

DIAPHRAGM

Learning to use a diaphragm is a good way to begin to know our bodies; we can feel more in control using a safe method whose workings we understand.



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San Francisco Women's Health Center

THE DIAPHRAGM

We at the San Francisco Women's Health Center are writing this paper to share information about diaphragm usage. We encourage women to use the diaphragm or other more natural methods of birth control and to avoid the dangers of birth control pills or IUD's. With clear understanding of proper insertion and consistent diaphragm usage, the diaphragm is a safe and effective method of birth control for many women. Learning to use a diaphragm is a good way to begin to know our bodies; we can feel more in control using a safe method whose workings we understand.

In the 1960's, with the development of the birth control pill and the intrauterine device (IUD), the diaphragm lost popularity. Earlier use-effectiveness studies showed it to be less effective than the new methods, and most women found it messier and less convenient. But as new information continues to be published about the serious side effects of the pill and the IUD, more and more women feel uncomfortable with these methods. At the same time, studies have shown that various factors can affect the reliability of the diaphragm. Effectiveness depends on 1) proper fit; 2) use and effectiveness of a spermicidal cream or jelly; and 3) consistent and proper use of the diaphragm. The diaphragm has been shown to be up to 99% effective if used correctly and consistently, and has no material risk to users. This compares favorably to the figures usually cited for the pill (99+%) and the IUD (95+%).

The two key words in the studies on the effectiveness of the diaphragm are "correctly" and "consistently." Using the diaphragm correctly is usually relatively easy for most women. With the aid of the person fitting the diaphragm and some practice, a woman can feel confident that she is placing the diaphragm correctly. Consistency, on the other hand, can be more difficult. Unlike the birth control pill and the IUD which prevent conception 24 hours a day (at the same time exposing the woman to the risks of side effects), the diaphragm is used only at the actual time of sexual intercourse. This has several implications. If we expect

to be having intercourse away from home, we have to remember to carry our diaphragm. For those of us with unpredictable sex lives, this can be a hassle. And once we know we are going to have intercourse, we have to insert the diaphragm. For many of us, it can take months before we overcome feelings of embarrassment or plain forgetfulness. One factor which will probably affect our consistency of diaphragm usage is intent. The more clear we can be about our reasons for using birth control, whether to prevent or postpone conception, the more successful we will be. The surprising part about this is that it also applies to methods like the pill and IUD. If we are experiencing difficulty in using the diaphragm consistently, it is important to talk to a health care provider, friends who are using the diaphragm, or our partner to explore feelings and practical ideas which will help us.

WHAT IS THE DIAPHRAGM?

The diaphragm is a method of birth control which prevents the entrance of sperm into the uterus by holding spermicidal jelly or cream in place over the opening of the uterus. The diaphragm is made of soft rubber in the shape of a shallow cup, with a flexible metal spring forming a circular outer edge. There are three types of metal springs: 1) arcing spring which forms a curve when bent; 2) coil spring, which forms a straight line when squeezed; and 3) flat spring, which is a flat band, not a wound spring, and is rarely used.

Which type you will use depends on which type best covers your cervix, is most comfortable, and easiest for you to insert. When properly fitted and inserted, the diaphragm should fit snugly over your cervix, locked in place behind the pubic bone. Sizes range from 55 to 105 millimeters (2-4 inches). Your size will depend on the length of your vagina, which does not necessarily relate to your general body size. If you have not yet had sexual intercourse, you should use condoms and foam the first few times since the size of the diaphragm you will need will change.



DIAPHRAGM IN PLACE

It is really helpful to visualize where the diaphragm goes. The diaphragm is held in place over the tip of your uterus, the cervix, which can be seen at the end of your vagina with the aid of a speculum, flashlight and mirror. It can be felt by inserting your finger into your vagina. The entrance

into the uterus is through the cervical os; the os is a very small dimple or slit-shaped opening.

