast cancer as well as ectopic pregnancy once the IUD has been inserted. Before having this IUD inserted, women must sign a written release saying that they have been informed about the risks and are agreed to having it inserted. Since the tube used to insert this sort of IUD is somewhat larger than with other IUDs, the procedure is overall somewhat more difficult. Especially in very young women who have yet to give birth insertion may be more complicated since the coil is thicker than the copper coil and may make dilation of the cervix necessary. For women who have not yet given birth the hormone IUD is not the method of choice and should be considered only when all other reliable methods have been exhausted.



The **hormone implant**

› EFFECTS/USE: The hormone implant is a small rod that is inserted by specially trained gynecologists under the skin of a woman's inside upper arm. Small amounts of gestagen are delivered to the body which prevent pregnancy from occurring for a period of up to 3 years. The gestagen stops ovulation and also induces changes to the mucous lining around the cervix and in the uterus. This rod, called Implanon, can be implanted between the first and the fifth day of the woman's menstrual cycle and later removed at any point in time. The hormonal agent is immediately active, and after removal thereof fertility is reestablished very quickly. This type of contraception is appropriate for women of all ages, though to date studies have been carried out only on women aged 18 thorugh 45. Cases of improper implantation have led to unwanted pregnancies. Thus, it is paramount that the gynecologist regularly control the proper position of the implant.

› SAFETY: The safety of the hormone implant is very high.

BENEFITS: For women who shun regularly taking the pill or using other means of contraception this method can be a viable alternative as it requires no further effort on the part of the recipient.

DISADVANTAGES: Some side effects, such as acne, headaches, tenderness in the breasts, depression and weight gain, can occur very often, i.e., in more than 10% of all users. Most women also experience longer lasting or frequent bleeding while using the implant. In other women menstrual bleeding becomes seldom or is absent altogether (in about 5% of the users). Especially for younger girls this can be unnerving. Having the implant removed after less than 3 years also renders it a very expensive method of contraception.

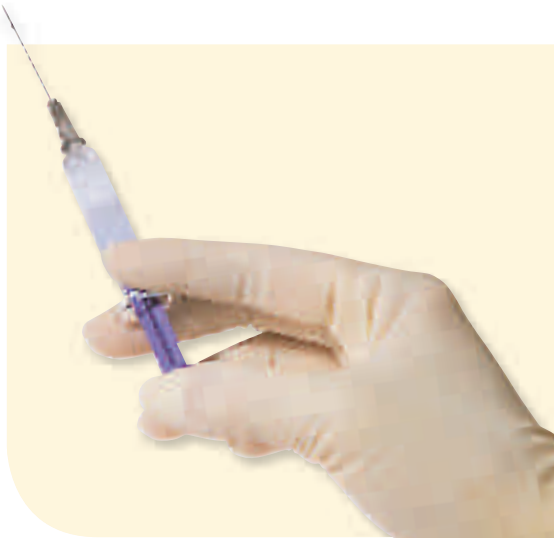
The three-month depot

› EFFECTS/USE: This method consists of injecting a long-acting hormone (gestagen) into the gluteal muscle (buttocks). It works by inhibiting ovulation and must be repeated every 3 months. This method should be used only by women who do not tolerate other drug-based methods. And it is appropriate only for women with a regular menstrual cycle.

› SAFETY: The safety of the three-month depot injection is very high.

BENEFITS: Women who prefer not to have to constantly think about contraception receive a high level of safety with this solution. This injection has also proved advantageous in women who do not tolerate other hormonal contraceptives because of certain illnesses (such as sickel-cell anemia).

DISADVANTAGES: Side effects such as spotting or intermenstrual bleeding occur relatively often. Also common are headaches, nervousness, vertigo, depression, acne, temporary nausea and high weight gain. Studies have shown that using this method over a longer period of time can also lead to loss of bone density. The latter risk is highest among women from 18 to 21 years of age. After the last shot has been given it lasts a long time, sometimes up to an entire year, before the woman's menstrual cycle becomes normal again and fertility returns. This method is not appropriate for women who cannot commit for such a long time.



The vaginal ring

This method of contraception consists of a plastic ring containing a low dose of a combination of estrogen and gestagen which must be prescribed by a physician. It is a "one-size-fits-all" solution.

› EFFECTS/USE: The vaginal ring has the same efficacy as the contraceptive pill. The hormones emitted hinder ovulation as well as change the consistency of the mucous at the cervix, thus preventing sperm from entering. The hormones are absorbed by the lining of the uterus.

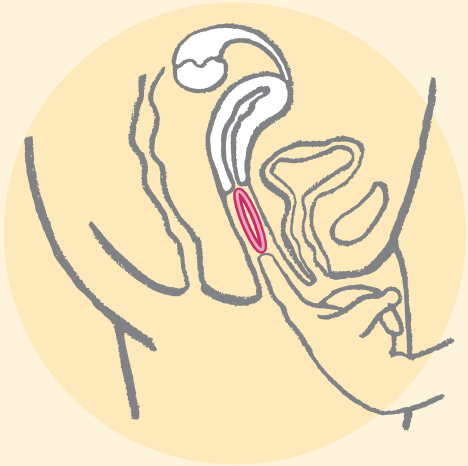
The ring is inserted into the vagina by the woman herself between the first and the fifth day of her menstrual cycle. During the initial 7 days after insertion an additional means of contraception should be employed, e.g., a condom. If a hormonal contraceptive such as the pill was previously in use, the optimal time for inserting the ring should be determined together with a gynecologist, since there are different brands available. After inserting the ring (while lying down or standing up), one can leave the ring in place for the coming 3 weeks, after which it must be removed. After a further week's time, during which the normal period occurs (after about 3 days' wait), a new ring is inserted, even if menstrual bleeding has not yet subsided.

Protection against unwanted pregnancy is also present during the "ring-free" days.

The ring should always be inserted every month on the same day of the week and at the same time. For example, if the ring is inserted on a Sunday at 9 p.m., then it should be removed exactly 3 weeks later on a Sunday at 9 p.m. and after 7 days' time a new ring inserted on Sunday at 9 p.m. Like a tampon, it is inserted into the vagina and pushed up as far as it will go. It makes no difference exactly where in the vagina the ring is placed: The contraceptive effect is the same everywhere. Of course, it should not be a nuisance to the woman and her partner. To remove the ring, the woman puts her finger in her vagina, catches the lower part of the ring and pulls it out.

Should the ring slip out of the vagina by accident during intercourse or when removing a tampon, it can be reinserted within the next 3 hours without any negative effects. The vaginal ring

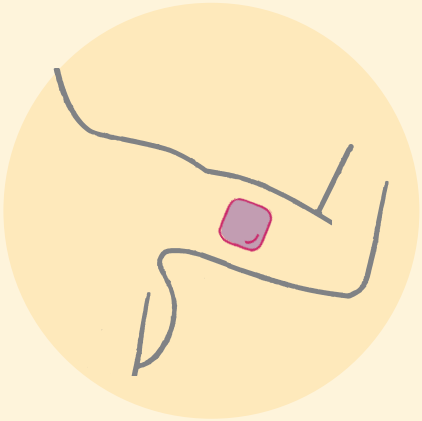
can be washed off with luke-warm water, but should not come into contact with soap or disinfectants of any kind. When kept at room temperatures not exceeding 30 °C it has a shelf-life of about 4 months after being bought in the pharmacy. Should yeast infections incur, speak with your gynecologist since some antifungal ingredients may counteract the contraceptive effects of the ring. In cases of severe descensus of the vagina the ring is not an appropriate method.



› SAFETY: Previous studies have demonstrated a very high level of contraceptive safety, comparable to that of the contraceptive pill.

+ BENEFITS: The vaginal ring is easy to use. Women can insert it and remove it themselves and thus need not consult a gynecologist. Once is has been inserted, contraception is no longer a worry – something that is of great value especially for women who have trouble sticking to an exact schedule. Also, stomach ailments of all kinds as well as vomiting and diarrhea do not affect the contraceptive efficacy of the vaginal ring. Other medical reasons for using the vaginal ring include eating disorders such as bulimia or intestinal disorders where the absorption of hormones in pill form is not guaranteed.

– DISADVANTAGES: The most common side effects of the vaginal ring are headaches, vaginitis (inflammation of the vagina) and vaginal discharge. Mood swings, intestinal pain, nausea, tension or tenderness in the breasts, painful menstural periods and acne have also been observed. It is presently unknown how the vaginal ring compares to the contraceptive pill with respect to the development of thromboembolism. As with the pill, the simultaneous use of antibiotics (with the exception of amoxicillin and doxycycline), antiepileptic drugs and St. John's wort may lead to a reduced efficacy. In such cases additional (mechanical) means of contraception such as a condom should be employed during their intake and in the 7 days following ingestion. Women who cannot take the pill for medical reasons (➔ p. 22) should also not use the vaginal ring.



The contraceptive patch can be applied to the skin of the upper arms, buttocks, stomach or anywhere else on the body except the breasts.

The contraceptive patch

This transdermal, skin-colored patch must be prescribed by a physician. It contains a combination of estrogen and gestagen and can be applied to the skin of the upper arms, buttocks, stomach or anywhere else on the body with the exception of the breasts.

› EFFECTS/USE: The principle behind this means of contraception is similar to that of other hormonal contraceptives such as the pill. The patch is applied on the first day of the menstrual cycle to a clean, dry and healthy spot of the body (i.e., not to reddened or damaged skin). When switching from one hormonal method to another, one should talk to a gynecologist to select an optimal time for changing over. The patch is pressed firmly to the skin until the edges adhere well, where it remains for the next week. To ensure that the patch is adhering to the skin, it should be checked every day. The patch is then removed and replaced on every 8th and 15th day of the menstrual cycle. The time of day is not important, but one should take care that the patch is always placed at a different spot every time. It can be applied to skin of the upper arms, buttocks, stomach or anywhere else on the body with the exception of the breasts. To ensure proper adhesion, do not use creams, lotions, makeup or other cosmetics near the patch.

On the 22nd day of the menstrual cycle no patch is applied, triggering a normal menstrual period. After another week's time a new patch is applied (even if no bleeding has occurred or even if menstrual bleeding is still in progress), and the process begins anew. If you forget to change the patch on the designated "patch day," this can be remedied within 48 hours. However, a pause of more than 7 days means losing the contraceptive effect, and some other (nonhormonal!) means of contraception must be added, for example, a condom. Studies have shown that the patches remain intact and safe even when swimming, going to the sauna, during sport activities or under other circumstances. However, should the patch lose its adhesion or come off completely, it should not be re-applied. The contraceptive effect is still in force for about 24 hours, in which

time a new patch can be applied. Only one patch should be applied at any given time.

› SAFETY: Studies have reported a very high contraceptive safety for the patch, albeit only for women between the ages of 18 and 45. Efficacy is not guaranteed for women who weigh more than 90 kg.

BENEFITS: The patch is easy to apply and causes no discomfort. It is one of the safest means of contraception available. The hormones in the patch go directly through the skin into the bloodstream and thus pose less of a threat to the liver than other hormonal methods. Problems such as vomiting or diarrhea have no influence on its efficacy as contraception. Simultaneous medical disorders such as eating disorders, particularly bulimia and chronic intestinal disorders, where hormonal update is not guaranteed, are of no consequence here.

