

A Primer on Natural Family Planning

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<http://nfpsite.aldred.org/primer.php>

The NFP Primer

This NFP Primer was written by Cathy Woodgold and Jim Van Damme and hosted on the [NFP Files website](#), which is now merging with this site. The original Resources section has been removed: this site has its own resources section, available from the links at the left; the Primer has also been adapted slightly in places to link to other resources now available.

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Summary

Modern Natural Family Planning (NFP) is safe, healthy, 99% effective in avoiding pregnancy, useful in achieving pregnancy, marriage building, reversible, moral, and cheap. You can accurately gauge your fertility **as it happens** through easily observable signs and choose to increase or greatly decrease your fertility while getting to know your body better. This Primer is an introduction to the different methods of NFP, and compares them to contraceptives and abortifacients. This is part of our much larger website, [The NFP Information Site](#), which has more articles and links to NFP resources for further information.

Important Stuff

o people avoiding pregnancy, there are only 3 methods of 100% effective avoidance of pregnancy:

- Total abstinence
- Removal of the ovaries (NOT tubal ligation)
- Castration (NOT vasectomy)

Everything else has a pregnancy rate, including NFP. This primer is a condensed introduction, NOT the adequate instruction and experience you need to achieve the 99% method effectiveness level. For that we refer you to the books and organizations listed in our [Resources](#) page.

This is solely the opinion of the authors and no NFP organizations have officially approved it. Check them out on our [Resources](#) page. You are encouraged to link to this page and pass this along wherever appropriate, provided the content is not modified. Check back with us occasionally for improvements. If you have comments, please send them to us; contact information is at the bottom.

1. Introduction and advantages

Effectiveness for Avoiding Pregnancy

The method effectiveness of NFP is about the same as the most effective artificial methods. It is **more effective** than barrier methods (condoms and diaphragm).

For comparison, below is the approximate method effectiveness (percentage of couples of normal fertility who go one year without getting pregnant, using each method perfectly). Some of these numbers may seem high, but remember, this is **method effectiveness**. Very few people, for instance, learned or used Calendar Rhythm correctly.

Method	Method effectiveness	Type
No birth control method	15%	
Calendar Rhythm (Ogino-Knaus)	91%	NFP (obsolete)
Withdrawal	94%	contraceptive
Ovulation (or Billings) method	97%	NFP
Diaphragm with spermicide	94%	contraceptive
Foam	97%	contraceptive
LAM (breastfeeding) (first 6 months)	98%	NFP
Condom	97%	contraceptive
Female condom	95%	contraceptive
IUD	98.5%	abortifacient
Pill (Progestin/combined)	99.5/99.8%	abortifacient/contraceptive
Sympto-Thermal method	98%	NFP

Tubal Ligation	99.6%	sterilization
Depo-Provera, Norplant	99% (approx.)	contraceptive
Vasectomy	99.9%	sterilization
Castration, removal of ovaries, abstinence:	100%	sterilization

This data was reported by Hatcher in 1994, in the book *Contraceptive Technology*, the industry standard reference. A couple of studies, one in Los Angeles, actually showed a zero Sympto-Thermal Method (STM) pregnancy rate, but realistically ALL methods, even tubal and vasectomy, have a surprise pregnancy rate (except the last ones, as explained in our disclaimer). Links to other, and more recent, studies verifying the excellent effectiveness of various NFP methods are on our [Effectiveness](#) page. Since this data was compiled, NFP rules have been refined to make it more accurate; newer contraceptive pills, on the other hand, have lower dosages to reduce side effects, making them less effective and abortifacient more often.

User rates for all methods are lower. The user rate is the actual rate in practice by couples who sometimes misuse a method (forget a pill, diaphragm in wrong or without spermicide, condom without spermicide, misinterpret or try to "cheat" NFP rule, etc.). Another reason for lower user rates is that some studies had only limiters and others only spacers. Limiters intend to limit family size; spacers generally want kids "soon" and are apt to use more liberal rules and take chances, and will eventually use NFP to increase their fertility.

