



Natural Family Planning

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Natural Family Planning (NFP), also referred to as the symptothermal method or Fertility Awareness Method (FAM) refers to a set of practices used to determine the fertile and infertile phases of a woman's menstrual cycle. Methods of identifying infertile days have been used for over a thousand years, but scientific knowledge gained during the past century has greatly increased the accuracy of these systems. Fertility awareness methods may be used to avoid pregnancy, to achieve pregnancy, or as a way to monitor gynecological health. NFP relies on the observation of changes in the primary fertility signs (basal body temperature, cervical mucus and/or cervical position). Some women also find the observation of secondary fertility signs useful, such as breast tenderness and *mittelschmerz* (ovulation pains), although NFP does not rely on secondary signs. Most menstrual cycles have several days at the beginning that are infertile (pre-ovulatory infertility), a period of fertility, and then several days just before the next menstruation that are infertile (post-ovulatory infertility). The first day of red bleeding is considered day one of the menstrual cycle. The fertile period is calculated using a set of rules based on primary fertility signs and cycle history.

Primary signs

The primary fertility signs are *basal body temperature* (BBT), *cervical mucus*, and possibly *cervical position, firmness and openness*. The research done on NFP and the resulting effectiveness rates have been based mainly on BBT and cervical mucus observation, so this is what is usually recommended, although some women may choose to observe cervical position instead of or in addition to cervical mucus.

Basal body temperature

Basal body temperature is a person's temperature taken when they first wake up in the morning. In women, ovulation will trigger a rise in BBT of at least 0.2 degrees Celsius that lasts approximately until the next menstruation. This temperature shift, together with changes in cervical mucus, is used to determine the onset of post-ovulatory infertility.

Cervical mucus and position

The appearance and sensation of cervical mucus are generally described together as two ways of observing the same sign. Cervical mucus is produced by the cervix, which separates the uterus from the vaginal canal. Fertile cervical mucus promotes sperm life by decreasing the acidity of the vagina, and also helps guide sperm through the cervix and into the uterus. The production of fertile cervical mucus is caused by the hormone oestrogen which is released by the cells that surround a maturing follicle (egg sac) in the ovary. By observing her cervical mucus, and paying attention to the sensation as it passes the vulva, a woman can detect when her body is gearing up for ovulation, and also when ovulation has passed. When ovulation occurs, oestrogen production drops and progesterone starts to rise. The rise in progesterone causes a distinct change in the quantity and quality of mucus observed at the vulva. The cervix changes position in response to the same hormones that cause cervical mucus to be produced and to dry up. When a woman is in an infertile phase of her cycle, the cervix will be low in the vaginal canal; it will feel firm to the touch (like the tip of a person's nose); and, the os – the opening in the cervix – will be relatively small, or 'closed'. As a woman becomes more fertile, the cervix will rise higher in the vaginal canal; it will become softer to the touch (more like a person's lips); and the os will become more open. After ovulation has occurred, the cervix will revert to its infertile position.

Predecessors of NFP/FAM

The development of NFP was influenced to some degree by its predecessors which include the calendar-based method developed by Knaus/Ogino and the Billings method which was based on cervical mucus changes only. These methods were less effective compared to NFP as NFP is based on the signs and symptoms observed in the current cycle rather than using past menstrual cycle history only and uses two parameters (BBT and cervical secretions) as a double-check system.

Benefits and drawbacks

NFP has a number of unique characteristics:

- NFP can be used to monitor reproductive health. Changes in the cycle can alert the user to emerging gynecological problems. NFP can also be used to aid in diagnosing known gynecological problems such as infertility.
- NFP is versatile: it may be used to avoid pregnancy or to aid in conception.
- NFP can be used by all women throughout their reproductive life, regardless of whether a woman is approaching menopause, is breastfeeding, or experiencing irregular cycles for other reasons.
- Use of NFP can give insight to the workings of women's bodies, and may allow women to take greater control of their own fertility.
- Some symptoms-based forms of fertility awareness require observation or touching of cervical mucus, an activity with which some women are not comfortable. Some practitioners prefer to use the term "cervical fluid" to refer to cervical mucus, in an attempt to make the subject more palatable to these women.
- Some drugs, such as decongestants, can change cervical mucus. In women taking these drugs, the mucus sign may not accurately indicate fertility.
- For contraception: by restricting unprotected sexual intercourse to the infertile portion of the menstrual cycle, a woman and her partner can prevent pregnancy. During the fertile portion of the menstrual cycle, the couple may use barrier contraception or abstain from sexual intercourse.