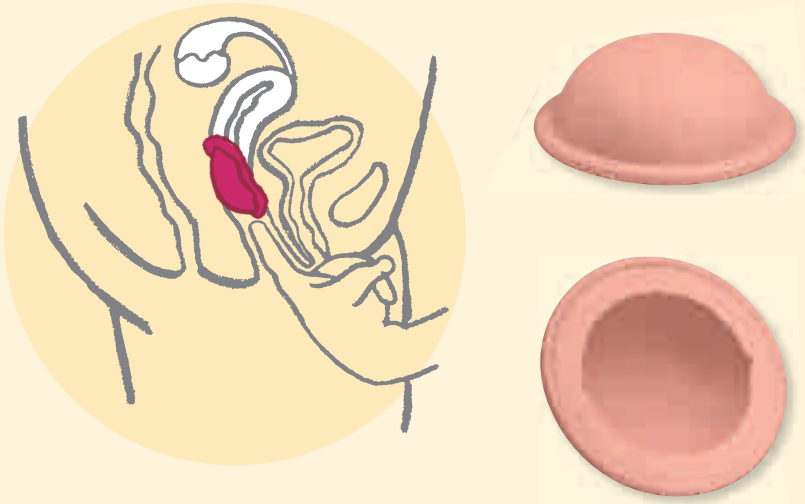
DISADVANTAGES: As with other hormonal contraceptives that combine different ingredients irregular bleeding can occur here too. The most common side effects in clinical studies include tenderness in the breasts, headaches, local skin reactions to the patch and nausea. The patch should not be used with past or present venous or arterial thromboses, with abnormal vaginal bleeding (e.g., spotting between periods, very strong or very long menstrual bleeding) that has not been diagnosed by a gynecologist, with existing or presumed breast cancer, with migrane headaches with focal aura, with liver diseases or with hypersensitivity toward the ingredients in the patch. Data from newer studies (as of 2011) have confirmed that this method has a higher risk of venous and arterial thrombosis compared to pills containing levonorgestrel. Read the package insert carefully before applying the patch.

As with the pill, the simultaneous use of antibiotics, antiepileptic drugs and St. John's wort may lead to a reduced efficacy.

The **diaphragm**

The diaphragm looks like a small plastic dome. It consists of a round spring molded into the rim and covered with latex or silicone. Nine different sizes are available. The diaphragm must be fitted by a health-care professional in the doctor's office, a family-planning center or (sometimes) in counseling services. The perfectly sized diaphragm is one that is large enough to cover the entire cervix but goes unnoticed and causes no discomfort. Size is important because a woman's vagina dilates somewhat during sexual arousal. The proper position of the diaphragm should be checked with the fingers every time it is inserted by ensuring that one can feel the cervix through the diaphragm.

› EFFECTS/USE: The diaphragm prevents the egg and sperm from coming together by blocking entry of the sperm to the uterus. In addition to the mechanical seal, additional protection is afforded by use of a spermicidal jelly with the ingredient nonoxynol-9, which kills any stray sperm. There is also a jelly available that consists of all-natural ingredients produced from lactic or citric acid (and not nonoxynol-9) which only inhibits the sperm and forms an additional mechanical barrier to the cervix, while being less harmful to the woman's health. Whatever jelly is used, it should be put on the side of the diaphragm that faces the cervix. Also the inner rim should be smeared with jelly. In this way, the entire cervix – and thus "access" to the uterus – is doubly protected. The diaphragm (and the jelly) should be inserted into the vagina and placed over the cervix not more than 1–2 hours before intercourse, preferably immediately before sexual activity.



Using the diaphragm

› SAFETY: Properly used the diaphragm is a safe method of contraception, as safe in fact as the condom. The level of safety depends greatly on using the proper size, on properly inserting and positioning the diaphragm. The best approach is to practice inserting the diaphragm at the doctor's or counseling office. The diaphragm must completely cover the area from the rear vaginal vault to the glen of the pelvis bone. One should be able to feel the cervix through the inserted diaphragm. No more than 2 hours should elapse between insertion and intercourse. After intercourse the diaphragm can remain in the vagina for up to 6 hours (that's how long the sperm can survive), but should be removed at the latest after 24 hours.

After a weight change of more than 5 kg or after giving birth one should have the size of the diaphragm checked and if necessary adapted to the new conditions. Many women who are feel uncertain about using a diaphragm employ, at least at the beginning, other forms of contraception until they have gathered enough experience to feel safe. The diaphragm demands a certain amount of care to remain clean and ready for the next time to be used. After removal it should be washed off with warm water, carefully dried and treated with corn or potato starch to keep it dry. A diaphragm should be replaced every 2 years.

BENEFITS: One only needs to use the diaphragm when actually having intercourse. Thus, it is a good method for women who do not have frequent sex. It is relatively inexpensive and does not harm the body in any way. Some women feel using the diaphragm is a boon to their better getting to know their own bodies.

DISADVANTAGES: Proper use of the diaphragm must be practiced. The woman must learn to examine herself and her anatomy and be able to feel her cervix and properly insert the diaphragm over the entire cervix. Only then is the contraceptive effect guaranteed. Some couples, however, complain that having to insert the diaphragm limits their sexual freedom and spontaneity.

Studies show that women who use the diaphragm have fewer urinary tract infections.

In some cases, the spermicidal jelly used can cause a burning sensation on the tip of the penis. Try out a different product.

The cervical cap (aka Lea's Shield®)

Using the cervical cap

The cervical cap is a contraceptive barrier device about the size of a small saucer.

› EFFECTS/USE: Like the diaphragm the cervical cap is inserted through the vagina and placed in front of the cervix. Its level of safety can be increased by using a spermicidal jelly. An additional valve on the side allows cervical mucous and menstrual blood to flow off, protecting the natural vaginal flora. The integrated control loop also means it can easily be removed.

After intercourse it should remain in the vagina for at least 8 hours.

The vaginal cap is available as one-size-fits-all since it automatically adapts (through surface tension) to the cervix. It can be purchased in a pharmacy, generally without a prescription.

› SAFETY: This type of contraceptive device is not very widespread, although users report high acceptance. The level of safety is considered comparable to that of the condom and the diaphragm, though to date no scientific data are available to support this claim.

BENEFITS: The cervical cap must not be individually fitted, but rather is available in a universal size that covers the cervix due to its overall size and form. The control loop makes it easy to remove from the vagina, and the built-in valve means it can remain in the vagina for up to 48 hours after intercourse. This provides couples with somewhat greater spontaneity than with the diaphragm.

DISADVANTAGES: The vaginal cap must be replaced after no more than 12 months since it often becomes discolored and takes on an unpleasant scent. This of course makes it overall more expensive to use than the diaphragm.

The **FemCap™**

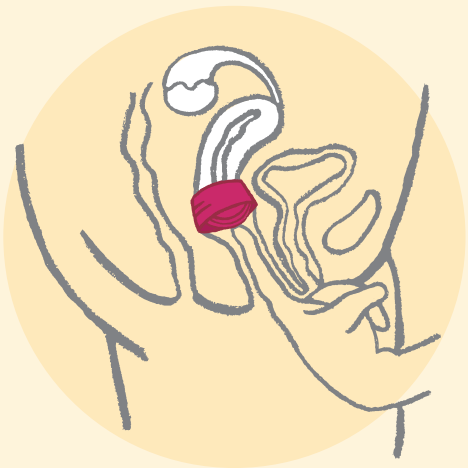
The FemCap is a further development of the classical cervical barriers that are no longer available. This sort of cap consists of a brim, a cap made of silicone and a circular recess inbetween. This cap, which is available in three different sizes, has a loop attached for quickly removing it from the vagina.

› EFFECTS/USE: Like the diaphragm, the FemCap is inserted into the vagina and put directly over the cervix. It comes to lie against the vaginal wall. A spermicidal jelly is always used in conjunction with the FemCap. About a half teaspoon of jelly is put into the inner cap and a half teaspoon in the recess facing the cervix. The FemCap should remain in the vagina for at least 6 hours after intercourse, but should then be removed no later than 48 hours following intercourse. The level of contraceptive safety may be increased if the cap is inserted only shortly before intercourse commences.

› SAFETY: The FemCap should be fitted by a competent healthcare professional. Like the other barrier methods, it too can slip off position during intercourse, so that a definitive safety prognosis cannot be made: Its safety depends greatly on the reliability of its use.

+ BENEFITS: One only needs to use the FemCap when having intercourse, leaving the woman's hormonal situation untouched. Because it is made of silicone, women with a known allergic reaction to latex can use it safely.

– DISADVANTAGES: Some women's vaginal mucous membranes may be irritated by the jelly used. In this case, try switching to another brand. Proper use of the FemCap demands some previous practice.



Using the FemCap™

Natural family planning (NFP)

SYMPTOTHERMAL METHOD

The symptothermal method has two duties to fulfill: It reveals the days of the menstrual cycle on which the woman is fertile in order (1) to help the couple to achieve fertilization and have a child or (2) to prevent fertilization by showing when they must use some form of contraception. This put great demands on both the man and the woman.

More so than with any other method of contraception with NFP the woman is dependent on involvement and responsibility being shown by her partner: Both persons must exhibit high constraint on the fertile days and resort to sexual practices that exclude conception, such as petting or masturbation, or other methods of contraception, such as condoms. The idea behind this form of contraception is to observe various physical characteristics (temperature, mucous, state of cervix) in order to determine the woman's fertile days during a menstrual cycle and to avoid allowing sperm to enter the vagina on these days by using other methods of contraception (e.g., a condom). Although the woman is fertile on only about 6–7 days of her cycle, there is no exact scientific method available to determine that period with absolute sureness. The symptotheramal methods described here can at least reduce that window to 12–14 days of the cyle – assuming the woman's cycle is regular.

The symptothermal method depends on determining at least two different physical characteristics: basal body temperature and the state of the vaginal or cervical mucous. Observation of the mucous membranes serves to indicate when ovulation is taking place, and recording the basal temperature curve to indicate when ovulation has been completed. Observing other physical signs, such as the state of the cervix or the cervical os, can increase the reliability of one's conclusions. The symptothermal method, however, must be trained: The learning phase lasts up to three menstrual cycles and thus demands considerable motivation on the part of the couple. The descriptions given of this method can provide only a rough sketch of how it works and do not suffice to carry through with it. Much additional informational material or direct counseling is necessary to this end.

BASAL TEMPERATURE METHOD

Such information can be obtained in the respective counseling centers. Providers of such services often offer courses to learn the method (see p. 91). In addition, the Swiss SymptoTherm Foundation and the Maltese Work Group NFP (Kalker Hauptstraße 22–24, D-51103 Cologne, www.natuerliche-familienplanung.de) offer introductory courses and further brochures on this theme.

Note: Examples of how to fill out temperature and mucous state curves are given on p. 47. An empty curve to fill out yourself is available on the internet at www.familienplanung.de/tabellen. Tables in various languages may be found under the address www.nfp-online.de.

Taking the morning temperature

The basal temperature upon awakening in the morning is somewhat lower during the first half of the menstrual cycle - from the beginning of the woman's period up to probable ovulation - than in the second half of the cycle. Following ovulation it then rises by about 2/10 of a degree centigrade and remains so until the menstrual cycle ends with the first bleeding. The temperature is taken directly after awakening and before getting up. The woman should have slept at least 1 hour before checking her temperature. Temperature can be taken in the mouth, in the vagina or anus; the important thing is that it always be taken at the same place. A simple glass thermometer suffices and is usually more accurate than a digital thermometer, though the latter have the advantage of being quicker.