Lumping in spacers, some studies have shown NFP effectiveness as low as 85%, which is most often quoted in literature designed to sell artificial contraception. In addition, Calendar Rhythm is usually included in the NFP statistics, although no current NFP organizations promote it. This is especially true of propaganda with a vested interest, such as contraceptive pill patient inserts (those teeny-tiny printed directions) and Planned Parenthood "Fact" sheets.

As you can see from the table above, NFP (except the obsolete Rhythm) is well within the range of "highly effective" birth control. (This does not apply to the experimental or unproven fertility indicators listed in the appendix below.) You can reach approximately 99% effectiveness level if you learn NFP properly and practice it according to the rules. It is **NOT** contingent on your having regular cycles. Additional information substantiating the excellent effectiveness of NFP can be found at the CCL and Family of the Americas web pages (see our [Resource](#) page). A longer treatise on effectiveness is on our [effectiveness](#) page.

There are many NFP providers which teach a number of commonly used rules, which vary between 98-99+% effectiveness. The most effective reversible birth control method is a version of the Sympto-Thermal Method that allows intercourse only after the rules determine ovulation. Most couples don't want to follow such a strict regimen and are willing to accept a small risk of pregnancy, so they choose a variation that suits their needs. The effectiveness is really your choice; you can choose nearly 100% effectiveness if necessary, or use more liberal rules when pregnancy is an option, but "not right now".

Atypical study found "...natural family planning can be extremely effective in the Third World. The study was of 19,843 predominantly poor women in Calcutta...The pregnancy rate was similar to that with the combined contraceptive pill --0.2 pregnancies/100 women users yearly." Or, 99.8% effective. (British Medical Journal, Sept. 18, 1993, by R.E.J. Ryder.)

members and students of NFP providers are encouraged to report method and user pregnancies in order to further refine the rules and teaching styles, and their experience confirms the high effectiveness shown in the studies. In our 21 years of teaching, we have had no method failures among our clients; if it was "only" 99% effective, we would have seen some. Any NFP teacher will tell you that they won't volunteer to teach it unless they've seen that it works. And the bottom line is **yes, it works!**

You will notice that some methods are termed "abortifacient" in the chart above. These can act to prevent implantation of a newly conceived child in their mother's uterus, thus starving it to death. The pharmaceutical/medical community, to avoid the word "abortion", has refined the term *pregnancy* to start when implantation has occurred. Therefore, the effect is described as "prevention of pregnancy". The existence of the newly conceived life in your fallopian tubes, as separate from you as the rest of your children and just as alive, is now known to be a medical fact; but the value judgments about that are left to our page on [morality](#)

Health

natural methods do not interfere with a person's health in any way. In fact, you get to know your cycles so that you know when something's not totally right. If your cycles are really weird, NFP can be used, but it alerts you and your doctor. There are sometimes things you can do (nutrition and lifestyle, usually) to have more normal cycles. Birth control pills won't do that, although they are commonly used to make women bleed on schedule, thus masking problems. So many times young women or girls are put on the pill to "regulate their cycles", and when they try to conceive, their unnoticed, untreated problems come back with a vengeance.

NFP observations can also be useful when trying to achieve pregnancy. NFP doesn't have side effects that can reduce fertility in the long term, as some artificial birth control methods can. And of course, sterility surgeries are serious anti-fertility measures; they aren't always reversible, and seldom cheaply. Check out our [sterilization](#) page if you're tempted.

The health problems and abortifacient properties of pills, IUDs, sterilization, Depo-Provera, etc. have been documented but seldom disseminated to patients. That fine-print "patient insert" gives you just enough information so you can't sue the pharmaceutical company if you suffer a stroke or blindness. They may not tell you about weight gain, loss of libido, hair loss, high cholesterol, or any other "minor" side effects (there are about 40 of them). There's more about them on our [Contraceptives](#) page. If you'd like to know about the specific problems with Depo-Provera, Norplant and other time-release artificial hormones (or get info about class-action lawsuits), see our [Depo-Provera](#) page.

