

Guidelines

Fertility Awareness Methods to achieve and avoid pregnancy Last updated August 2023

These guidelines are intended to supplement instruction from an experienced FAM practitioner

See clinic list at www.fertilityuk.org

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Guidelines adapted from evidence-based guidelines used in European prospective longitudinal study¹

¹ Frank-Herrmann, P., The effectiveness of a fertility awareness-based method to avoid pregnancy in relation to a couple's sexual behaviour during the fertile time: a prospective longitudinal study, *Hum Reprod*, 22(5): 1310-1319, May 2007

Step-by-step guide to interpreting the chart

- Name and age of woman. Is she of normal fertility?
- Chart number: New user (charting less than 1 year) or experienced user (more than 1 year)?
- What is the length of her current cycle?
- Does she have a record of her last 12 cycle lengths? Yes/No
 - o If yes, what is the length of her shortest cycle (S)?
 - o If no, then she should start recording her cycle lengths
- Was there a temperature rise in the last cycle? Yes/No
 - o If yes, then the period is a true period and is *relatively* infertile
 - o If no, the bleed may be associated with ovulation and is potentially fertile
- Interpret the temperature chart:
 - o Identify the temperature rise by applying the coverline and the 3 over 6 rule
 - Identify the last fertile day ensuring that the third high temperature is at least 0.2 deg. C above the six low readings.
- Interpret the pattern of cervical secretions:
 - Identify the start of secretions (change from dryness)
 - Check the description in the appropriate boxes
 - o Identify the peak day (last day showing most fertile characteristics)
 - Extend the shading on peak day upwards to see the correlation between the secretions and temperature
 - Double-check the secretions with the temperature ensuring that there are three high temperatures *after* peak day
- Interpret the changes in the cervix (optional)
 - Low, firm, closed, tilted cervix: infertile. High, soft, open, straight cervix: fertile [Note that the above changes are for women with an anteverted uterus.
 Women with a retroverted uterus may notice that the cervix feels high at the infertile time and low at the fertile time]
 - Consider how the cervical changes correlate with the other indicators
- Use a calculation to identify the first fertile day (see page 5)
- Consider other factors which may affect the chart, e.g., alcohol, sleep disturbance, changes in temperature-taking time, stress, illness or medication
- Apply the appropriate guidelines dependent on the woman's fertility status checking her understanding and commitment:
 - Planning pregnancy: consider intercourse targeting, impact on relationship and concerns about delayed conception
 - o Avoiding pregnancy: check effectiveness required and couple motivation
- Use a horizontal arrow + to indicate the start and end of the fertile time based on all the available information
- Add any relevant teaching points to the chart to increase client learning

Guidelines to plan pregnancy

NICE guidelines state: Vaginal sexual intercourse every 2-3 days optimises the chance of pregnancy. The use of basal body temperature charts to confirm ovulation does not reliably predict ovulation and is not recommended.²

Sex frequency

Frequent sex is the key to conception. The higher the sexual frequency, the higher the chance of conception.^{3 4} There is no evidence for 'saving up' sperm and some evidence that daily ejaculation improves sperm quality by reducing DNA damage.⁵

Most women wish to understand their fertile time to optimise sex targeting.

- LH kits: only identify a very short fertile window so should be discouraged
- Fertility monitors such as Clearblue identify the full fertile window, but are costly.

Cervical secretions provide the most useful marker of days with high conception probability. Within the six-day fertile window (from 5 days before to the day of ovulation), the type of secretion observed on the day of intercourse is more predictive than the timing relative to ovulation (based on temperature rise)⁶ Intercourse on *any* day of secretions could result in pregnancy. One study found the highest chance of pregnancy (38%) on peak day (which frequently coincides with ovulation), with 26% chance the day before peak (which often coincides with the day of the most abundant secretions)⁷

TO OPTIMISE CONCEPTION

Aim for intercourse on any days when wet, transparent, stretchy secretions are present.

- The day with the most profuse secretions correlates closely with ovulation this frequently precedes peak day by one or two days
- Peak day and the two days preceding peak are the days of maximum fertility

Temperature: The rise in temperature confirms ovulation. Temperature has no predictive value; however, it can be useful as a diagnostic aid.