A number of factors can lead to measuring too high temperatures: measuring too late, previous alcohol intake, a late meal the previous evening, illnesses, stress, jetlag, climate change, using a different thermometer, drugs and medicines. Which of these actually influence the temperature must be determined during the practice phase and should be denoted carefully on an observation sheet. Other possible disturbing factors should also be written down so that they can be considered when looking at the curve.

Cervical mucous

Here one observes the state of the cervical mucous that forms around the cervix and at the cervical os. This mucous changes its form in the course of the menstrual cycle. At the beginning of the cycle it is usually rather dry and can neither be felt nor seen. A few days before ovulation the vaginal orifice feels moist – only then can one even see the mucous (e.g., on toilet paper) and feel it with the finger. It also changes its color, from intially milky white to a clear fluid. The viscosity also changes, from sticky and viscous to fluid and stringy (like egg-white). Once the cervical mucous has turned into a stringy fluid, the vaginal orifice feels slippery; during ovulation the mucous changes its consistency once again and becomes sticky and murky.

Recording the state of the cervical mucous can be disturbed by any sort of vaginal infection. Also, sexual arousal or male ejaculate as well as various chemical forms of contraception (spermicidal creams) can change the nature of the mucous. Taking mucolytics to treat a cold also also cause the cervical mucous to become more fluid.

Determining the fertile and infertile days

The records of the fertile and infertile days according to the temperature and the mucous methods should first be viewed independent of each other before being compared.

The end of the fertile period is easier to determine than the beginning using the symptothermal method. The fertile period begins on the evening of the third day of increased temperature or on the evening of the third day of greatest mucous change (most fluid, clear and stringy), depending on which of the two signs is seen first. The criteria for judging raised temperature following ovulation are as follows: The temperature on 3 consecutive days must be higher than that of the previous 6 days, and the value on the last of those 3 days must be at least 2/10 of a degree centigrade higher than the highest value of the previous 6 low-temperature days. The criteria for judging changes in the mucous consistency are as follows: The beginning of the fertile period is determined based on observations of the mucous consistency from the previous 12 menstrual cycles; the fertile period begins when the first feeling of moistness presents itself in the vaginal orifice.

Once a calendar of the last 12 cycles is available, 20 days are subtracted from the shortest cycle in order to calculate the number of infertile days at the beginning of the menstrual cycle (from the first day of woman's period on).

Conservative use of this method means that intercourse can take place only on the "safe days" following ovulation and leading up to the next period.

If temperature curves of the previous 12 cycles are available, 8 days are subtracted instead from the earliest day of temperature rise, and the fertile period begins at the first signs of moist mucous in the vagina.

› SAFETY: Inasmuch as intercourse takes place exclusively on the absolutely infertile days, this method is very reliable. Its safety, however, depends on avoiding errors of all kinds and on the diligence with which it is practiced. Particularly the beginning of the fertile period is often determined too late, and the fact that sperm can survive in the uterus for up to 6 days is not properly observed.

For this reason, this method is appropriate only for couples who have taken the time to learn it and who are capable of adhering to it even in very arousing moments.

BENEFITS: The symptothermal method of birth control is not a true means of contraception in the classical sense of the word, but rather a way of designing one's partnership. It is one way to become and remain aware of one's fertility and to address it directly. Especially feelings of belongingness and communication within the pair relationship are strengthened. Many couples in fact use this method not to prevent pregnancy, but to realize their desire for children: The calculated fertile days are pointedly chosen for intercourse to increase the chances of getting pregnant.

Patience is an important factor here, since it can take many cycles until fertilization actually takes place. The major advantage is that the approaching ovulation can be adjudged based on changes in the mucous consistency and the state of the cervix, and with the temperature method one can determine when the fertile period has passed – or whether ovulation has occurred at all. Many women like this method because it provides them with a natural and relaxed relationship to their own bodies. Living according to a natural and biological rhythm strengthens one's self-confidence and self-awareness. Unlike the hormonal methods of contraception, the natural methods of family planning include no invasive procedures and require no doctor visits (though they should not tempt one to neglect regular preventive checkups at the gynecologist's office). Especially women who have a positive relationship to their own bodies and know their own anatomy will feel comfortable with this method.

Some women report experiencing a more regular menstrual cycle upon recording their curves. Counseling services have additional informational material about this method as well as tables one can fill out with data on temperature and mucous consistency (➔ p. 47).

DISADVANTAGES: This method demands that the woman observe her body and its signs of fertility – and it means that her partner must be very cooperative. The learning phase of some 3 months is time-consuming, but as a rule can be integrated into a daily routine. Women with irregular ovulation will not

be able to determine their fertile and infertile days. Women with very long or irregular menstrual cycles may experience very long periods of time in which fertility suddenly becomes present. Such phases may occur while nursing, during puberty and menopause, or because of stress and illness.

This method – more so than any other method of contraception – requires close cooperation and great responsibility on the part of the woman's partner. Sexuality must comply with the calculated fertile and infertile periods, that is, other barrier methods such as a condom must be employed on the fertile days or one must revert to sexual practices that bear no risk of pregnancy. Some couples using this method suffer from a lack of spontaneity.

An additional tool that can be employed with NFP is close observance of the state of the cervix or the cervical os. Self-observing these can expand the sympto-thermal method and increase its level of safety. The cervix and the cervical os also change their consistency during the menstrual cycle: Immediately after menstrual bleeding the cervix feels hard (like the tip of one's nose), is closed and lies deep in the vagina. During the fertile period, on the other hand, it becomes softer (like one's upper lip), is slightly open and shifts toward the upper part of the vagina.

A daily examination with the finger can reveal these changes and mark the beginning of the fertile period. The infertile period begins 3 days later with a once again firm and closed cervix. This can additionally be controlled by the temperature method.

A final important note:
This method is not recommended as sole method of determining fertility as it is too uncertain.

TEMPERATURE AND MUCOUS CURVES

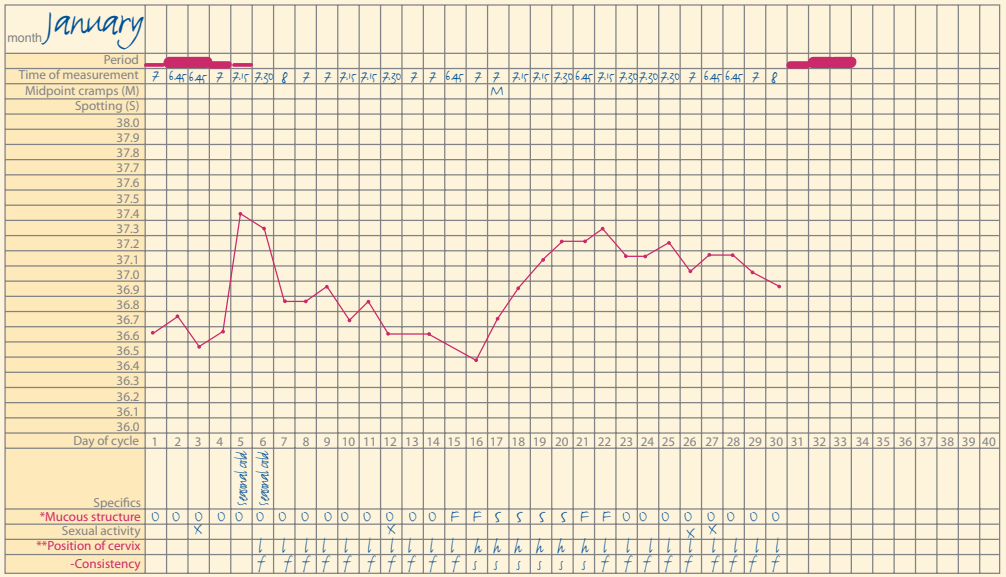
These two tables show examples of curves of body temperature and mucous structure recorded during a menstrual cycle.

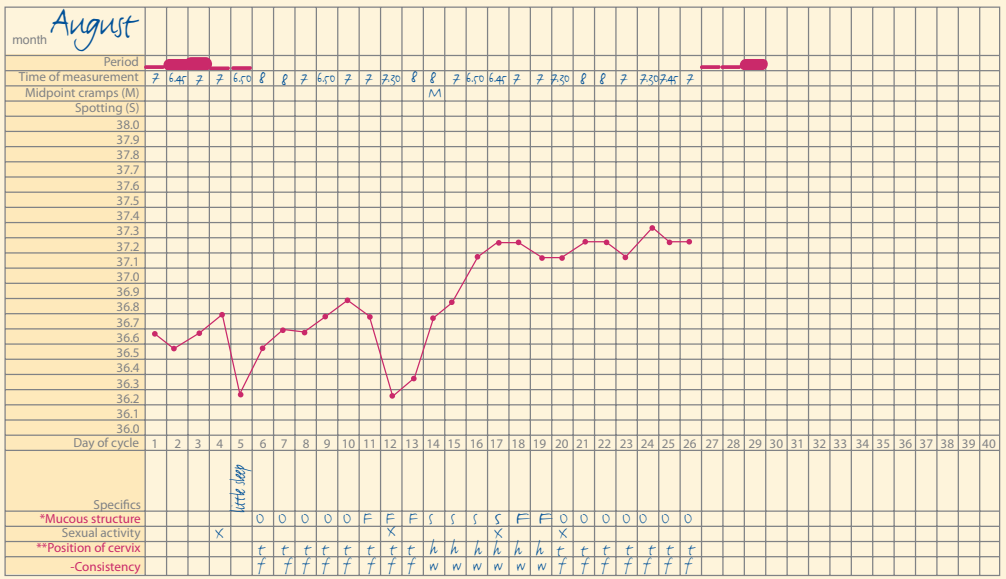
An empty table to fill out yourself may be downloaded from the following address:

www.familienplanung.de/tabellen

Abbreviations:
* Mucous structure
S = sticky, viscous, little mucous
F = fluid, transparent, stringy
O = without mucous

** Position of cervix
h = high
l = low
Consistency:
f = firm
s = soft


month January
Period
Time of measurement
Midpoint cramps (M)
Spotting (S)
38.0
37.9
37.8
37.7
37.6
37.5
37.4
37.3
37.2
37.1
37.0
36.9
36.8
36.7
36.6
36.5
36.4
36.3
36.2
36.1
36.0
Day of cycle
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
started period
started period
Specifics
*Mucous structure
Sexual activity
**Position of cervix
-Consistency


month August
Period
Time of measurement
Midpoint cramps (M)
Spotting (S)
38.0
37.9
37.8
37.7
37.6
37.5
37.4
37.3
37.2
37.1
37.0
36.9
36.8
36.7
36.6
36.5
36.4
36.3
36.2
36.1
36.0
Day of cycle
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
little sleep
Specifics
*Mucous structure
Sexual activity
**Position of cervix
-Consistency

Technical tools for calculating ovulation

The tools introduced below should not be seen as true methods of contraception. They do nothing to change the basic advantages and disadvantages of the symptothermal method. Indeed, they were originally developed to help women who wanted to use natural birth control methods without the effort involved in learning the complicated procedures otherwise necessary. Without prior knowledge of the method, however, many user errors occur. And women who are well acquainted with the symptothermal method do not need the computer-assisted tools.

They are, however, very useful when one is trying to get pregnant.

THE TEMPERATURE COMPUTER

› EFFECTS/USE: A number of small apparatus are available that record and evaluate basal temperature. These battery-operated minicomputers measure the temperature, evaluate the data and calculate the fertile and infertile periods of a woman's cycles, providing the results with a series of LEDs. They may be purchased on the internet or in pharmacies.

› SAFETY: Insufficient data exist to judge the exact safety of these devices. They tend to determine longer fertile periods than the manual symptothermal methods do.