Marriage Building

NFP users generally report a positive impact on a relationship. It operates totally different from contraception, which acts as a barrier (physically and emotionally) between you. Because NFP is a cooperative system, it helps you to love, respect, appreciate, and communicate better. You learn it together, interpret the charts together, and decide to postpone or seek pregnancy together. The divorce rate among NFP users is far less than the average, partly because of this. The negative effects of contraception on society as a whole were forecast in the early 20th century and spread with a vengeance (we can't say "came to fruition" of course) in the latter half; more of that on our [Practical Theology and Sexuality](#) page.

The reason most people who are avoiding pregnancy refuse to try NFP is probably the periodic abstinence from sexual relations that is required. We turn that around and count it as an advantage instead. It prevents the partners from developing a pattern where one person is always desirous of intimacy and the other is always seeking more space, by creating times when both people feel strong desires. A "courtship" time and a "honeymoon" time each month helps keep a marriage from getting stale. It also helps you develop different aspects of your relationship at different times. Like any other physical training, "no pain, no gain". But once you achieve mastery, it gives you a real high.

Couples trying to achieve pregnancy can feel there is no pressure on them during most of the month, when they know what part of the month they're fertile. Charting fertility signs can let people know whether they're pregnant or not, much sooner than they would otherwise know, thus reducing uncertainty and anxiety both for those seeking and avoiding pregnancy.

Cost

lasses, books and materials range from free to less than \$100, and after that it takes a \$3 book of charts per year (unless you print them out). This is much cheaper than contraceptives and abortifacients, and way, way cheaper than home pregnancy tests, fertility specialists, doctor visits, and surgery. The disadvantage of this is that it makes NFP instructors hard to find because, unlike the huge contraceptive industry, they have a hard time advertising due to low cash flow. It also makes for low acceptance among medical personnel, who make the most money from injectables like Depo-Provera that require regular office visits.

2. Cycles: Basic Fertility Awareness

In a typical menstrual cycle, a woman has several days of bleeding, followed usually by a few infertile days, then several days (we call these days a "patch") during which the cervix (opening into the uterus) opens and produces a certain type of fluid (mucus), then ovulation. These symptoms are caused by a gradual buildup and peaking of the estrogen hormone. That is followed by a time (about 2 weeks) of waiting for any newly conceived life to implant in the uterus and continue growing. This time is controlled by the progesterone hormone. If there's no implantation, the cycle ends and the bleeding of the next cycle begins.

If you have intercourse when no fertile mucus is being produced (and this usually includes the days of bleeding), the sperm quickly die, and pregnancy is highly unlikely. When fertile mucus is present, the

sperm gradually die but some can still live in it for up to 6 days. Therefore you are fertile when fertile mucus is being produced, even several days before ovulation. The egg lives only about one day. Sometimes, another ovulation may occur up to a day later, and that egg dies a day later. After that, it's impossible for you to become pregnant for the rest of that cycle.

The different parts of this cycle are usually determined using two main symptoms. The first is a rise in basal body temperature, an easy and reliable indicator that ovulation has occurred, caused by progesterone. The woman's temperature is taken immediately upon waking, at the same time every morning. It only goes up about a half degree Fahrenheit, which is most accurately read with a basal body temperature (BBT) thermometer. It generally stays up for 2 weeks (the "luteal phase"), then might dip just before menses starts again.

The second symptom is observation of the quality of the cervical mucus itself. This takes more experience than just reading a thermometer, but most people with good instruction are doing well after 3 to 4 cycles. The fertile mucus lasts around 3 to 7 days, and is like stretchy egg white. The less fertile mucus is tacky, opaque, and generally less abundant.

In the usual cycle, mucus builds up to a peak, ovulation occurs, then the mucus dries up and BBT goes up. However, ovulation can be delayed due to a number of things, or a mucus patch may start then dry up, then start again; you just wait for the BBT rise to signal ovulation. Postpartum cycles (including nursing, which prevents ovulation temporarily) and menopause are normal things that can be successfully charted.