The cervix and the os are what the health worker sees when you have a pelvic exam done, or what you see when you do a self-cervical exam. When in place, the front of the diaphragm fits snugly behind the pubic bone, the dome covers the cervix, and the back end rises into the space behind the cervix.

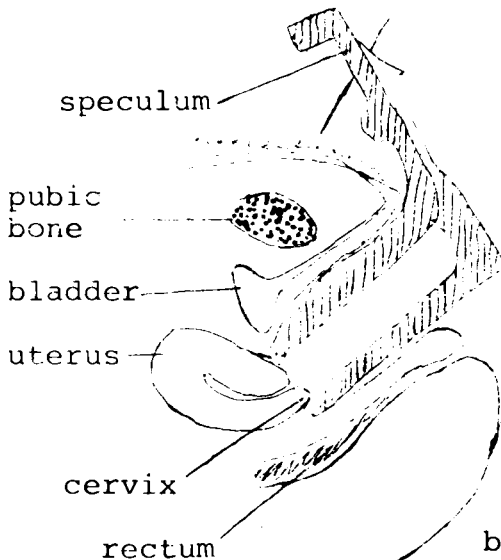
WHERE AND HOW TO GET A DIAPHRAGM

Because every woman is a different size, the diaphragm must be fitted to her. Diaphragms are currently available only by prescription, so generally this means you must get one from a doctor or clinic. You should make sure to choose a health care provider who feels good about diaphragms and has had a lot of practice fitting them. Like any skill, diaphragm fitting takes motivation and practice to do it well. A doctor who tells you that you should be on the pill but will fit you anyway cannot be expected to fit you correctly.

The following is a step-by-step description of how a

diaphragm should be fitted. It may be used by the person fitting a diaphragm and the person being fit for a diaphragm.

1. Go to the toilet. A full bladder or rectum can interfere with a proper diaphragm fitting.



2. You, or whoever is fitting you, should check your cervix with a speculum. You should remember that your uterus does move around, so the position of the cervix can change. If your cervix consistently points upward, it is more likely that the diaphragm may slip around a lot (this may be referred to as a retroverted uterus). This does not mean that you can't use a diaphragm, but there may be more chance of becoming pregnant.

3. Have a provider do a bi-manual exam to determine the position of your uterus. She/he should especially check to see if there is a pocket behind the pubic bone, where the diaphragm can slide.

4. The person doing the bi-manual should next use her/his index finger and thumb to measure the distance from behind the pubic bone to the posterior fornix, which is the space behind the cervix. Keeping the fingers in the same position, she/he should measure how far the index finger extends into the vagina. This measurement should approximate the diameter of the diaphragm.

5. Next, the person doing the fitting should insert the size diaphragm she/he thinks will fit; several sizes may be

tried. There are twelve possible sizes. Usually the provider will use actual diaphragms to do the fitting; sometimes, however, they will use diaphragm rings, which are like the rims of a diaphragm without the rubber dome. Make sure that the diaphragm you take home is a brand new one.

6. The last thing the fitter should do is check the fit of the trial diaphragm. There are three aspects that need to be checked:

- a. The diaphragm should completely cover the cervix.
- b. The rim of the diaphragm should fit snugly along the vaginal walls. If a finger can easily be inserted between the rim of the diaphragm and the wall of the vagina, a larger size is needed.
- c. The diaphragm should slide behind the pubic bone, as the bone is what helps hold the diaphragm in place. The diaphragm should fit with even pressure along the vaginal walls--if it doesn't, it may be too big. Since the vagina expands during sexual stimulation, it is important to use the largest size diaphragm that fits correctly.

COUNSELING

When you get your first diaphragm, it is important that the health personnel counsel you in several areas of diaphragm use.

1. You should have a graphic description of how the diaphragm fits inside you. This should be accompanied by diagrams and pelvic models. However, it is easiest to understand how to properly use the diaphragm if you look at your cervix with a mirror provided by the provider during the speculum exam.
2. You should be thoroughly instructed on how to use the diaphragm.