\+ BENEFITS: These devices can be of great help to some women who use the NFP method.

– DISADVANTAGES: Compared to the symptothermal method the devices tend to calculate longer periods of fertility, which impedes sexual activity even further. User errors are common if sufficient knowledge of the symptothermal method is missing.

THE HORMONE COMPUTER

› EFFECTS/USE: Hormone computers determine the fertile days of the cycle by analyzing the hormones present in a woman's urine. They request data input on certain days from hormone test strips dipped in the woman's morning urine. These are then analyzed and the infertile days determined and marked with LEDs.

› SAFETY: Hormone computers tend to designate shorter fertile periods than the temperature computers, which lowers the overall safety. For this reason they are not considered safe.

+ BENEFITS: Unlike the symptothermal method or a temperature computer the woman does not need to make daily measurements, but rather prepares urine test strips only on certain days of the menstrual cycle. The hormone computer best suits couples who are trying to get pregnant and want to have intercourse on the fertile days with the help of a urine test.

– DISADVANTAGES: The need for new test strips every month make this method a relatively expensive contraceptive method with a relatively low level of safety.

NFP CELL-PHONE APPS

Cell-phone apps supporting the symptothermal method or natural family planning (NFP) take over the work of recording and organizing the data on length of cycle, basal temperature and consistency of cervical mucous. The data entered into the cell-phone app result in a curve showing the fertile and infertile days of the cycle as well as comparisons with previous cycles. A timer can also be set to alert the user to enter the data daily. These mobile programs are good replacements for paper-and-pencil sheets.

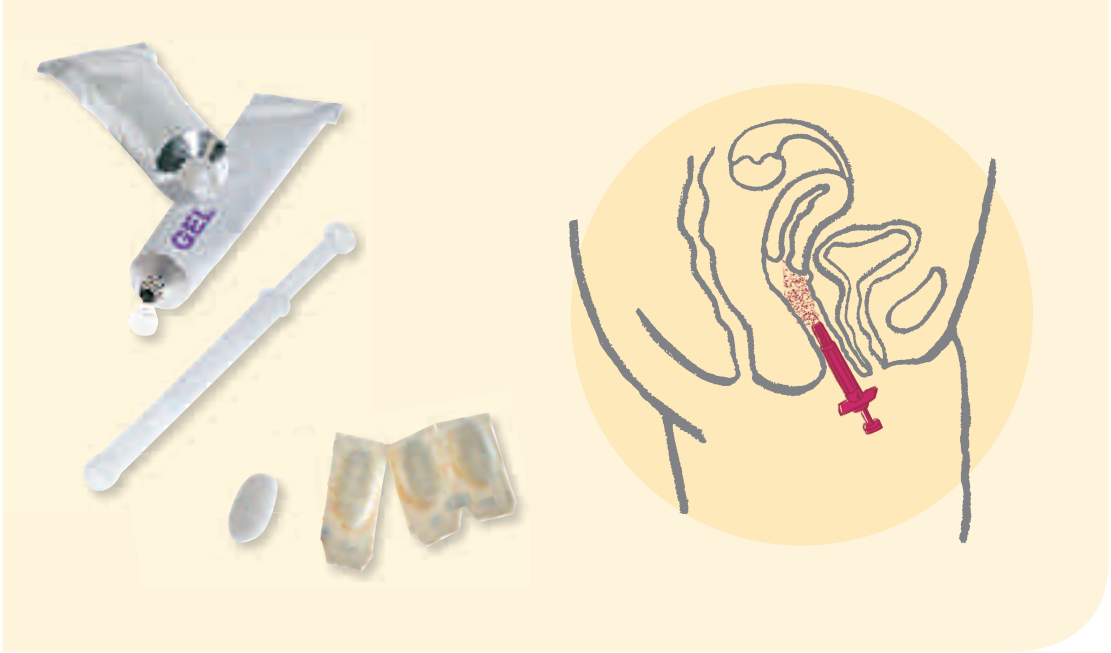
The apps are appropriate for women with cycles of between 23 and 35 days.

Chemical methods

› EFFECTS/USE: Generally speaking, all chemical methods function similarly, examples being spermacidal suppositories and jellies: They consist of a wax-like or jelly-like substance that is dissolved in the vagina through body heat and spreads as a viscous slime to cover the cervix. The ingredients used nearly always include as active substance nonoxynol-9, which kills sperm cells. There are also substances available without this ingredient based on acids such as citric or lactic acid, which only reduce the motility of the sperm. There is presently no scientific evidence on whether the natural formulations are better than the chemical ones, but they are certainly less hazardous to one's health. In order that these agents dissolve and spread sufficiently to protect against getting pregnant, they must be inserted into the vagina at least 10 minutes before intercourse. Suppositories that create a foam offer the greatest effect since the foam better distributes the active ingredient throughout the vaginal area.

Only after dissolving completely and spreading widely do these means of contraception reach complete effectiveness.

It is very important to carefully read the instructions on the package!



› SAFETY: How reliable these chemical substances really are depends on the respective product and how it is used. For example, the leadtime printed on the packaging must be adhered to very exactly. A better solution is to use these products together with a diaphragm (together with a spermicidal jelly) or a condom (inasmuch as this is possible, check the instructions on the package). Suppositories that are not water based cannot be used together with condoms as they can damage them.

BENEFITS: These substances are available over the counter in pharmacies and drug stores. They have no effect on the hormonal system, and they need only be used when intercourse actually takes place.

DISADVANTAGES: These substances should not be used as exclusive means of contraception since they are not completely reliable and safe. The chemicals included can cause a feeling of warmth in the vagina, and some people complain of a burning sensation in the vagina or on the tip of the penis. If this happens, try another brand. The smell and taste also take some getting used to.

Chemical means are not appropriate as sole agents for contraception.

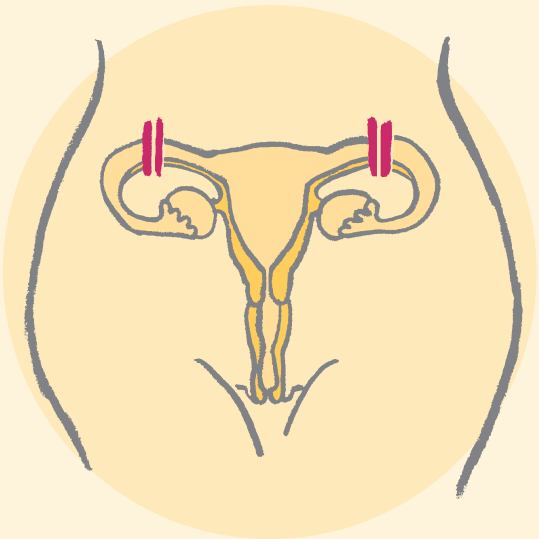
Sterilization

Sterilization, i.e., the clamping off or severing of the woman's tubes or the male seminal ducts (vasectomy), is the safest of all possible contraceptive methods. Such an operation leads to long-term infertility in both sexes.

But this step should be carefully considered beforehand and above all should be considered only when all family planning has been completed. Things can change, and the once certain belief that sterilization is the right way to go can change, too. Statistics show that some 5–10 % of all sterilized women later regret their decision, and in men the rate is similar. Often the reason lies in a new relationship in which the desire for children crops up. Recent advances in microsurgery have allowed some sterilizations, at least in principle, to be reversed (refertilization): In both men and women the severed tubes/ducts can be operatively reconnected – but there is no guarantee that fertility will return. The operation is also complex and expensive: in Germany between EUR 3000–4000 in woman and somewhat less in men. For this reason, the pros and cons should be carefully weighed before having the operation carried out. Counseling centers have further information available (see p. 91). Both partners should be completely agreed to taking such as step as their means of contraception and be aware of what it means for their relationship – including their sexual relationship. This is true as well for men and women who are not in a stable relationship.

No one should be pressured into a sterilization, and no one should be sterilized to please one's partner or spouse. In the end, every individual has to decide for themselves whether this is the proper step to take.

STERILIZATION IN WOMEN



Following ovulation the egg travels from the ovaries through the Fallopian tubes to the uterus. Sterilization interrupts this path, so that the egg and sperms cannot come together, thus preventing fertilization. The most common method is carried out laparascopically, whereby the surgeon makes small incisions in the intestinal area and inserts instruments and a camera to carry out the procedure. A large incision is no longer necessary. The tubes are then either melded with heat or clamped off with a clamp made of plastic and titanium.

Both methods have proved to be equally reliable, though there is some evidence that the clamping method has a better of chance of being reversed if desired. The operation is usually done on an inpatient basis under general anesthesia. Complications such as bleeding, damage to the inner organs or infections can occur as with all intestinal operations, but are rare.

Sterilization does not affect the women's menstrual cycle, her hormone production or her libido. Following the operation itself she should rest a while. Sexual activity can begin when she feels up to it.

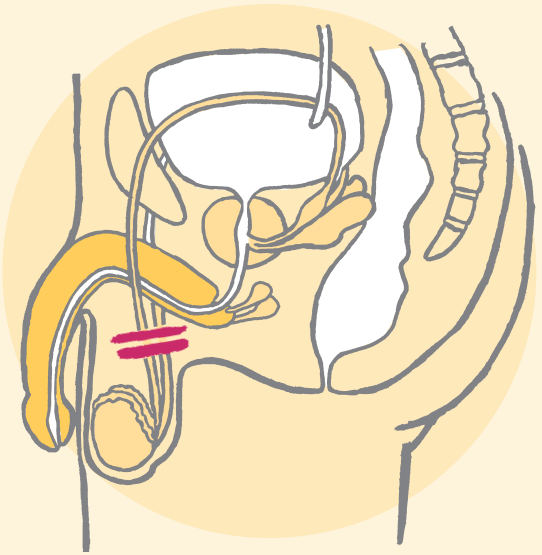
Moder microsurgical techniques theoretically allow fertility to be reestablished at a later point in time by having the tubes reattached. The most important aspects here are the woman's age and how far back the original sterilization lies. A study from 2004 revealed that three fourths of all refertilized women were able to get pregnant again.

STERILIZATION IN MEN

Sterilization in men is carried out by cutting and clamping off the seminal ducts (vas deferens) so that sperm cells can no longer be mixed with the semen (vasectomy). Because the procedure is easier to do in men than in women it is usually done on an outpatient basis. First, local anesthesia is applied, then the surgeon makes a small cut on the left and right side of the scrotum. The ducts are pulled out and severed, the loose ends fused together with heat or folded over and sewed up. The operation takes about 20 minutes. Complications such as bleeding, infections or wound-healing issues are rare. Following the operation the man should rest a while, though in principle he could have sex a few days after the procedure. It is recommended that other contraceptive means be used in the interim since remaining sperm cells can survive in the ducts for many months.

The more one ejaculates, the quicker these "reserves" are used up. It is wise that a urologist be consulted several times after the operation, also to take a sperm count. Only after this test has turned up completely negative can one forego all means of contraception. The amount of semen produced remains virtually unchanged, since this is done in the prostate gland and other glands and consists of only about 5% sperm cells. Sperm cells continue to be produced by the testicles, but are absorbed by the body on the testicle side of the severed duct.

Many men worry that sterilization will impair their sex life, but this fear is unfounded.



A man's sexual desire, virility and ability to reach orgasm remain unchanged as does the production of the sex hormones in the testicles.