Several different rules for finding the relatively fertile and infertile times have been developed and fine tuned over the years, based on thousands of charts and much medical research. You can choose each cycle whether to seek or avoid pregnancy, and how conservative to be. We haven't told you everything you need to know to interpret the mucus or temperature signs. That's something we're leaving to adequate instruction from books or class (see below for leads).

3. Avoiding Pregnancy

Since men are normally always fertile, NFP methods depend on finding out when the woman is fertile or possibly fertile, and having intercourse only on days when she is known to be infertile.

Calendar Rhythm

The now obsolete Calendar Rhythm used each woman's past cycle history to predict future cycles. Its method effectiveness, about 85-91%, was similar to that of its competitors in the 30's and 40's. Unfortunately, it was taught and practiced haphazardly, resulting in much worse effectiveness. The most common misconception (which still persists today) was that everybody ovulates on day 14. The Calendar Rhythm method, practiced correctly, uses the shortest and longest cycle in the past year or two to design rules for each woman. If she is fairly regular, Rhythm can work to some degree, and is

very simple. However, if she has a cycle much shorter or longer than her normal length, she can then get pregnant.

Instead of trying to predict probable ovulation dates based on past history, modern NFP assumes women are not perfectly regular. It accurately gauges your fertility as it happens, using readily observed symptoms.

Ovulation Method

In the Ovulation Method (OM), also known as the Billings method, the woman not only observes when she is bleeding, but also observes when she's producing fertile mucus. Many women are skeptical that they can really observe their mucus, but after daily charting and the guidance of a qualified teacher, they get to be pros after a few cycles. Thus the fertile time is determined with good accuracy.

The days of bleeding are days of low probability of being fertile; one isn't quite sure on those days. Without the confirmation of ovulation, bleeding which otherwise seems to be menstruation could really be bleeding at the time of ovulation, or bleeding for some other reason. So they're called "days of bleeding" rather than "menstruation," and require abstinence. Also, in a very short cycle, fertile mucus may begin to be produced before menstruation has finished, and it may be difficult to observe in the presence of bleeding.

Unlike rhythm, the actual fertile time is detected. If there's an unusually long or short cycle where the rhythm method would fail, the OM nevertheless requires abstinence during your fertile time, as detected by the mucus pattern. An added advantage is that the OM allows intercourse from the end of bleeding all the way up to the time that your fertile time begins, which happens when the sperm-sustaining fertile mucus appears.

Sympto-Thermal Method

Using cervical mucus observations like the OM but crosschecking them by temperature is called the Sympto-Thermal Method (STM), and is more accurate than using either sign alone. Occasionally there's more than one mucus patch, but ovulation occurs only after the last one. Without the temperature crosscheck, you would assume ovulation was after the first mucus patch.

The Sympto-Thermal method uses daily temperature measurements, taken upon waking in the morning at the same time every day. It also relies on symptoms of fertility, most commonly the presence of fertile mucus, and the position of the cervix. Around the fertile time, the cervix withdraws further into the body and its opening widens.

At the time of ovulation, temperature starts to rise about half a degree Fahrenheit. Crosschecked with the other symptoms, this provides confirmation that ovulation has occurred and determines the infertile time following ovulation. The precise sympto-thermal rules require waiting 3, 4 or

more days, depending on the situation, after the first sign that ovulation seems to have occurred, while continuing to collect information to confirm it. This also allows for multiple ovulations.

The infertile time in the early part of the cycle is less certain, but can still be found with effectiveness rates that compare well with other methods. The version with the lowest effectiveness rate allows intercourse up to the last day that is free of fertile signs such as mucus. This rule is similar to the Billings Method. Stricter rules are available for those who want them; these rules involve beginning abstinence a few days before the first fertile signs are expected.

In the STM intercourse is often allowed during menstruation. Unlike the OM, you can tell that bleeding is really menstruation, because the rise of temperature in the previous cycle confirms that ovulation has occurred.