3. You should try putting the diaphragm in and out a few times while you are still in the medical setting. The provider should check to be sure you have inserted it correctly, and teach you how to check it yourself. You will probably not be completely comfortable with your diaphragm until you have taken it home and used it for a while, but it is very important that you get some help initially with insertion and removal.

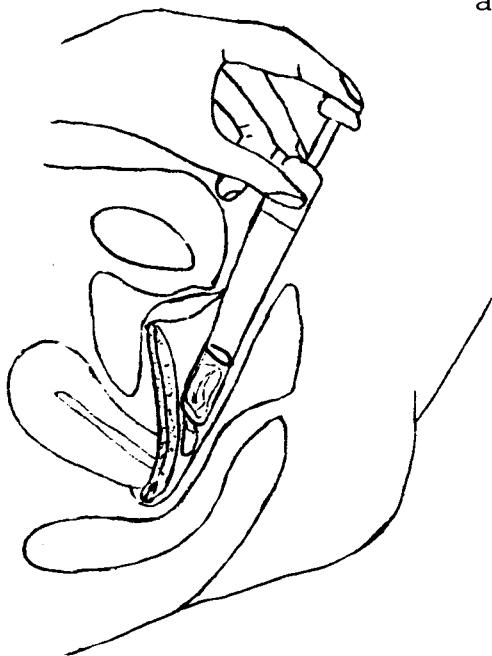
4. You should be told to come back and have your diaphragm rechecked if it is uncomfortable to wear, if you have a lot of trouble sliding it over your cervix, or if you feel it may be incorrectly fit for any other reason. You should also be told that your size may change if you gain or lose ten or more pounds, or if you get pregnant (no matter what the outcome of the pregnancy).

HOW TO USE THE DIAPHRAGM

It is generally stated that the diaphragm with jelly or cream can be inserted up to two hours before intercourse. Opinion varies on this matter and it seems likely to us that this varies among women and depending on the time of the menstrual cycle. If you tend to have a lot of cervical mucus, the jelly or cream will wash out more quickly and you might want to insert the diaphragm closer to the time of intercourse. The same might be true if you suspected or knew you were close to ovulation (the most fertile time of the cycle). It does seem clear that inserting the diaphragm and jelly closest to the time of intercourse allows for maximum effect of the spermicidal jelly or cream.

The diaphragm must be left in place for six to eight hours after the last intercourse to give the spermicidal jelly or cream time to work and for sperm to die in the vagina. It can be left in longer, but should be removed within a day or two. This allows the natural cleansing action of the vagina to continue unhindered.

If you don't have intercourse within the two hours after insertion of the diaphragm, or within the period during which you feel safe, you should put fresh jelly or cream in with an applicator before proceeding, or you can remove the diaphragm and start over again. An applicator comes with the first tube of cream or jelly. It is



a plastic tube with a plunger which can be screwed into the tube of jelly or cream and filled. It is then placed far into the vagina; depress the plunger and the jelly or cream will be deposited on the outside of the diaphragm. One application of jelly or cream is needed for EACH ejaculation. For subsequent intercourse within the six to eight hour period, DO NOT REMOVE THE DIAPHRAGM, just insert an applicator more of jelly or cream.