Should the man later regret having been sterilized, under some conditions it can be reversed by reattaching the ends of the seminal ducts. Sperm cells once again pass through the ducts and can be found in the semen of 60–97% of such reoperated men. However, the success rates for subsequent pregnancies lie much lower according to the newest statistics. And the success rate of a reattachment depends greatly on how far back the original operation lies (➔ www.familienplanung.de/kinderwunsch/ursachen/operation-kann-sterilisierung-de-mannes-ruckgaengig-machen).

Birth control following birth

The thought that a woman could become pregnant shortly after giving birth to a child serves to inhibit many couples' sex life. Thus, many seek a safe method of contraception for the time immediately after pregnancy (where contraception was not an issue). It is particularly difficult to find a reliable method of birth control when the mother is still nursing: It should be safe but not affect the quality or amount of milk produced – and of course it should have no negative effects on the baby!

NURSING

When women completely nurse their babies, i.e., at least 6 times within 24 hours for a total of no less than 80 minutes, do not supplement their breast milk by other means and do not have a monthly period (afterbirth discharge can be disregarded here), then they enjoy a high level of protection against becoming pregnant. At every act of nursing the body emits the hormone prolactin, which retards activity in the ovaries. If the mother, however, takes longer pauses from nursing or reduces her nursing by feeding the child other foods, then this effect may disappear.

Here, an additional form of contraception should be considered.

BARRIER METHODS

Barrier methods such as condom or diaphragm are well suited for women who are nursing since they have no negative effects on milk production or the newborn baby. The diaphragm, however, should be (re)fitted by a healthcare professional, even if a diaphragm was used before the pregnancy. The physical changes a pregnancy causes means

that an old diaphragm will generally no longer fit. There is also an initial waiting time of about 3 months following birth since the uterus first has to reach its normal state.

Generally speaking, of course, barrier methods are only as safe as the caution and consequence their users apply.

THE CONTRACEPTIVE PILL

There are a number of restrictions to using the contraceptive pill while nursing. The combination pill is not appropriate while nursing since it contains estrogens that would decrease milk production and supply the nursing baby with too many hormones in the breast milk.

THE MINIPILL

The minipill is a different matter. Since it contains only gestagen – and that at a lower dosage than in the combination pills – it has no negative effects on the milk ingested by the baby. It must, however, be taken at exactly the same time every day. Use of the minipill should not commence less than 6 weeks after giving birth.

The estrogen-free pill can also be used, which combined with nursing has a high level of contraceptive safety.

IUD

IUDs can be used by nursing women since they have no influence either on milk production or on hormones that reach the baby. However, they should be inserted (by a healthcare professional) only after the uterus has returned completely to its normal size. The hormone IUD can also be used while nursing since it contains only gestagen (➔ "The Minipill," p. 23). Remember that choosing the IUD as a means of contraception is a long-term commitment.

NATURAL METHODS

Natural family planning methods such as recording the woman's basal temperature or cervical mucous are normally not appropriate for nursing women who have not gathered much previous experiences with this method: Following a birth and the hormonal changes it can cause there is no way to know when the woman's menstrual cycle, and thus her fertile and infertile times, will once again become regular. Women who have considerable experience with these methods and feel safe in using them may have less of a problem preventing a new pregnancy.

THE HORMONE IMPLANT

Small amounts of the ingredients from a hormone implant do pass to the breast milk, but this does not negatively influence the quality or quantity of breast milk the mother produces. According to present, albeit limited experiences with this contraceptive, it can safely be used while nursing.

THREE-MONTH DEPOT

The ingredients in this injection do pass to the breast milk, but to date no negative effects have been registered.

This method, however, should not be used in the first 6 weeks after childbirth as it may produce heavy bleeding.

VAGINAL RING

Like the contraceptive pills that contain estrogen, the vaginal ring should not be used while nursing.

CONTRACEPTIVE PATCH

The homones in the patch can change the amount and makeup of the breast milk. Thus, this method is not recommended while nursing.

THE MORNING-AFTER PILL

The hormone levonorgestrel is passed on to the breast milk. For this reason, it is suggested that the mother nurse the baby directly before taking the two tablets and then wait for 6 hours before starting to nurse again. With the newer morning-after pill, which contains the ingredient ulipristal acetate, nursing should be interrupted for at least 36 hours.

When deciding which contraceptive is best used while nursing, one should consult with one's gynecologist and discuss the benefits and disadvantages at length. This can also form the basis for a new decision about what forms of birth control are to be used in the future and thus how to enjoy sexual activity without fear of getting pregnant again.

Contraception in the middle years

From the age of 40 years onward a woman's fertility slowly declines. Changes to the monthly cycle are usually the first signs that menopause is approaching. These changes give reason to ponder how long contraception is still necessary, and what other changes menopause will precipitate. During this stage some women deliberate intensely whether or not to have a (or another) child. For some, their family planning has long been finished, so the matter of contraception changes with increasing age. Whereas young women in particular tend to use contraceptive pills of some sort, older women are more inclined to use an IUD or to be sterilized.

Changes in the **menstrual cycle**

At about age 45 the menstrual cycle of many women begins to change. In some, it becomes shorter; in others, there are phases with irregular bleeding or complete cycles without ovulation. In most women, however, the menstrual cycle becomes completely irregular only during the final years of menopause. Sometimes months can pass without a period; or they occur in very short timespans; or long-lasting periods of bleeding crop up. Whether a woman experiences the typical side effects of menopause, e.g., hot flashes, sleeping disturbances and vaginal dryness, varies greatly from one individual to another. In some women they occur only after all menstrual activity has long ceased, whereas in other women they may accompany relatively normal cycles. And not every woman feels the negative effects of the hot flashes.

How long **contraception?**

An important question in this period is how long one has to practice birth control. The chance of a woman 45 years and old of getting pregnant is very small, but individual fertility can vary widely, making it nearly impossible to properly judge the risk of an unwanted pregnancy in any particular woman. Activity in the ovaries can also vary over time. Even though one's period has been absent for many months, it may suddenly return and be accompanied by ovulation. For this reason, hormonal blood tests are of little value and reflect only the situation at the moment of the examination.

When a woman fails to have a normal menstrual cycle, either because she is taking a hormonal contraceptive or be-

cause of the effect of menopause, there is no way to know whether contraception is still necessary. Generally speaking, a woman should use contraception up to at least the age of 51. Only a hormonal blood test after having stopped all hormonal means of contraception can determine the true risk of pregnancy.

Whether to use hormonal contraceptives during menopause should be discussed in detail with one's gynecologist.

Which contraceptives are **recommended during menopause?**

The risk of cardiovascular diseases must be factored into the decision to use hormonal contraceptives. This risk generally increases with age and is exacerbated by hormonal contraceptives. If a woman who takes hormonal contraception at this age does not smoke, have high blood pressure, increased blood fats or other risk factors, all of which can raise the risk of having a heart attack or stroke, then taking a pill with a combination of estrogen and gestagen (➔ p. 20ff.) should pose no further risk. Risk of thrombosis is ca. 3–6 times higher, however. If no other means of contraception are feasible, one can continue to use low-dose, combination pills through menopause, assuming other cardiovascular risks have been eliminated. Nevertheless, it is recommended that the woman's blood pressure, blood fats and other cardiovascular risk factors be checked regularly.

The minipill (➔ p. 23, must be taken on a rigid schedule) and the gestagen implant (➔ p. 32), both of which contain only gestagen in a low dose, have less of an effect on the cardiovascular system and are the contraceptive of choice in such cases. They do, however, cause irregular periods.

Many women in this age range switch from the pill to an IUD (➔ pp. 29f.). Particularly women who have given birth will experience fewer problems with an IUD. If heavy bleeding makes use of the copper-coil IUD impossible, or if the IUD has proved to increase bleeding, then the hormone IUD (IUC) may be a good alternative to reduce the amount

of bleeding. Middle-aged women often have myomas (benign muscle nodes in the uterus) that can disform the uterus and make insertion of an IUD impossible. Barrier methods such as condoms (➔ pp. 24ff.), the diaphragm (➔ pp. 38f.) or the FemCap (➔ p. 41) are widely used methods among older women: Their year-long experience and familiarity with their bodies enables them to employ these methods with ease. Weak muscles in the pelvic region may also prevent them from properly using a diaphragm. Sometimes special gymnastic exercises to strengthen the pelvic muscles can help – and incidentally also prevent bladder weakness. The cervical cap may no longer fit well if the uterus has slipped down (prolapse). One can, of course, use the symptothermal method – but only for as long as the menstrual cycles are more or less regular and ovulation is present. If ovulation is often absent or if the cycles last very long, then the fertile days of the cylcle can no longer be satisfactorily determined. The potentially fertile periods would then be very long indeed, defeating the purpose of this method.

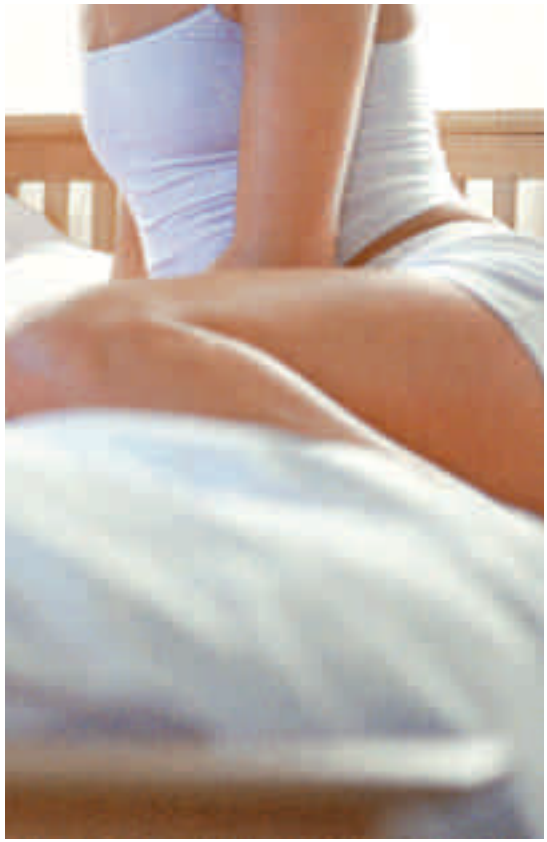
Sterilization (➔ pp. 52ff.) is a good alternative for many women of this age. Family planning has been concluded, and there is subsequently no need to worry about contraception. Many women eschew the operation, however, because of the costs and the potential dangers, particularly in light of the fact that only a few years remain to worry about. Especially since other safe and convenient alternatives such as the IUD or homonal contraceptives are available. Because the operation is easier and less invasive in men, a vasectomy may be a good alternative for couples who have definitively concluded their family planning.

Combining hormonal treatment for **menopause** with contraception

Relatively few women are plagued by such massive problems during menopause that they resort to homonal treatment. The presence of hot flashes does not necessarily signal the end of fertility, making contraception a continuing matter of concern. Combination pills are effective against hot flashes but also carry with them a higher risk of cardiovascular events than those drugs prescribed to treat the afflictions of menopause. Combining hormonal treatment and contraceptives, such as the hormone IUD, the 3-month depot, the minipill or the hormone implant, is not recommended. The copper coil IUD and barrier methods, however, can be used parallel very easily.

Natural means of contraception, on the other hand, are not possible since the hormones change the consistency of the cervical mucous as well as basal temperature.

Unsafe methods of contraception (if indeed methods at all)



Coitus interruptus

The idea of a timely "withdrawal" or "watching out" belongs to the oldest and worst ways to prevent pregnancy simply because it doesn't work. In this scenario the man pulls his penis out of the vagina in advance of his orgasm and ejaculation, which now takes place outside the woman's body. This method offers no safety since a certain amount of semen always comes out of the penis before complete ejaculation. Coitus interruptus is easy: It needs no tools or materials, no advance preparation, no major discussion. That's what makes it so tempting. And yet we can only advise against it with all due emphasis!