Another indicator sometimes used in the STM is the position and softness of the cervix, the opening into the uterus. Under the influence of estrogen, it softens, opens, and raises up to admit sperm. After ovulation, it shuts and hardens to keep everything out. The cervix can be gently felt with your clean fingertips, and after getting to know its different phases, you can chart it like mucus. This sign can be helpful when your mucus is ambiguous. Some women never use it; some rely on it.

Lactation Amenorrhea Method

This means the absence of periods due to breastfeeding. Used since the beginning of humanity, breastfeeding still prevents more pregnancies than all artificial methods of birth control put together. In modern society, we need the guidelines of the LAM for effectiveness.

After giving birth, a woman normally experiences a time of infertility until her body is ready for another pregnancy. If you don't breastfeed, it's usually quite short. If you exclusively breastfeed your baby, without pacifiers, bottles, babysitters, or schedules, the average length of infertility is 14 months. It varies a lot, though, from a few months to several years. If fertility returns during the first 6 months while breastfeeding a lot, it usually starts with menstruation before the first ovulation. That provides a warning that fertility is returning.

The rules for LAM are simple: If a woman has given birth in the last 6 months, is fully breastfeeding her baby (no formula, solid food, etc.) and has not yet menstruated, she has only a 2% chance of conceiving even without observing any fertility signs.

You can achieve higher effectiveness by following guidelines of "ecological mothering": nursing on demand, nursing at night, nursing in a lying down position for naps and at night, no bottles or pacifiers. The longest time between feedings each day may be the strongest factor leading to the return of fertility, so if the baby stops nursing during the night, the return of fertility becomes more likely.

Your fertility will return eventually, of course, and you can delay subsequent pregnancy by watching for the return of fertility. If you've practiced NFP before your pregnancy this is easy. Otherwise, you need the guidance of a qualified teacher.

Not only is breastfeeding effective pregnancy postponement, it is highly beneficial to your baby's physical and emotional health by providing nutrients, antibodies, and nurturing. Birth control pills adversely affect nursing and milk nutrients, but you need not stop nursing; you simply don't need the Pill.

any health organizations support breastfeeding for many reasons. UNICEF has estimated that each year, 1.5 million babies die worldwide because they weren't breastfed. Use of LAM provides an additional incentive and source of support for breastfeeding.

nice website for the LAM is listed on our Info page. Our Ecological Breastfeeding Guidelines are [here](#).

4. Getting Pregnant

Conception occurs right after ovulation, as the egg enters the fallopian tubes. With good timing, sperm will be waiting there to fertilize it. The egg only lives a day or so, but sperm can live several days in the fertile type mucus. So achieving pregnancy is a matter of timing coitus just before ovulation.

If the woman has very short mucus patches (assuming she knows what to look for), this could adversely affect her fertility. Dry-up drugs like antihistamines, or not drinking enough water, can reduce the amount of cervical mucus. Improved nutrition and possibly guaifenesin (e.g., Robitussin cough syrup) can sometimes help to generate more. **However, cough syrup (with Dextromethorphan) has been implicated in BIRTH DEFECTS in recent clinical work [CLICK HERE](#) for more info. Read this carefully before trying it!**

inding exact ovulation time is impossible without a laparoscope, but you've got a few days of sperm life to work with. Possible signs of ovulation are:

- A temp dip toward the end of the mucus patch pattern
- First day of mucus dryup
- First day of temp rise (usually too late)

Secondary signs can be useful, too, but they come after cycles of experience and knowing when to look. One is "mittelschmerz," German for "pain in the middle" (of your cycle, that is); you may prefer just "ovulation pain," which presumes its origin. Medical opinion differs on its cause and timing, but you can usually assume ovulation is very near it.

To avoid sperm depletion, coitus should not be on consecutive days, nor for a week before the probable time of the beginning of the cervical fluid patch. Once the BBT goes up, ovulation is probably over and it's too late. Trying to get pregnant using just a thermometer can be frustrating, so use mucus charting to find the most fertile time.