HOW TO INSERT THE DIAPHRAGM

It is important to feel for the position of the cervix with your finger before inserting the diaphragm (see diagram next page). This will give you a clearer picture of where to "aim." This is especially important because your uterus will sometimes change position. We have found that often under the influence of hormones, the whole uterus pulls up during ovulation and may be harder to reach. This may be a good time to use more jelly or cream than usual since you are most fertile during ovulation. If your cervix is

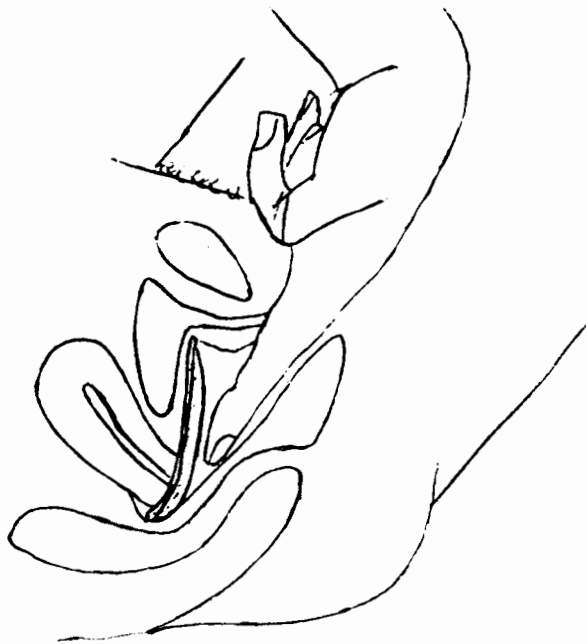
hard to reach, jumping up and down can coax it down, or try another position for insertion.



Place one teaspoon to one tablespoon of the spermicidal jelly or cream (about 3/4 inch out of the tube) into the center of the inside of the dome of the diaphragm and smear it around. Although opinion varies as to whether the jelly or cream needs to be put on the outside edges of the rim, consensus of opinion definitely advises putting

more jelly or cream around the inside of the rim for further protection. Next wipe the jelly or cream off your fingers, as it can be slippery and can be quite comical or frustrating to deal with when trying to insert your diaphragm. Just relax and keep calm, reminding yourself that this is a very effective and safe method of birth control which takes time and practice to become comfortable using. Taking a few deep breaths can help you to relax.

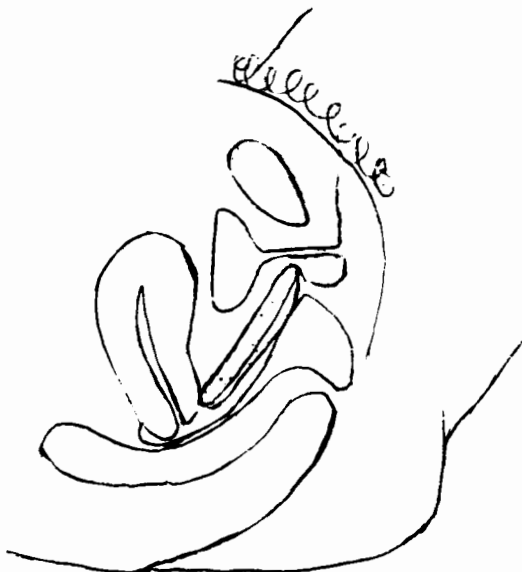
Once the jelly or cream is in place, squeeze the rims together with your thumb and second finger of the hand with which you will insert the diaphragm. With your free hand, separate the lips of the vagina and slip the diaphragm in along the floor of the vagina, angling a little down and back until you feel it slip into place behind your pubic bone. Holding the rims together at the end farthest away from you seems to make insertion fairly manageable. You must always check to be sure the diaphragm is hooked behind the pubic bone, with the back rim behind the cervix (see diagram on next page). You should feel the cervix (like the tip of your nose) under the rubber of the diaphragm.



If you or your partner feel your diaphragm during intercourse, the diaphragm might be inserted incorrectly or may be the wrong size. Be sure it is behind the pubic bone; if it is still a problem, return to the provider for a size check.

WHAT POSITION?

There are many positions you can use to put in the diaphragm. You can squat, lay down with your legs bent up at the knee, sit on the toilet (being careful not to drop your diaphragm into the bowl), or stand with one leg up, say on the side of a chair. We suggest that you practice a bit at home alone and find the positions that are most comfortable for you.