Knaus-Ogino

The same is true for the so-called Knaus-Ogino method, named after its discoverers Hermann Knaus from Austria and Kyusaku Ogino from Japan. It is also known under the name "calender method" or "rhythm method." Here, the fertile time in a woman's cycle is calculated on calendric basis. A logbuch of the menstrual cycles of the previous 6 months is used to determine the longest and the shortest cycle. From this one calculates the presumed fertile and infertile days of the cycle. This method, however, is not a safe contraceptive method since it is based solely on a calculation of the infertile days and does not, unlike the symptothermal method, measure the body's actual cyclical signs. We can only advise against this method, too.

Nursing is, as we noted above (pp. 56ff.) a reliable method of contraception – but only under very certain select circumstances.

Contraceptive accidents and unwanted pregnancies

If a woman has unprotected sex during ovulation or if an "accident" has occurred – a torn condom, for example – she may become pregnant (➔ p. 24). The absence of the next period is always a first sign that she may be pregnant. Later, other typical changes occur that point toward a pregnancy – morning sickness, frequent nightly urge to urinate, moodiness, fatigue, loss of appetite and food cravings.

In some cases, if unprotected intercourse took place or an accident happened before ovulation, the "morning-after pill" or the "morning-after IUD" can be used.

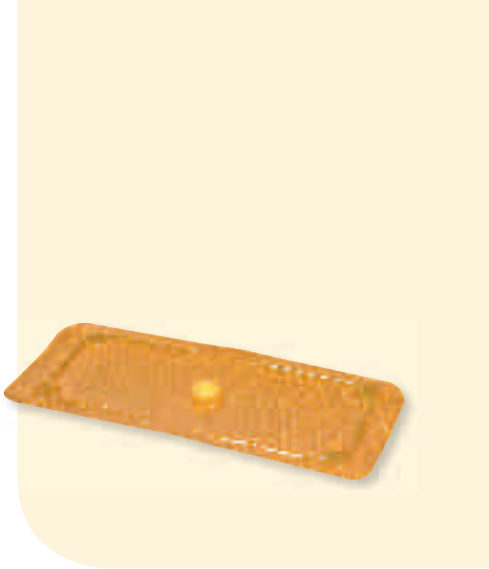
The **morning-after pill**

Two different drugs are available for use in emergencies – though not for regular use – as so-called "morning-after pills." Both consist of hormone preparations available only by prescription.

› EFFECTS/USE: The one type contains levonorgestrel, one of the gestagen-like hormones. It suppresses or delays ovulation when intercourse took place before ovulation, i.e., when the probability of a fertilization is highest. Whether it also actually prevents the egg from attaching to the uterus is still disputed. Because the protective power of the pill decreases with time, the woman must take the tablet in the first 72 hours (3 days), preferably in the first 12 hours, after unprotected intercourse. The "morning-after pill" can be used at any time during the menstrual cycle.
A second type, available since 2009, is based on the drug ulipristal acetate, which suppresses the sexual hormone progesterone and thus prevents ovulation and most likely also the build-up of the layers in the uterus. This new "morning-after pill" can be taken for up to 5 days (120 hours) after intercourse – but here too the sooner the better.

It is known that these methods work only if the egg has not already become lodged in the folds of the uterus. Thus, "morning-after pills" are not abortion pills as is often claimed! Their use by women who are already pregnant does not lead to termination of that pregnancy.

These pills should not be taken on an empty stomach as they might otherwise be vomited up. If vomiting does take place within 3 hours after their use, a new pill must be prescribed and taken to guarantee the proper effect. If the woman is already taking the contraceptive pill and has taken a "morning-after pill" because of a "mistake," then it is generally suggested that she cease taking the contraceptive pill and wait on her monthly period. Then she can begin anew with the contraceptive pill beginning with the first day of her new menstrual cycle. It is urgently recommended that other means of contraception be used in the meantime (e.g., condoms).



The most important thing after experiencing an "accident" or a contraceptive failure is to get in contact with a gynecologist or, on weekends, go to the emergency room or some emergency service to get immediate help. It is imperative also to talk with a gynecologist or another healthcare professional as soon as possible about how to avoid such "accidents" in the future.

After taking the emergency pill, the women usually has her normal monthly period within the expected timeframe; with the new version of the „morning-after pill," however, the period can be delayed by up to 7 days (in 20% of all women). If bleeding does not commence within 3 weeks' time, a

pregnancy test should be carried out. If a pregnancy has been determined despite the "morning-after pill," then we may be dealing with a so-called ectopic pregnancy, i.e., outside the uterus in the abdominal cavity or one of the Fallopian tubes. Such a situation is usually accompanied by slowly increasing, sometimes very sudden, pains, or unusual changes during the subsequent period (very weak or very heavy bleeding, unusually intensive menstrual pains). Here, a doctor should be consulted as soon as possible.

› SAFETY: Studies have shown that the modern drugs with only one ingredient cause fewer side effects and are generally more effective than the old combination drugs that were taken off the market in 2003. The "morning-after pill" is a highly effective way to prevent an expected pregnancy. But the efficacy does fall with time since intercourse: It is 95% effective within 24 hours, 85% within 24–48 hours and 58% within 48–72 hours. No reliable data are available for the efficacy of the new "morning-after pill" for the first 120 hours.

+ BENEFITS: The "morning-after pill" is a very efficient method to prevent an unwanted pregnancy following unprotected intercourse or when no or insufficient means of contraception have been used or have failed.

– DISADVANTAGES: Side effects can occur with these drugs, too, such as irregularities in menstrual bleeding (spotting, delayed periods), pain in the lower abdomen, nausea, vertigo, headaches and vomiting. But they usually occur less often and less severely than with the previous generation of combination pills. The "morning-after pill," however, does not replace other forms of contraception, particularly hormonal ones. And it is not as safe as other hormonal contraceptives. Because it can upset the woman's menstrual cycle, it should not be used in consecutive months.

The efficacy of the "morning-after pill" may be reduced by simultaneous use of antiepileptic drugs or pharmaceuticals containing St. John's wort. Also, some

antibiotics, antidepressants and anti-HIV drugs should be taken with caution. Persons with severe liver insufficiency are advised not to take the "morning-after pill." Women at risk of ectopic pregnancy should consult with their doctors whether the "morning-after pill" is appropriate for them in an emergency.

Pro familia Hotline:
Since October 2004 pro familia has a hotline available in four languages (Turkish, Russian, English, German) to dispense reliable information on the "morning-after pill." This has the form of an automatic answering service, reachable around the clock under the number **0 18 05/77 63 26***.

* Calls cost 0.14 €/min from a landline and max. 0.42 €/min from a cell phone.

The "morning-after IUD"

› EFFECTS/USE: Inserting an IUD can prevent the egg from attaching to the wall of the uterus for up to 5 days after a contraceptive "accident." The emergency IUD is in fact a normal IUD and has the same effect of a normal IUD (→ pp. 29f.). The hormone IUD, however, cannot be used for this purpose.

› SAFETY: The "morning-after IUD" has a relatively high level of safety.

BENEFITS: The "morning-after IUD" is particularly called for when the woman wants to use it thereafter as a normal means of contraception. The comments in the section above on IUDs are thus generally valid here too.

DISADVANTAGES: The "morning-after IUD" should not be removed before onset of the next period. The side effects of the IUD mentioned in the respective section are valid here too.

Pregnancy test

The first sign of pregnancy following unprotected sex is usually the absence of the woman's normal period. Later, other typical changes occur that point to a pregnancy – morning sickness, frequent nightly urge to urinate, moodiness, fatigue, loss of appetite and food cravings. If a woman suspects she is pregnant she can obtain a pregnancy test in a pharmacy or drug store. This should not be done, however, before her expected period as the test results are not generally reliable. Such an early test should in any case be repeated after a week's time. Pregnancy tests used from the first day of the missing period onward, on the other hand, are

more reliable and can determine within minutes whether the woman is indeed pregnant.

These tests all function similarly: They test the woman's urine for a particular pregnancy hormone the body produces once the fertilized egg has landed in the uterus. Note: This hormone is also produced with ectopic pregnancies. One can, however, also go to the gynecologist's office to take such as test since they are generally done free of charge and have a high level of reliability. A doctor's office also has someone to talk with afterwards.

Pregnancy counseling and legal issues:
Legal regulations and indications

When a woman becomes pregnant and is confronted with a major conflict, she should go to see a physician or a pregnancy counseling agency as soon as possible. It is often helpful if the wonan's partner goes along. Such counseling centers can provide both help and information about what legal alternatives the couple has, whether they choose to carry the child to term or have an abortion.

This counseling should serve to encourage the couple and show empathy for their situation, not lecture or patronize them. It should support their efforts to reach their own careful and informed decision.

Such counseling is one of the prerequisites that must be met if a woman is to have her pregnancy legally terminated through abortion. But abortion, it should be mentioned, is not a means of contraception!

LEGAL STIPULATIONS

Pregnancy counseling

According to German law on abortion counseling, abortion is generally deemed illegal, but is nevertheless allowed under certain exceptional circumstances:

- No more than 12 weeks (first trimester) must have passed since conception.
- The pregnant woman must want the abortion and the physician doing the procedure must prove that the woman received counseling at least 3 days before the scheduled abortion at an accredited counseling service (§219, para. 2, 2 StGB).
- The abortion must be carried out by a physician.
- The physician doing the abortion cannot be the same person who counseled the woman.

Indications for abortion

An abortion is not subject to prosecution if a proper legal indication has been determined by a physician:

Criminological indications

- No more than 12 weeks (first trimester) must have passed since conception.
- If, in the opinion of a physician, the pregnancy was incurred through a sexual crime to the woman (rape, sexual abuse, e.g., if the girl was under the age of 14 at the time of conception).

Medical indications

Only if a medical indication is present can an abortion be done beyond the first trimester, in order to

- avert imminent danger to the woman's life or to avert severe impairment of her physical or mental state, should no other reasonable means be available.

Abortion

There are two basic ways to terminate a pregnancy: surgically and pharmaceutically.

SURGICAL ABORTION

Surgical abortion is usually carried out on an outpatient basis, i.e., the woman can go home 1–2 hours after the procedure. Thus, it can take place in a doctor's private practice, an outpatient clinic or in a hospital. Only in situations where the pregnancy is already beyond the 12-week limit or in the presence of major illnesses is it necessary that the woman stay in the hospital for a few days.

The most common – and least burdensome – method is when the fetal material is removed by suction (vacuum aspiration). To this end the cervical os – the opening to the cervix – is carefully dilated. The entire procedure lasts about 10–15 minutes. It can be done with local anesthesia of the cervix or under general anesthesia, both of which carry little risk to the woman. The woman can choose which type of anesthesia best fits her needs. Following the abortion she should rest for a few days. A further examination at a gynecologist's

office should be done about 2 weeks postoperation.

This procedure entails few complications. During the operation itself some discomfort can arise due to the anesthesia or through slight injuries to the uterus, but only rarely does heavy bleeding or an infection ensue. The procedure should have no effect on later childbearing or fertility.

This method has the advantage of being over relatively quickly and having fewer side effects than the drug-based abortion.