Time to conception within one year of fertility-focussed sex

In a large German study, 38% of couples conceived on the first cycle; 68% by the third cycle; 81% by the sixth cycle; and 92% by the 12th cycle.⁸

² National Institute for Health and Care Excellence, Fertility assessment & treatment for people with fertility problems; Clinical Guideline 156, Feb. 2013 available from: www.nice.org.uk/guidance/cg156

³ Barrett JC., The risk of conception on different days of menstrual cycle Popul Stud (Camb), 23(3):455–461, Nov 1969

⁴ Schwartz, P. Fecundability, coital frequency and the viability of ova. *Popul Stud (Camb)*, 34(2):397–400, Jul 1980

⁵ Greening, D., Daily sex helps reduce sperm DNA damage and improve fertility, presented to European Society of Human Reproduction & Embryology conference June 30 2009, Amsterdam

⁶ Bigelow JL., Mucus observations in the fertile window, Hum Reprod, 2004, 19(4): 889-892, 2004

⁷ Gray RH., Timing conception and risk of spontaneous abortion, Am J Obs Gyne, 172(5):1567-72, 1995

⁸ Gnoth, C. Time to pregnancy *Hum Reprod* 18: 1959–1966, 2003

Guidelines to avoid pregnancy: Normal fertility - Single indictor methods

The guidelines for single indicator methods are provided here for completeness; however, a single indicator method is never as effective for avoiding pregnancy as using a combination of indicators with a calculation to identify the start of the fertile time.

New users: The first cycle is a learning cycle for ALL new users. Advise: record the indicators, but no unprotected intercourse. **There is no infertile time in the first cycle.** The guidelines below can be applied from the <u>second</u> cycle onwards.

Using cervical secretions only

- No intercourse during a period (or any bleeding/spotting)
- Intercourse is restricted to the evenings on non-consecutive early dry days
- The day after intercourse is marked with an "X" to denote a "wet" day
- The fertile time starts at the first sign of any secretions
- The fertile time ends 3 full days after peak day
- Intercourse is unrestricted from the 4th day after peak until the start of the next period

Using temperature only

- The fertile time starts on day 1 of the cycle (first day of period).
- The fertile time ends after the third high temperature has been recorded, provided it is at least 0.2 deg. C. above the highest of the preceding 6 low readings (the other temperatures need only be 0.1 deg. C). Intercourse can be resumed on the evening of the third high temperature.
- If the third high temperature is not at least 0.2 deg. C above the 6 low readings, wait for a fourth high temperature which only has to be above the coverline. Intercourse can then be resumed from the *fourth* evening.
- The late infertile time lasts until the start of the next period.

Using cervical signs (anteverted uterus)

Cervical signs should *not* be relied on as a single indicator method for avoiding pregnancy, but can be used in combination with other indicators for improved effectiveness.

- A low, firm, closed, tilted cervix indicates infertility
- A high, soft, open, straight cervix indicates fertility
- The fertile time starts at the *first* sign of fertility i.e. when the cervix shows the first sign of moving higher or becoming softer, more open or straighter.
- The fertile time ends when the cervix has returned to low, firm, closed and tilted and remained so for 3 days.
- If the other indicators (temperature and secretions) correlate, there is no reason to wait for the cervix to remain closed for three days. There must always be a double check for the start and end of the fertile time.

Using calendar calculation only

- Shortest cycle (S) minus 20 = first fertile day
- Longest cycle (L) minus 10 = last fertile day

The calendar calculation requires at least 12 cycles of personal information (last 12 cycles).

The Longest cycle calculation is only relevant for a single indicator method. If combining indicators, L-10 is unnecessary as the combination of temperature and cervical secretions is a more reliable way to identify the *end* of the fertile time.

Calculations to identify the first fertile day (FFD)

Accurately identifying the start of the fertile time is probably the biggest challenge with FAMs. The changes in secretions (and cervix) are very subtle and take time to learn. FAMs are more effective when a calculation is used to identify the start of the fertile time, but this requires accurate information about past cycle lengths.

If a new user knows the length of her last 12 cycles, she can use the S minus 20 rule:

Estimate the shortest cycle length out of the last 12 cycles: for example, if a woman had cycle lengths of 32, 27, 31, 30, 27, 29, 30, 27, 31, 28, 30 and 29 days, her shortest cycle length (S) is 27 days. The calculation is:

Shortest cycle (S) minus 20 to give the first fertile day; so: 27-20=7.

Day 7 is therefore the first fertile day in the above example.

This is recalculated after each cycle to work on the length of the last 12 cycle lengths.

If a new user does <u>not</u> know the length of her last 12 cycles, she needs to record 12 cycles to establish her shortest cycle. In the interim she can start using the Day 6 rule as follows:

- Cycle 1: No pre- or post-ovulatory infertile time. This is a learning cycle only.
- Cycles 2 & 3: No pre-ovulatory infertile time (to establish if she has very short cycles)
- Cycles 4 12: Provided the first three cycles are 26 days or longer, she can have intercourse up to day 5 with the fertile time starting on day 6. This is known as the **Day 6 rule**

From cycle 13 Having recorded 12 cycles, she can start using the *S minus 20 rule* - The calculation is always made on the most recent 12 cycle lengths.