COMMON IMPROPER INSERTION

CARE OF THE DIAPHRAGM

After using the diaphragm you should wash it with warm water and mild soap and rinse. Carefully

blot it dry and store it in a container away from the light. We used to recommend dusting the diaphragm with cornstarch to absorb extra moisture until it was pointed out that the carbohydrate-rich cornstarch could feed bacteria in the vagina and cause an infection. Probably you could use small amounts and dust it off before using; you might feel cornstarch is important to use in a humid climate. Never use talcum powder as it may be irritating to the vagina and many studies have proven that talc or the asbestos in it is carcinogenic (cancer causing).

It is important to check for holes before using the diaphragm by holding it up to the light or filling it with water and looking for leaks, especially around the rim. If you have a Koroflex brand diaphragm, this is especially important, as it was recently discovered that a large number of their diaphragms were defective, having microscopic holes around the rim. These would tend to weaken the rubber and allow tears to occur more easily. To check if you have a defective diaphragm, look for a code on the rim. If it says F6, G6, H6, I6 (6 means 1976, letter refers to month, i.e. F is sixth month or June) it is from a defective lot. If your diaphragm is defective, return it to the place you got it if possible, or to a local family planning clinic, and have it replaced for free. Otherwise, your diaphragm should be replaced approximately every two years, or when you notice signs of wear. Remember to have the fit rechecked if you gain or lose ten pounds, and after childbirth, abortion or miscarriage.

YOUR PARTNER AND THE DIAPHRAGM

Sometimes the most rewarding and/or frustrating aspects of using a diaphragm are the attitudes and actions of our partners. If you have a supportive partner, you might want to teach him what you know about the diaphragm, so that he can share responsibility for birth control. Many women ask their partners to put in the diaphragm. Sometimes it can be easier for them to see where it goes and to get a good angle. You could ask your partner to check to see if the diaphragm is in correctly once you

have put it in. Many couples find that they can incorporate putting the diaphragm in as part of lovemaking. This can take a while to develop. Even if you do not feel comfortable with these suggestions, you might find that you can feel relaxed about putting it in yourself when he is there with you.

One problem even supportive partners have with the diaphragm is the taste of jelly or cream experienced during oral sex. If the man has any burning feelings as a result of the jelly, change brands immediately. Sometimes another brand might have a less offensive taste. Other ideas are to put the cream or jelly in just before intercourse, or wiping the vulva off with a damp washcloth. You may have to experiment a bit before coming up with a solution to this problem.

Having a cooperative and interested partner probably means you will be a more effective diaphragm user. If he sometimes initiates putting it in, or insists that you use it when you might let the moment slide by, you are much less likely to get pregnant, since the diaphragm works only if you use it. You might ask him to keep a spare diaphragm at his house or in his car. You might also feel good that the responsibility for preventing pregnancy is not entirely yours.

How can we deal with new or uncooperative partners? Sometimes we tend to underestimate men's willingness to be responsible for birth control. Often they feel it is the woman's role, though they might feel mystified by or uncomfortable with that assumption. A calm and matter of fact explanation about your plans for birth control is often greatly appreciated, especially if you explain why you have picked the diaphragm and the role they can play in its use. Tell them how it works, the importance of consistent use, as well as where your cervix is and how to use the jelly or cream. If they are still not supportive of your use of the diaphragm, you have some difficult questions to answer. At this point you might want to talk to friends or counselors who can help you to explore your

feelings. If you decide to go ahead with your use of the diaphragm, there are ways you can minimize any hassle with your partner. One suggestion is to put the diaphragm in before you see him if you think there might be a possibility of intercourse, and then add more jelly or cream if necessary. You can also put the diaphragm in in the bathroom. If he complains that he can feel the diaphragm during intercourse, have the fit checked, then try other positions that might involve less penetration. We find that it is always helpful to talk to other women about their experiences. We often have the same or similar experiences and breaking down our sense of isolation can be the biggest help we can find.