PHARMACEUTICAL ABORTION (MIFEGYNE™)

Mifegyne can be prescribed by a doctor for women whose pregnancy has not progressed beyond the 9th week of gestation, i.e., a drug-based abortion is possible only up to the 63rd day after the 1st day of the last period. This pharmaceutical is not available in pharmacies but only from institutions specially authorized to distribute it. The regulations governing legal abortion (➔ p. 74) are valid for this method as well.

Drug-based abortion is done by taking a pill containing the ingredient mifepristone, which retards the hormone progesterone necessary to a successful pregnancy. After taking the pill in a doctor's office the woman can go home. Some 36–48 hours later, again in a doctor's office, she must then take prostaglandins, which trigger labor and induce the actual abortion in most cases. Mifepristone also dilates and softens up the cervical os. If abortion has not taken place after 3 hours (and this is the case in up to 25% of all woman), then a second dose of prostaglandins is given; here, the woman remains under medical observation. In most cases the fetal material is then successfully shed.

A third visit to the doctor's office or clinic is necessary for a postprocedure examination and to ensure that all material has indeed been aborted.

This examination is absolutely necessary.

Experience in other European countries such as Sweden, England and France shows that this method has fewer health risks than the operative method.

However, the drug-based method should not be used by women with

- chronic adrenal diseases
- severe asthma
- an allergy toward mifepristone or some other ingredient in the pills
- an existing intolerance of prostaglandins.

The pharmaceutical abortion is clearly the physically less stressful method. It is appropriate for women who are willing to openly face their abortion. Psychologically speaking, it is a longer drawn-out procedure that demands more "participation" on the part of the woman, who has to take the pills herself and shed the fetal material. Some women emphasize preferring this hormonal method because it gives them more control over their body.

The drug used here should not be confused with the "morning-after pill," which causes the mucous in the uterus to be sloughed off within 72 hours after intercourse.

Because not all gynecologists offer this type of abortion, one should contact local counseling services (→ cover "Help and advice") to obtain the respective addresses.

COSTS

- According to German law (§218a, sect. 1 StGB) women who want to have an abortion in accordance with regulations for counseling must pay for the procedure themselves. However, if they do not have the means to do so, they are eligible for support to cover the costs in accordance with a special law covering abortions under special circumstances. The costs are then assumed by the respective state government. This coverage can be applied for from one's normal health insurance company.

- This is also true for women who are uninsured, in which case the health insurance company issues a voucher to assume the costs for the respective state.

- The costs involved are those of the actual abortion and any routine postprocedure examinations.

- All other costs, such as examinations carried out during pregnancy or treatment due to complications of the abortion procedure, are assumed by the health insurance company.

- In cases of medical or criminological indications, the woman's health insurance covers all costs.


Ich liebe Dich

Finding the right contraceptive

Deciding which contraceptive (or contraceptives) to use depends on many different criteria and personal preferences. Every woman and every man will decide differently about the advantages and disadvantages of each method. Below you will find a complete list of all contraceptives available.

LIST OF CONTRACEPTIVES AS A DECISION GUIDE

The checklist given on page 90 serves as a guide for finding the right contraceptive for your own particular situation. We hope it can help you make your own decision. You can also take this checklist along with you when you visit your doctor or a counseling center.

Contraception **at a glance**

METHOD	EFFECTS/USE	BENEFITS
Contraceptive pill (combination pill)	❯ Prevents ovulation with hormones ❯ Prevents the sperm cells from reaching the uterus and prevents the egg from lodging in the lining of the uterus ❯ Taken daily ❯ Is taken on the first day of the woman's period (menstrual cycle) ❯ Must be monitored by a physician	❯ High level of safety ❯ Relatively short and weaker periods as well as menstrual cramps ❯ Improves acne in some women
Minipill **New minipill**	❯ Similar to contraceptive pill, but generally does not suppress ovulation since it contains only gestagen ❯ Is taken without pausing, but must be taken daily at exactly the same time ❯ Generally prevents ovulation	❯ Fewer side effects than the combination pill ❯ Can also be taken while nursing ❯ In exceptional cases can be taken up to 12 hours late
Condom	❯ Prevents fertilization by collecting the semen ❯ Easy for both partners to use ❯ Lubricating substances containing vaseline or other fats/oils as well as certain genital medicines or salves should not be used at the same time	❯ Low leadtime ❯ Effective immediately, no waiting necessary ❯ Can be used only when necessary ❯ Cheap and available everywhere ❯ Modern condoms cause no discomfort or nuisance ❯ Only means of contraception for the male ❯ Protects against HIV infection and against other sexually transmitted diseases

DISADVANTAGS/SIDE EFFECTS	APPROPRIATE FOR WHOM?	COSTS INVOLVED (AS OF FEB. 2010)	SAFETY
❯ Vaginal infections ❯ Irregular periods ❯ Tenderness of the breasts ❯ Loss of libido ❯ Headaches (vision disorders) ❯ Weight gain ❯ Danger of thrombosis	❯ Women looking for a safe and convenient method of contraception ❯ Women willing to live with the side effects ❯ Not suitable for women who smoke ❯ Can be taken by women over 40 if they are healthy, nonsmokers and use the low-dose versions	❯ Ca. €17/month ❯ 3- or 6-month packs are cheaper	Very high
❯ Must be taken very diligently ❯ Disorders of the menstrual cycle possible ❯ Spotting common	❯ Similar to the combination pill ❯ Appropriate also for women with estrogen intolerance	❯ Similar to the combination pill ❯ €19/month or €35 for 3-month pack	Very high Very high
❯ May interrupt sexual arousal ❯ Must be thought of and used in due time	❯ Essential for persons with multiple partners ❯ Appropriate also for adolescents ❯ Can be used while nursing or with irregular menstrual cycle	❯ Ca. €5–10	High

METHOD	EFFECTS/USE	BENEFITS
Female condom (Femidom)	❯ Vaginal sheath that prevents sperm cells from reaching the egg; lubricant recommended in addition	❯ Protects against HIV infection in women
Copper coil (IUD)	❯ Irritates the uterus and thus prevents the egg from becoming lodged in the uterus lining	❯ Works in the background to prevent pregnancy and requires no further effort
Hormone IUD	❯ Prevents build-up of the uterus lining through the hormone gestagen ❯ Causes cervical mucous to become viscous ❯ Must be inserted by a gynecologist ❯ May stay in place for up to 5 years	❯ Similar to normal IUD ❯ May cause weaker and less painful periods
Hormone implant	❯ Prevents ovulation ❯ Changes mucous lining of cervix to prevent sperm from getting through ❯ Hormonal rod must be inserted by specially trained physician or gynecologist ❯ Effective for up to 3 years	❯ No regular ingestion or applicaton necessary ❯ Very safe ❯ Long-lasting protection

DISADVANTAGS/SIDE EFFECTS	APPROPRIATE FOR WHOM?	COSTS INVOLVED (AS OF FEB. 2010)	SAFETY
› Proper insertion must be practiced	› Women who want to retain control of contraception	› Ca. €2–3/piece	High
› Menstrual pains › Increased blood flow › Distrubances of menstrual cycle › Tubal inflammations possible, esp. in young women › May lead to infertility › Ectopic pregnancies possible › Miscarriages	› Older women who already have children or have completed their family planning	› Ca. €130–150 incl. insertion, remains in place for 3–5 years	Very high
› Initial depressive moods, weight gain, tension in breasts, headaches, nausea › Irregular periods or absence of period (amenorrhea)	› Similar to normal IUD › IUD is not method of choice in childless women and should only be used if all other (safe) methods have proved to be impractical	› Ca. €250–350 incl. insertion, remains in place for up to 5 years	Very high
› May cause acne, headaches, tension in breasts, depressive moods › Expensive method if removed early › Often irregular periods	› Women seeking high level of safety › Women who have difficulty regularly taking pills › Women willing to commit to a contraceptive for long period of time	› Ca. 300 incl. insertion	Very high

METHOD	EFFECTS/USE	BENEFITS
Three-month depot	❯ Primarily prevents ovulation ❯ Must be (re)injected every 3 months by physician	❯ Works safely without much thought
Vaginal ring	❯ Works like the contraceptive pill ❯ Ring can be inserted into the vagina by the woman directly and is left in place for 3 weeks. After 3 weeks she removes it and her normal period begins shortly thereafter. Then a new ring is inserted.	❯ Easy to use ❯ No daily reminder necessary
Contraceptive patch	❯ Effectiveness similar to that of hormonal contraceptives ❯ Can by applied to most parts of the body and must be renewed on the 8th and the 15th day of the menstrual cycle	❯ Easy-to-use method of hormonal contraception that does not put strain on the liver
Diaphragm	❯ Prevents fertilization of the egg by blocking the entrance to the uterus with a plastic cap ❯ Best used with spermicidal jelly ❯ Can be used by women alone (with or without the cooperation of the partner) ❯ Must be fitted by a gynecologist ❯ Instructions and practice on proper use necessary	❯ Relatively easy to use ❯ Can be used spontaneously as necessary ❯ No side effects

DISADVANTAGS/SIDE EFFECTS	APPROPRIATE FOR WHOM?	COSTS INVOLVED (AS OF FEB. 2010)	SAFETY
❯ Many women do not tolerate it well ❯ Even if poorly tolerated, the 3 months must be completed ❯ Headaches, nervousness, depressive moods, acne	❯ Women who have a normal menstrual cycle and do not tolerate other methods	❯ Ca. €30	Very high
❯ Some side effects, such as headaches, vaginal infections, vaginal discharge	❯ Women who want to use a hormonal contraceptive without having to take it daily	❯ Ca. €40/3 months	Very high
❯ Irregular periods, tenderness in breasts, headaches, nausea ❯ Local reaction to patch	❯ Women who want to use a hormonal contraceptive without having to take it daily	❯ Ca. €30–40/3 months	Very high
❯ Practice necessary ❯ May inhibit sexual spontaneity ❯ The spermicidal jelly can sometimes irritate the tip of the penis	❯ Women who have no problem touching themselves and are looking for a method with few side effects	❯ Ca. €25–40	High

METHOD	EFFECTS/USE	BENEFITS
Cervical cap (aka Lea's Shield)	❯ Similar to the diaphragm ❯ Additional loop for easy removal and valve allows cervical musous and blood to flow off ❯ Increased effectiveness when used with spermicidal jelly	❯ Can be left in place for up to 48 hours ❯ This ensures a greater spontaneity than other barrier methods
FemCap™	❯ Available in three sizes ❯ Increased effectiveness when used with spermicidal jelly	❯ Does not strain hormonal status ❯ Suitable also for women with latex allergy
Natural family planning (NFP)	❯ Determination of fertile and infertile days, consisting of measurement of basal temperature and observation of mucous consistency ❯ Data must be closely analyzed ❯ Proper interpretation must be learned (courses, counseling centers, books) ❯ Temperature must be measured daily at same time and mucous conscientously controlled	❯ Noninvasive ❯ Provides opportunity for physical self-exploration and self-observation
Technical tools for calculating ovulation	❯ Fertile and infertile days are calculated, evaluated and displayed with a small computer	❯ Tools may also be used to explicity calculate the days when sex will lead to pregnancy