The 'Stop Bar'

Draw a short vertical bar - the 'stop bar' - to show the start of the fertile time based on the Day 6 rule or the S minus 20 rule. Couples need to understand that if they continue to have unprotected intercourse after the 'stop bar' they are at increasing risk of pregnancy.

Women with very short cycles (less than 26 days) who have a strong need to avoid pregnancy should be advised that there is no pre-ovulatory relatively infertile phase.

Earliest temperature rise minus 7 rule - for experienced users

Experienced users may add another rule: Take the 12 most recent charts. Identify the earliest temperature rise and subtract 7 to identify the first fertile day. If in subsequent cycles, a temperature rise occurs on an earlier day, adjust the calculation accordingly. Always do the calculation based on information from the last 12 cycles.

The earliest change ...

A calculation generally gives the earliest indication of the start of the fertile time; however, a woman should always be vigilant for any change in cervical secretions (or cervix) which may precede the day given by the calculation. The fertile time starts at the *earliest* sign of change – whether from the secretions, cervix or calculation (see algorithm on page 5).

Calculations to identify the first fertile day (FFD)



Notes

1. Draw a short vertical 'stop bar' to show the first fertile day based on the relevant calculation

2. A calculation generally gives the earliest indication of the first fertile day; however, a woman should always be vigilant for any change in cervical secretions and/or cervical change prior to the day given by the calculation.

The fertile time starts at the earliest sign of change - whether from secretions, cervix or the calculation.

Guidelines to avoid pregnancy: Combined Indictors: Normal fertility

Guidelines must be followed consistently and carefully recognising that the late infertile time (post-ovulatory) is the most effective for avoiding pregnancy.

First cycle: The first cycle is a learning cycle only. Ideally intercourse should be avoided completely during the first cycle to allow an uninterrupted observation of secretions

Second and subsequent cycles: The woman needs to establish whether it is likely that she ovulated in her previous cycle. At the start of her period, she asks herself:

- In the previous cycle: was there a temperature rise 10-16 days before this bleed?
 - If yes: The bleed is a true period and the guidelines can be applied
 - If no: Assume the bleed indicates fertility and avoid unprotected intercourse until the fertile time has ended

Start of the fertile time (first fertile day/FFD) is identified by:

- Calendar-based calculation
 - S minus 20 rule (provided there is a record of the last 12 cycle lengths), or
 - Day 6 rule (from 4th cycle provided that the first 3 cycles are 26 days or longer), or
 - Earliest temperature rise minus 7 (provided that there are at least 12 charts)
- Cervical secretions: The first sign of *any* cervical secretions
- Cervix: The first sign of change from low, firm, closed and tilted (anteverted uterus)

The first fertile day is the day shown by the *earliest* indicator (see algorithm on page 5)

End of the fertile time (last fertile day/LFD) is confirmed by:

- Temperature: the evening of the third high temperature, provided that:
 - There are 3 consecutive undisturbed high temperatures
 - The 3rd high temperature is at least 0.2 deg. C. above the 6 low readings
 - There are at least 6 low temperature readings
- Cervical secretions: All high temperatures must be after peak day
- Cervix: low, firm, closed and tilted for three days. (If temperature and secretions correlate there is no need to wait for the third day of a low, firm closed, tilted cervix).

Summary of guidelines to avoid pregnancy

- First fertile day = First secretions or relevant calculation whichever comes first
- Last fertile day = Evening of the third high temperature after peak day

A double-check of at least two indicators is advisable to confirm both the start and end of the fertile time.

Guidelines to avoid pregnancy after hormonal contraception

These guidelines are for use following discontinuation of *any* hormonal method – this includes combined oral contraceptive pills, patches and rings; and progestogen-only pills, injectables, implants and intrauterine systems. There is very little research on returning fertility following discontinuation of hormonal methods. Injectable methods are commonly associated with fertility delays, however an immediate return to normal ovulatory cycles should be anticipated following all hormonal methods.

Major cycle disturbances include: cycle lengths of more than 35 days, luteal phases of less than 10 raised temperatures and monophasic cycles. These and other subtle disturbances should be anticipated for up to six cycles and in extreme cases for longer.⁹

Return of regular ovulatory cycles: The beginning of a regular ovulatory cycle after discontinuation of hormonal contraception is the first of at least 3 consecutive cycles with a luteal phase of 10 days or more.