WHO CAN'T USE THE DIAPHRAGM

A woman with a severely displaced uterus, which can be seen during a pelvic exam, cannot use the diaphragm, nor can a woman with protrusion of the bladder through the vaginal wall (cystocele) or other openings in the vagina (fistulas). A woman should be fitted after first having intercourse a few times, since the size will change. During that time other methods should be used (i.e., condoms and foam). If you feel uncomfortable touching your genitals and feel you won't use your diaphragm, for whatever reason, this method is not for you. The effectiveness of the diaphragm depends mainly on consis-
tent use.

SPERMICIDAL CREAMS AND JELLIES

Different brands of spermicidal creams and jellies are available in drug stores without a prescription, some labeled for use alone, others for use with a diaphragm. Because those labeled for use alone tend to have a higher concentration of spermicide, we recommend that you use them with your diaphragm for added protection. The Consumers' Union Report on Family Planning (New York, 1966) lists these creams and jellies as being most effective: Delfen Vaginal Cream and Koromex Vaginal Jelly. We were unable to find any more recent study. According to Our Bodies, Ourselves (New York, 1976), the following jellies and creams also act to reduce

our chances of getting gonorrhoea: Cooper Cream, Koromex II-A Vaginal Jelly, Certane Vaginal Jelly, Milex Crescent Jelly, Ortho-Gynol Jelly, Ortho Cream.

Acceptability of taste and smell, and cost, should be considered in choosing the spermicide to use with your diaphragm. You might find that jelly provides more lubrication than cream. Also check the expiration date on the end of the tube, as these products lose their potency several years after they are manufactured.

At the present time, contraceptive jellies and creams can be paid for by Medi-Cal if a nurse practitioner or doctor writes the name of the jelly or cream on prescription paper. Thus, if you qualify for Medi-Cal, you should ask the person who fits your diaphragm to do this. Some clinics give away diaphragm jellies and creams at no cost to the consumer; this can be worth checking as contraceptives are expensive. In addition, different drugstores sell the same products at different prices, so you can shop comparatively.

Any jelly or cream can cause irritation to a particular woman or man. If this happens you should switch to a different spermicide or use a different method of birth control. This is discussed more in the SIDE EFFECTS section of this paper.

Do not use a contraceptive jelly or cream containing mercury. The type of mercury used in contraceptive jellies or creams is phenyl mercuric acetate (PMA). It is essential to check the ingredients before you buy a product to be sure it does not contain this. Well-known brands containing mercury in the form of phenyl mercuric acetate are Koromex A Jelly, Koromex Cream, Lorophyn Jelly, and Certane Vaginal Creme. Do not use them or other products containing this chemical.

Mercury is of concern to women for two reasons. First, methyl mercury, the most dangerous form of mercury, is known to cross the placenta from the mother to the fetus and concentrate in the fetus. It is the most potent agent known for inducing damage to chromosomes and hence causes certain birth defects. Secondly, mercury in the form of PMA used in contraceptive jellies and creams is dangerous. A Japanese researcher, M. Shimizu, studied the effect of this product on rats. His results, published in July of 1971 by the Japanese Obstetrical and Gynecological Society, proved that mercury can be absorbed through the vaginal walls and that some injury to the kidneys may occur through the repetitive use of PMA as a contraceptive. Some spermicides contain 400 times the Food and Drug Administration Limit on mercury in fish; $\frac{1}{2}$ teaspoonful of pure PMA taken orally would be lethal to the average person, thus spermicides containing PMA are especially dangerous to couples who enjoy oral sex. Other equally effective brands of spermicides do not contain mercury and are definitely preferable to those which do. Check the package of your spermicide to see if it contains PMA.