DISADVANTAGS/SIDE EFFECTS	APPROPRIATE FOR WHOM?	COSTS INVOLVED (AS OF FEB. 2010)	SAFETY
❯ Practice necessary ❯ Must be replaced every 6–9 months ❯ Relatively expensive	❯ Women who have no problem touching themselves and are looking for a method with few side effects	❯ Ca. €46–50	High
❯ May cause irritations to the mucous membranes	❯ Women who need contraception only when necessary ❯ Women looking for a contraceptive with few side effects	❯ Ca. €45–60	Relatively high
❯ Long learning period necessary ❯ Regular periods of abstinence or use of additional contraceptives necessary	❯ Women looking for a natural alternative to hormones ❯ Women who want to get to know their body better ❯ Women with regular life patterns ❯ Women willing to forego spontaneity ❯ Women with a responsible partner	❯ No set costs involved ❯ Costs for courses/ literature may incur	Relatively high
❯ Not a very safe method of contraception ❯ Expensive	❯ Women who want to get pregnant ❯ Women looking for a contraceptive with few sides effects and are willing to take the risks involved	❯ Ca. €90–180 ❯ Depending on model, between €8–35/month for test strips	Unsafe

METHOD	EFFECTS/USE	BENEFITS
Chemical methods	❯ Jellies or suppositories create a viscous slime that covers the cervix ❯ 10-minute leadtime ❯ The instructions on the package must be carefully heeded	❯ Easy to use ❯ Available over the counter ❯ Can be used spontaneously
Sterilization	❯ Interrupts the woman's tubes or the man´s seminal ducts ❯ Operation necessary ❯ In women usually under general anesthesia ❯ In men as outpatient with local anesthesia	❯ Once carried out assurance that no impregnation can occur ❯ No worries about contraception necessary thereafter
"Morning-after" pill (single-agent preparation)	❯ Exact mechanism of action unknown, presumably suppresses ovulation ❯ Can be used only in emergencies ❯ Available only by prescription ❯ "Morning-after" pill must be taken no later than 72 hours after unprotected intercourse	❯ Emergency measure to prevent unwanted pregnancy
"Morning-after" IUD	❯ Prevents the (fertilized) egg from lodging in the uterus ❯ A normal copper coil IUD can be inserted for up to 5 days after unprotected intercourse	❯ Only for emergencies to prevent unwanted pregnancy

DISADVANTAGS/SIDE EFFECTS	APPROPRIATE FOR WHOM?	COSTS INVOLVED (AS OF FEB. 2010)	SAFETY
› Feeling of warmth or sometimes burning in vagina and on penis › May become too fluid and flow out of the vagina › Not compatible with some condoms (attacks rubber)	› Should not be used exclusively	› €7–12 depending on product	Unsafe
› Temporary pain from sutures › Decision must be well thought out	› Women and men with no further wish to have children › Women and men in stable, long-term partnerships › Women and men over 35 years of age	› Depends on local circumstances › Woman: ca. €600–1000 › Men: ca. €450–500	Very High
› Disrupted period, nausea, abdominal pains, vertigo, vomiting › Fewer side effects than combination preparaton	› Women who in an emergency situation (accident or failure to use a contraceptive) don't want to get pregnant	› Ca. €17 › Newer type ca. €35	Relatively high
› Similar to copper coil IUD	› For use only in emergencies › Women who want to use normal IUD as contraception	› Ca. €130–150 incl. insertion	Relatively high

Decision **guide**

- How important is it to me not to get pregnant?
- Do I want to get pregnant in the foreseeable future?
- Do I already have children and would like to have no more?
- When was my last pregnancy?
- Do I want to have a baby but haven't yet found the right partner or right circumstances to fulfill that wish?
- Do I have multiple sexual partners?
- Am I in a stable partnership or am I presently single?
- How regular is my lifestyle?
- How regular is my menstrual cycle?
- Does my partner feel responsible for birth control?
- Have I ever used contraceptives?
- How well acquainted am I with my body, including everything that goes on in my body?
- How do I feel about my own body?
- Am I well organized and disciplined?
- Do I have a chronic illness of any kind?
- Can I adjust to using a particular contraceptive for a longer period of time?
- Do I have severe menstrual symptoms (such as cramps or pain)?
- Do I regularly take any medicine?
- Do I smoke?
- Am I older than 35 years?
- Do I only seldom have intercourse?
- Am I allergic to any known substances (e.g., latex)?
- Is the price of contraceptives a criterion for me?
- Is it difficult for me to talk about sexuality?
- How important is it to me to have spontaneous sex?
- How do I feel about having to prepare for sex in advance by setting up contraception?
- Do I prefer to take care of birth control myself or leave it to someone else?

Help and **advice**

Answers to all your questions concerning sexuality, contraception, the desire to have children or (unwanted) pregnancy are available at no cost from the many family-planning centers. These counseling centers also provide information about financial support and other assistance available to families and children in need. Further, they can assist in cases of family conflicts regarding matters of family planning. These counseling centers are obligated to confidentiality, and anonymity is also possible.

Centers for abortion counseling are run by church associations and other social-welfare organizations as well as other nongovernmental and municipal agencies. The addresses of such centers may be found in the local telephone directory, obtained from social or health agencies or under www.familienplanung.de/beratung/beratungsstellensuche/

Anyone contemplating getting an abortion should seek out special conflict counseling offered in an accredited counseling center for pregnancy conflicts. A certificate proving one's attendance at such counseling is also one prerequisite for getting an abortion exempt from punishment within the first 12 weeks. The Caritas organization and the Social Service of Catholic Women do not provide such certificates, though they do provide counseling concerning pregnancy conflict.

More on the topics of contraception, the desire to have children, pregnancy and counseling may be found under **→www.familienplanung.de**

Measure. Choose. **Try it on.**

FIND THE RIGHT-SIZED CONDOM
WITH THE "KONDOMETER"

To be effective, a condom has to have a firm fit – which also makes it less noticeable during sex.

Condoms are produced in many different sizes and forms. Which condom best fits your needs can be determined by trying out the various ones available.

To help you in your search for the perfect condom, we have developed the "Kondometer."

Further information may be found under
www.kondometer.de.

THE KONDOMETER

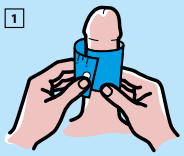
The attached Kondometer can help you to find the right-sized condom for your needs. Cut out the measuring tape printed on this page and punch a hole in it where the dot is.

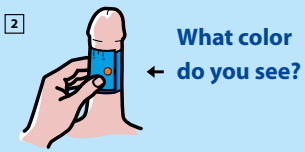
When using the Kondometer be careful of the paper edges, which may be very sharp and cut the skin.

HOW TO USE THE KONDOMETER

1 On the back you´ll find at the right a white arrow. Apply it to your penis first and then wrap the rest of the tape around your rigid penis.

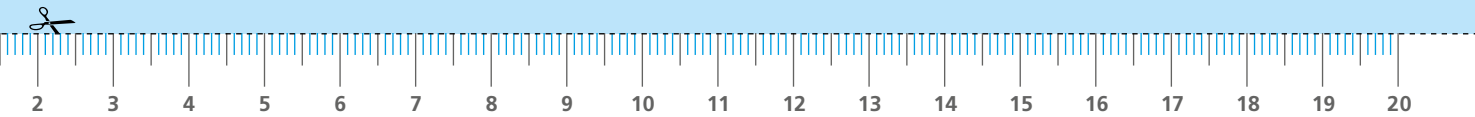
2 Now look through the hole you punched. What color do you see?* That color corresponds to the recommended condom size.





HERE, WIDTH MATTERS

Condoms are designated by their width, even though we are measuring the circumference of the penis. The Kondometer helps to translate those figures. The color scale printed on the back of the tape allows you to decide whether the standard-sized condoms – or rather smaller/larger ones – are your best choice.



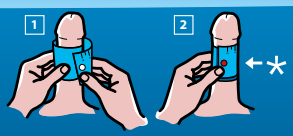
kondometer

Which size fits your needs? The width is what matters!

familienplanung.de
UNABHÄNGIG UND WISSENSCHAFTLICH FUNDIERT

On the back you'll find at the right a white arrow. Apply it to your penis first and then wrap the rest of the tape around your rigid penis.

2 Now look through the hole you punched. What color do you see?* That color corresponds to the recommended condom size.



Information on using condoms may also be found in the BZgA brochure "Safe and Sure. Contraception for Him and Her" (Order no. 13060000)

www.familienplanung.de

TO EACH HIS OWN

Condoms are measured in length and width. For optimal safety and comfort, however, the width of a condom is decisive and more relevant than the length. This is why often only the width is displayed (in mm) on the packaging.

- Example for a small condom:
  width 49 mm, length 170 mm
- Example for a standard condom:
  width 52 mm, length 185 mm
- Example for a large condom:
  width 55 mm, length 200 mm

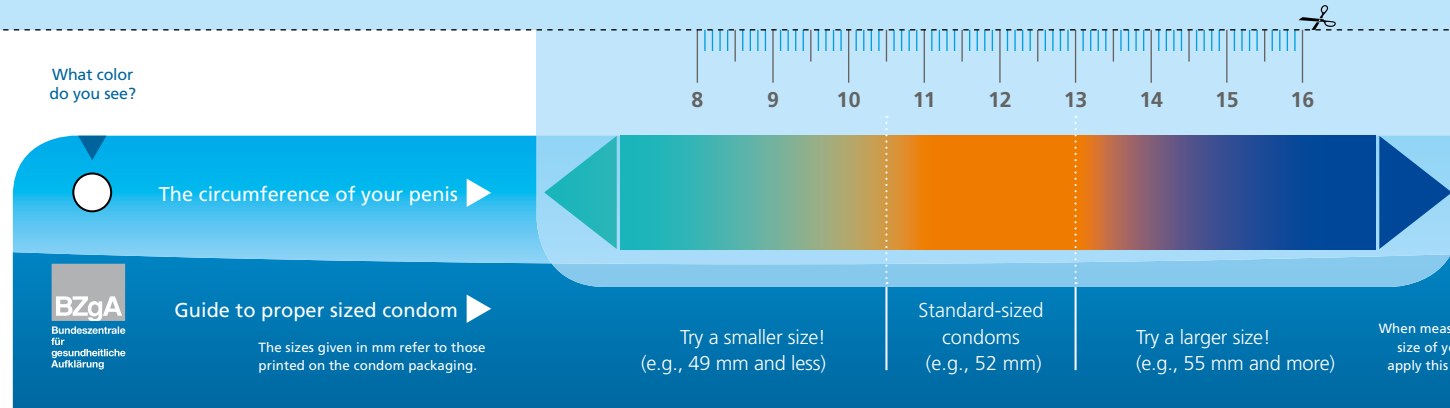
ONLY A CONDOM THAT FITS GUARANTEES A SAFE SPRITZ

Often condoms don't properly fit their owner – they are either too big or too small. For a condom to be effective, however, it has to have a firm fit.

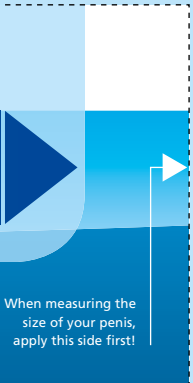
- Condoms that are too small can
  - be difficult to slip over the hardened penis
  - fit too tightly and cause pain
  - rip or burst
- Condoms that are too big can
  - be difficult to slip over the hardened penis
  - fit too loosely
  - slip off during sex and remain in the vagina or rectum

SAFE USE OF CONDOMS

For further information on how to properly use condoms consult p. 24 of this brochure or visit the website www.familienplanung.de.



BZgA
Bundeszentrale für gesundheitliche Aufklärung



FURTHER INFORMATION

- Broschüre „mach's mit… Kondom!
  Safer Sex – wie und wozu?"
  (Order no.: 70520000)

- www.kondometer.de

Bundeszentrale für gesundheitliche Aufklärung (BZgA), 51101 Köln