If the BBT is up at the post-ovulation level 3 weeks later, there is a 99% probability of pregnancy (no test needed). Many expensive pregnancy tests, sonograms, and inducements are done because people don't know when they got pregnant. Show the chart to the doctor instead. Note: home pregnancy tests are not as accurate as the BBT elevation. See "Fertility Factors" section below for more on getting pregnant.

Estimated Date of Childbirth

Pregnancy doesn't begin at the last menstrual period (LMP); yet that's the basis of the old-fashioned Naegele's Rule, which is still used by many doctors. The time between menses and ovulation can vary, and a woman may even have breakthrough bleeding when she is expecting her next period. The EDC by the Prem rule is the first day of temperature rise minus 7 days plus 9 months. (That's 38 weeks after conception, not LMP.) 65% of deliveries will be plus or minus one week from EDC; 90% +/- 2 weeks; 95 +/-3 weeks; 99% +/-4 weeks. Calculating EDC by this more accurate method can save you a number of sonograms and possibly an unnecessary induction. If your doctor insists on using Naegele's Rule, calculate the conception date yourself, subtract 14 days and report that as the beginning of your last period. Be sure to tell him about your deception after the baby is born.

Fertility Factors

Fertility varies widely, and about 10% of couples have fertility problems. Consulting with NFP teachers (or reading books) may reveal a better picture of what your fertility is, and what your prospects for improving it are. It depends on a lot of factors, and self-awareness of your cycles is the first step. There is a lot you can try before resorting to expensive, marginally effective fertility clinics and drugs.

Your charts, properly interpreted, show what your cycles are like. Look for anovulatory cycles, length of mucus patches, breakthrough bleeding, delayed ovulation, or symptoms of approaching menopause. Short luteal phases or unusually low BBT (around 97.2 degrees or lower) affect fertility and can often be treated with vitamins and other nutrients, or changes in lifestyle. Sometimes medical intervention is necessary to correct a condition which is only indicated by your chart (and your lack of fertility).

gradual decrease in fertility occurs with age, but until menopause there's still a chance. An MD told a friend of the Van Dammes that over 40, women don't ovulate, but they have over 60 charts that show otherwise.

The hormone contraceptives (Pill, Depo, Norplant) can have unwanted permanence, and previous IUD use can cause repeated miscarriages. This is another good reason not to use them.

Your health and nutrition is important. Drugs, tobacco, alcohol, and caffeine use affect fertility. Stress and excitement (both good and bad) can result in anovulatory cycles. Improving your diet and/or taking certain vitamin and mineral supplements can improve fertility; for example, the father must have sufficient vitamin C in his diet for sperm mobility. For the woman, too much exercise or not enough body fat (min. 20%) can suppress fertility. Marilyn Shannon's book, "[Fertility, Cycles & Nutrition](#)"(FC&N), is the best on the subject and has specific recommendations and dosages to treat different problems like infertility, PMS or painful cycles. Optivite and similar vitamin compounds are specifically tailored to improving fertility.

If you have low fertility due to low sperm production, irregular cycles, or low mucus there may be additional (and cheap) things you can do to correct these problems. Before using high-tech infertility treatments, charting the women's cycles can help determine what is causing the infertility, and thus provide a guide as to what techniques may be useful. For example, if charting shows that the woman is actually getting pregnant but is having very early miscarriages, then Clomid or In-Vitro Fertilization is useless; but other medical or nutritional treatments (like natural progesterone) can help. Short luteal phases, unusually low basal temperatures or lack of fertile cervical fluid are different conditions that can be related to infertility and that have different nutritional or medical treatments. These are covered in comprehensive NFP books.

5. Learning it / where to get more info

Our website, "[The NFP Files](#)" began as an outgrowth of this Primer, and has much more information on various aspects of NFP. If you came here from somewhere else, have a look at it.

You have to learn NFP for it to be effective, whether from a book, home study course or in a class taught by a trained instructor. You can't learn it properly in 5 minutes from a friend; you first need to understand the basics of how your body works. Books and organizations are listed on our [Resources](#) page.