Advantages

- There are no drug-related or other side effects to NFP.
- NFP is free or very low-cost. Users may avail of a chart, calendar, basal thermometer, or software. The costs are extremely low when compared to other methods.
- NFP can be used with barrier contraception so that intercourse may continue through the fertile period. Unlike barrier use without NFP, practicing NFP can allow couples to use barrier contraception only when necessary.

Disadvantages

- Use of a barrier method is required on fertile days, otherwise the couple must abstain. To reduce pregnancy risk to below 1% per year, there are an average of 13 days where abstinence or barriers must be used during each cycle.
- For women with very irregular cycles - such as those common during breastfeeding, perimenopause, or with hormonal diseases such as PCOS - abstinence or the use of barriers may be required for months at a time. Many couples may not have the motivation or discipline to abstain or use barriers for long periods of time.
- Fertility awareness does not protect against sexually transmitted disease

Effectiveness

The effectiveness of NFP, as of most forms of contraception, can be assessed two ways. Perfect use or method effectiveness rates only include people who follow all observational rules, correctly identify the fertile phase, and refrain from unprotected intercourse on days identified as fertile. Actual use, or typical use effectiveness rates are of all women relying on fertility awareness to avoid pregnancy, including those who fail to meet the "perfect use" criteria. Most commonly the Pearl Index is used to calculate effectiveness rates.

Several factors account for typical use effectiveness being lower than perfect use effectiveness:

- mistakes on the part of those providing instructions on how to use the method (instructor providing incorrect or incomplete information on the rule system)
- mistakes on the part of the user (misunderstanding of rules, mistakes in charting)
- conscious user non-compliance with instructions (having unprotected intercourse on a day identified as fertile)

The most common reason for the lower actual effectiveness is not mistakes on the part of instructors or users, but conscious user non-compliance, i.e. the couple knowing that the woman is likely to be fertile at the time, but engaging in sexual intercourse nonetheless. This is similar to failures of barrier methods, which are primarily caused by non-use of the method.

The University of Düsseldorf in Germany has conducted a study with 14,870 cycles to assess the effectiveness of NFP based on the rules we teach at our practice. The method effectiveness in this study was 0.4 (no unprotected intercourse in the self-detected fertile phase) and 2.3 with typical use (unprotected intercourse in the self-detected fertile phase).

To achieve pregnancy

Intercourse timing

A study by the University of Düsseldorf has also found that couples who timed their intercourse based on their fertility charts to maximise chances of conception achieved pregnancy faster (60% within 3 months, 81% within 6 months, 91% within 12 months) than those who did not time their intercourse (55% within 6 months, 80% within 12 months).

Problem diagnosis

Regular menstrual cycles are sometimes taken as evidence that a woman is ovulating normally, and irregular cycles as evidence she is not. However, many women with irregular cycles do ovulate normally, and some with regular cycles are actually anovulatory or have a luteal phase defect. Records of basal body temperatures (BTT), especially, but also of cervical mucus and position, can be used to accurately determine if a woman is ovulating, and if the length of the post-ovulatory (luteal) phase of her menstrual cycle is sufficient to sustain a pregnancy. Also, the BBT and mucus quality gives some indication of a woman's oestrogen/progesterone levels.

Pregnancy testing and gestational age

Pregnancy tests are not accurate until 1-2 weeks after ovulation. Knowing an estimated date of ovulation can prevent a woman from getting false negative results due to testing too early. Also, more than 18 consecutive days of elevated temperatures means a woman is almost certainly pregnant.

Estimated ovulation dates from fertility charts are a more accurate method of estimating gestational age than the traditional pregnancy wheel or last menstrual period (LMP) method of tracking menstrual periods.

Combining NFP with barrier methods of contraception

There are several options for contraception during the fertile window: these include condoms, diaphragms and cervical caps.

We offer coaching in NFP and fittings for diaphragms and cervical caps. For more information, please follow this link http://www.naturalgynae.com/nav6_fact17.html to our Health Fact Sheet on Women's Birth Control Choices on our website or contact us by phone at 0845 688 5270 or email at enquiries@naturalgynae.com.