The Food and Drug Administration (FDA) has formed an Over-The-Counter Drug Review Panel to consider the safety or lack of safety of drugs currently sold without a prescription. The Vaginal Products Section is responsible for products such as contraceptive jellies and creams. The panel has studied the danger of mercury in products for vaginal use and has recommended that they be excluded, mainly because of potential damage to a fetus. This recommendation will probably take at least a year (until mid 1979) to become policy. Meanwhile the larger drug companies have stopped using PMA, but some smaller companies do continue to make diaphragm creams and jellies with PMA.

An annotated list of common ingredients of creams and jellies is appended. Many brands list only the actual

spermicide; they may also contain any of the listed ingredients or any others. If you suspect you are sensitive to a particular substance, you should write the company producing the jelly or cream to see if their product includes that ingredient. Other brands apparently list all the ingredients. Some of the information on ingredients was supplied to us by the University of California Hospitals--Drug Information Analysis Service; the rest was looked up in various chemical dictionaries.

ADVANTAGES OF THE DIAPHRAGM

Besides being a relatively safe and effective method of birth control, the diaphragm has several other advantages. Because of its cup-like shape, the diaphragm can hold in the menstrual flow. This can make intercourse during the menstrual period less messy, or the diaphragm can be used in place of a tampon if needed.

The diaphragm can also be seen as a preventive health measure. If a woman has many sexual partners or contact with a man who docs, she can use a brand of spermicidal jelly or cream which has been shown to be effective in preventing gonorrhoea (see appendix). Since women often don't have symptoms when they do get gonorrhoea, it is especially important to use preventive measures.

Recent studies have linked frequent early intercourse to a higher incidence of cervical cancer. The diaphragm with its rubber dome can act as a protective barrier to contact between the penis and cervix and probably acts as a prevention of cervical cancer.

SIDE EFFECTS

Compared to birth control pills and IUD's, diaphragm use is generally very safe indeed. However, there is no perfect method of birth control, and, while "natural" compared to pills or IUD's, the diaphragm still requires placing chemicals toxic to sperm and a foreign object

against the cervix and keeping them there for at least six hours. Some possible negative side effects are listed below:

1. Irritation, burning or itching from the spermicidal jelly or cream can occur. If it does, the woman should not use the type of jelly or cream which produces the irritation, as allergic reactions should be taken seriously. She can try other types of spermicide until she finds one that is not irritating; if all kinds are irritating or the reaction severe she should use a different method of birth control. A man may also be irritated by a spermicide, though he is in contact with it for a shorter time.
2. The taste of the contraceptive jelly or cream may be undesirable during oral sex. This can be reduced by wiping the outer genitals with a soft, damp washcloth after putting in the diaphragm, or by trying another brand.
3. Discomfort from the diaphragm itself can occur during sex, especially if the woman has a very retroflexed uterus (retroflexed means pointed back toward the rectum and bent), as the diaphragm may hit the fundus (back of the uterus) during intercourse. However, uterine position should not normally prevent a woman from trying a diaphragm as most can use it comfortably. Occasionally a particular sexual position may produce awareness of the diaphragm or discomfort. Most women and men do not feel the diaphragm if it is fitted correctly.
4. Slight cramping or uncomfortableness during the six to eight hours the diaphragm must remain in place after the last intercourse, occasionally occurs. Again, check the fit. Some jelly or cream may drip out during this time, which is slightly messy.

CONCLUSION

These side effects of diaphragm use rarely occur, except for the taste of the jelly and occasional slight messiness. In contrast, negative effects of birth control pills and IUDs are common, as well as affecting the whole body and potentially causing sterility or death. However this list does show that the diaphragm is not perfect or completely natural. If a woman does have problems with the diaphragm and does not want to use pills, IUDs or sterilization of self or partner(s), a few alternatives remain. Condoms are an easily available choice. New and more effective rhythm methods, referred to as "natural birth control", may be tried, which include the usage of a combination of calendar, rhythm, basal body temperature, and self-examination of cervical mucus (secretions). Sexual alternatives to penis-vaginal intercourse can also be used to prevent conception.