First cycle

- Intercourse must be avoided throughout the first cycle.
- Even if the first cycle appears to be bi-phasic there is no discernible infertile time due the effects of the contraceptive hormones.

Second cycle

- Intercourse must be avoided during the early infertile time
- Use the coverline technique to identify the temperature rise. Extend the coverline back as far as possible, excluding the first four temperatures during the period.
- Intercourse can be resumed after the *fourth* high temperature has been recorded, provided they are *all at least 0.2 deg. C.* above the low temperatures. All high temperatures must be after peak day.

Third and subsequent cycles

- The late infertile time starts on the evening of the third high temperature provided that it is at least 0.2 deg. C. above the six low temperatures. All high temperatures must be after peak day.
- Intercourse is restricted to the late infertile time until regular ovulatory cycles are reestablished.
- When there have been at least 3 consecutive biphasic cycles with a luteal phase of 10 days or more (i.e. regular ovulatory cycles have returned), intercourse is permitted in the early infertile time using the guidelines for normal fertility.

Period or bleeding

• Intercourse is allowed during a period (up to day 5) from the fourth cycle onwards provided that the first three cycles are 26 days or longer and the period is a 'true period'.

Calculation based on cycle length

• Calculations to identify the first fertile day (*Day 6 rule, S minus 20 and Earliest temperature rise minus 7*) must be recalculated after any hormonal method

⁹ Gnoth, C. Cycle characteristics after discontinuation of oral contraceptives, Gynecol Endocrinol 16(4): 307-317, Aug 2002

Lactational Amenorrhoea Method

Lactational Amenorrhoea Method (LAM) is a transitional method which is highly effective for postpartum women who plan to breastfeed exclusively for the first six months.

- "Women may be advised that if they are less than 6 months postpartum, amenorrhoeic and fully breastfeeding, LAM is over 98% effective at preventing pregnancy.
- Women using LAM should be advised that the risk of pregnancy is increased if the frequency of breastfeeding decreases (stopping night feeds, supplementary feeding, use of dummies/pacifiers), when menstruation returns or when more than 6 months postpartum." ¹⁰

There are no restrictions on intercourse, while the following conditions are met:

- ✓ The baby is exclusively breast-fed* and is fed often day and night <u>and</u>
- ✓ The mother's periods have not returned <u>and</u>
- ✓ The baby is less than six months

When any of these conditions are not met the couple need to use another method of family planning. The mother should be encouraged to continue breastfeeding for the health of her baby, however fertility indicators can be confusing for a breastfeeding woman whose periods have returned but regular cycles have not been established.

Exclusive breastfeeding: The baby should be fed exclusively from the breast (not expressed breast milk) and no dummies or bottles. The baby should be breast-fed at least once every four hours during the day and at least once every six hours at night. (FSRH 2015)

For comprehensive coverage of breastfeeding, LAM and returning fertility including definitions of the first postpartum menstruation and definitions of breastfeeding see: The Complete Guide to Fertility Awareness Methods, Jane Knight, Routledge 2017

¹⁰ Faculty of Sexual and Reproductive Healthcare (FSRH) Clinical Guidance, Fertility Awareness Methods, June 2015

Postpartum and during breastfeeding

If a woman wishes to switch from LAM to FAMs, she should start to observe her fertility indicators at least two weeks before she anticipates that she can no longer meet the conditions of LAM (i.e. when considering weaning, or approaching six months).

Basic infertile pattern (of secretions)

Estrogen levels during breastfeeding will be very low. Some women will experience persistent dryness but others will feel moist throughout and experience a 'basic infertile pattern' (BIP) of moistness. This pattern is exclusive to breastfeeding women. The basic infertile pattern has to be established over at least two weeks. This is defined as 2 weeks of dryness or 2 weeks of an *unchanging* pattern of cervical secretions.

- Intercourse should be avoided on any days of bleeding and for the following three days (as bleeding could mask cervical secretions)
- Intercourse is only allowed on non-consecutive evenings during the BIP. The day after intercourse is marked with an "X" as a non-intercourse day.
- Intercourse should be avoided at the first sign of any change from the BIP (by secretions or cervix), while the fertile signs last and for 3 days after return to the basic infertile pattern. (This allows time to ensure that the BIP has been re-established). Intercourse can be resumed on the evening of the fourth day.
- The BIP rule only applies prior to the first temperature rise (first presumed ovulation).