6. Epilogue

About the Authors of this Article

Professionally a scientist in a specific field (seismology), Cathy Woodgold is an amateur scientist and/or activist in many fields. Her interests include nutrition, breastfeeding, non-violence, barter, evolution, mathematics, auto-free living, midwifery, effective communication of emotions, alternative medicine, and natural family planning. Wife of Michael McKenny and mother of Kevin and Sheila (Sheila was born at home). <http://www.ncf.carleton.ca/~an588/index.html>

Jim Van Damme is a radar R&D engineer at the Air Force Research Laboratory in Rome, NY. He and his wife Mary Margaret, a medical technologist, ASL interpreter, lay minister, [Catholic Deaf Community Director](#), and teacher, are a CCL certified Teaching Couple, and have taught NFP since 1981. They have used it themselves for 20 years to avoid pregnancy (>200 cycles), and used it twice to achieve pregnancy.

This Primer began as a rant by Jim on the misc.kids.pregnancy USENET newsgroup in 1994 or so; was hosted on the USC website for a long time; and was combined with an article by Cathy around 1996. Cathy and Jim have never met or spoken to each other.

Acknowledgement

I'd like to acknowledge the advice, assistance and questions of many other folks without which this Primer would have been improbable, and the many teachers, researchers, and pioneers in the field of NFP who have labored against the tide in search of the truth.

Appendix 1 Other fertility indicators

We haven't included this section in the main part of the Primer above to avoid confusing beginners. However, there are other ways of determining fertility, some used by gadgets on our [resources page](#). The ones listed below have common weaknesses of being unproven in clinical trials, not easily used, too expensive, or not as effective as the methods explained above. Most of them are sold to the infertile as fertility enhancers, where expectations are lower. They can help in finding the fertile time. Avoiding pregnancy, however, requires 99% accuracy every cycle, ease of use, and non-ambiguity. In time, perhaps some of them will become useful symptoms. For now, we point them out as secondary symptoms.

It has been reported that a lymph node in your groin, right under the femoral artery, tends to swell up when you ovulate. It feels like a pea on the side that's ovulating. The vulva on that side also tends to swell up.

Your mucus increases in salt content when you are fertile. One class of devices which tries to detect this is the crystallization microscope. You put saliva or cervical fluid on a slide

glass, let it dry, and examine with a 50-100X magnifying lens. A ferning crystal pattern may be seen in the fertile part of your cycle.

here are other devices which measure the electrical continuity or pH of body fluids. The Cue fertility tester and PSC wristwatch (featured on a spring 2002 episode of "Sex and the City") work this way.

here are some hormone testers which typically require testing urine for levels of estrogen, progesterone and luteinizing hormone. These show some promise for accurately determining fertile and infertile times, especially Prof. Len Blackwell's Ovarian Monitor. Built-in microprocessors can help in recording and processing historical data. However, the accuracy, useability, and cost of these devices needs some engineering.

another class of computerized gadgets are variants on Calendar Rhythm, the best of which allow you to reach its only 91% method effectiveness; better if you are very regular, worse if you are irregular. Rhythm is also the basis of the Standard Days method, which is OK for third world countries and illiterates, especially combined with Lactation Amenorrhea. Once people get acquainted with the idea of fertility cycles and want something better, they can easily upgrade to the Ovulation Method.

at least, is the double ovulation scheme of Dr. Eugene Jonas, who years ago devised a complicated system of Rhythm and astrology that claims you ovulate twice per cycle. So, you have to abstain during your usual fertile time, plus the astrologically determined extra fertile time. Of course, this results in the same effectiveness as if you'd abstained during your usual fertile time. No clinical studies have ever shown the effectiveness of this, no convincing scientific theory of it has been published, and no other NFP organization supports this. But somebody asks us occasionally, so here it is (without endorsement). It's sold at <http://www.babyplan.com/ifptheor.htm>, and a skeptic's review is at <http://www.skepdic.com/refuge/jonas.html>.