Unfortunately, population control and profit for pharmaceutical companies are the primary motives behind contraceptive technology, rather than safety, effectiveness, and comfort of the birth control method for the individual woman. Until the political system is changed so that these motives are changed, birth control is a problem for health-conscious women who have sex with men and want to avoid or delay pregnancy. At present, new methods of birth control and the commonly racist and inadequate experimentation which produces them, should be examined critically by the consumer.

SOURCES AND FURTHER READING

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Hatcher, et al. Contraceptive Technology. New York, Irvington Publisher, Inc. 1976.

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Seaman, Barbara. Women and the Crisis in Sex Hormones. New York, Rawson Associates Publishers, Inc. 1977.

APPENDIX

COMMON INGREDIENTS OF DIAPHRAGM CREAMS AND JELLIES

Benzethonium chloride is used as a germicide, disinfectant and preservative. At the concentrations used on the skin it does not usually cause irritation, but some women may become hypersensitive after repeated applications. Highly toxic by ingestion; one gram may be fatal. Bitter taste.

Boric Acid can be very toxic. Borates are rapidly absorbed from mucous membranes and abraded skin, but toxic symptoms may be delayed for several hours. Borate excretion occurs mainly through the kidneys. Clinical and pathological findings relate principally to the central nervous system, genito-urinal tract, kidneys, liver, and skin.

Cellulose gum is a purified grade of carboxymethylcellulose. Colorless, odorless, non-toxic, water soluble. Acts as water binder, stabilizer, thickening agent. Used in ice cream.

Diisobutylphenoxypolyethoxyethanol and Nonylphenoxypolyethoxyethanol have a wide variety of physical properties and are used as wetting, emulsifying, and spermicidal agents. Even at full strength they rarely sensitize or irritate human skin.

Phenyl Mercuric Acetate (PMA) is an irritant to the skin and may give rise to erythema and blistering 6 to 12 hours later. Other toxic effects are similar to that of mercury. Since 1940 there has been only one report of systemic toxicity due to absorption of phenylmercuric salts, and the compounds are considered relatively safe in that regard. Nonetheless, it should be added that mercury is absorbed from vaginal preparations and it can be detected in the urine. A more common, though still rare, occurrence is contact sensitivity. Phenyl mercurials can cause local irritation and blis
Polysorbate 60 has a faint color and bitter taste. Approved by the FDA for food use. An emulsifying agent. Used in shortening and baked goods and in pharmaceuticals.

Propylene glycol is a colorless, stable liquid, practically odorless and tasteless. It has many uses, including solvent in perfumes, soft-drink syrups, preservatives, etc.

Ricinoleic acid is an unsaturated fatty acid which comprises about 80% of fatty acid content of castor oil. It forms soaps with alkalis.

Sodium lauryl sulfate is a widely used detergent of low acute and chronic toxicity. Skin irritation may be encountered due to absorption. By mouth it stimulates gastric mucous production and is used as a food additive.

Sorbital is a white, odorless, crystalline powder with a faint, sweet taste. It occurs in small amounts in various fruits and berries. It is used to ferment Vitamin C, for moisture-conditioning and improving the quality of cosmetic creams and lotions, toothpaste, tobacco, gelatin, candy, etc.

Stearic acid is the most common fatty acid occurring in natural animal and vegetable fats. It is colorless, odorless, and has a slight tallow-like taste. Used in lubricants, soaps, shoe polishes, cosmetics.

We at the San Francisco Women's Health Center research, write and sell literature on various topics in women's health care. Our purpose is to enable all women to learn about their bodies, to share what they learn, to take better care of themselves, and to demystify medicine and the doctor's role. We call this concept self-health. All the work of the San Francisco Women's Health Center is based on this model.

We believe that through education we gain power, and combined with political action, we as women can begin to take control of our own health care.