Identifying the first temperature rise after childbirth

The waking temperature of a breastfeeding woman tends to have greater day-to-day variations – a swinging temperature. This may settle to a more consistent pattern as fertility starts to return but this should not be relied upon.

- A horizontal line is drawn on the line immediately above the highest of the low-phase temperatures. The coverline should be extended as far back as possible, excluding any disturbances. This allows time to ensure that a swinging temperature has settled. There must be at least six low temperatures.
- There should be at least *four* temperatures at the higher level. Intercourse can be resumed on the evening of the *fourth* high temperature. All high temperatures should be at least 0.2 deg. C. above the low readings.
- All high temperatures should be after peak day.
- The luteal phase may be shorter in the first postpartum cycle.

Subsequent cycles

Late infertile time (post-ovulatory)

• Intercourse can be resumed on the evening of the *third* high temperature provided it is at least 0.2 deg. C. above the low temperatures and all high temperatures are after peak day.

Early relatively infertile time(pre-ovulatory)

- BIP rules no longer apply
- Only non-consecutive dry evenings are *relatively* infertile
- Calculations to identify the first fertile day (*Day 6 rule, S minus 20 and Earliest temperature rise minus 7*) must be recalculated following the re-establishment of normal fertile cycles.

Guidelines for women who do not breastfeed or breast feed for a short time

A woman who wishes to use FAMs should start recording her fertility indicators from 2–3 weeks postpartum. If she does not breastfeed or breastfeeds for only a short time (one month or less) she should expect her fertility to return very quickly. Some women will ovulate as early as the 4th week postpartum. Up to 70% of women will ovulate before their first period (and up to 60% of first ovulations are estimated to be potentially fertile)¹¹

- In the first cycle, intercourse may be resumed on the evening of the *fourth* high temperature (provided that all high temperatures are at least 0.2 deg. C. above the low-phase temperatures) with all high temperatures occurring after peak day.
- On the second and subsequent cycles, intercourse can be resumed on the evening of the *third* high temperature (provided it is at least 0.2 deg. C above the low temperatures) with all high temperatures occurring after peak day
- Intercourse can be resumed on non-consecutive dry evenings in the early infertile time from the second cycle onwards, but this always carries a risk of pregnancy.
- The Day 6 rule, S minus 20 and Earliest temperature rise minus 7 to identify the first fertile day must be recalculated following the re-establishment of normal fertile cycles (see page 5)

¹¹ Knight, J., The Complete Guide to Fertility Awareness Methods, *Routledge*: pages 283-4, 2016

During the perimenopause

Characteristics of pre-menopausal cycles

Pre-menopausal cycles follow a typical overall pattern, as described by the STRAW staging system;¹² but different cycle types occur randomly resulting in a variable sequence of fertile and infertile cycles. Cycles may be ovulatory with adequate (or inadequate) luteal phases or anovulatory. This impacts on cycle length and the variability of the pre- and post-ovulatory infertile phases, the nature of vaginal bleeding, and the indicators of fertility.

Early relatively infertile time

- Intercourse is permitted on non-consecutive evenings during the early dry days
- Intercourse should be avoided during any bleeding or spotting
- If the bleed is a "true period" (i.e. it is preceded by a temperature rise about 14 days earlier), intercourse should be avoided for its duration but can be resumed on non-consecutive evenings during the early dry days
- If the bleed is not preceded by a temperature rise, intercourse should be avoided for the duration of the bleed and for the following three days to establish a return to dryness. Intercourse can be resumed on the fourth evening and thereafter on non-consecutive evenings during the early dry days
- Intercourse should be avoided at the first sign of fertility (i.e. first change from dryness or first change from an infertile cervix whichever comes *earliest*) for the duration of the fertile signs and for *three days* after return to dryness (and an infertile cervix). Intercourse can then be resumed on non-consecutive evenings.

Late infertile time

- Intercourse can be resumed on the evening of the third high temperature after peak day, provided all high temperatures occur after peak day
- There must be at least six low temperatures, but the coverline should be extended backwards as far as possible, excluding the first four temperatures of the period
- The third high temperature must be at least 0.2 deg. C above the low temperatures
- Unrestricted intercourse is permitted until the start of the next period

Caution: If periods are getting further apart, shorter and lighter, then generally there is no cause for concern, but if periods are getting closer together, longer and heavier or there is any inter-menstrual bleeding, this should be investigated. Similarly, any post-menopausal bleeding (vaginal bleeding more than one year after the final menstrual period) should be investigated.

¹² Harlow, SD., Executive summary of Stages of Reproductive Ageing Workshop + 10; *Fertil Steril*, 97(4): 843-851, Apr 2012