How to Achieve Pregnancy

Trying to have a baby and not succeeding is one of the greatest frustrations a couple can experience. All their friends seem to achieve it without even trying, which really adds to the frustration. When couples seek accurate information about the most fertile time of the cycle, all too often they are given wrong information. Some of this information is so far wrong that it actually makes the task harder, if not impossible! This web site will correct much of the misinformation currently in circulation and, if the couple learn to accurately chart the woman's cycle and time intercourse accordingly, this will significantly increase their chances of conceiving a baby.

Please read the tutorial "How your Fertility Works" before reading this tutorial. How to Achieve Pregnancy will build on the knowledge you have obtained from the other tutorial and orientate it towards achieving conception.

Working with your Menstrual Cycle

Most couples feel that it important for the woman to have a regular cycle. Not true! You must learn to work with the cycle you have, not try to alter it, other than by good nutrition, good fluid intake, exercise and trying to cut down on stress, which is the most notorious contributor to irregular cycles. The "stress factor" can take many forms such as stressful jobs, travelling a lot (particularly flying), long working hours, shift work (particularly night work), financial difficulties etc. . Poor nutrition (not enough vegetables in particular), too much alcohol, not drinking enough water, smoking and not enough exercise, or conversely too much exercise, can also be contributory factors for some people.

The frustrating fact is that we all know people who smoked like chimneys, drank a lot, ate junk food, in other words broke all the rules in the book and became pregnant easily. It often makes people sceptical that any of the above advice is valid. In fact, we are dealing with individuals, who all react differently to different forces, foods and medicinal drugs. Also, we don't all start out with the same level of fertility necessarily. It's not a level playing field, when it comes to health and fertility. So we have to work with the constitution we have and improve it, when needed, by standard advice which has stood the test of time.

The length of time it takes to become pregnant (conceive) is different for everyone, but on average, for every 100 couples who have sex two to three times a week:

- around 30 will conceive within one month,
- around 60 will conceive within six months, and
- around 85 will conceive within one year.

The remaining couples take longer, and some may need medical help to conceive. A small number of couples may not be able to conceive at all if one, or both, of them is infertile.

The following pages are all about charting the menstrual cycle in order to identify the fertile window of each cycle. Again the individual variations become evident. Some women have short 3 week cycles, others average 4 weeks, others lasting 5-6 weeks, others again lasting a couple of months. Within the cycles, the fertile window can be very short with fertile mucus evident only 1-2 days a month, sometimes not evident at all. For others it can be abundant and last 5-6 days. Do not despair. Pregnancies have been achieved from intercourse on the only day fertile mucus was seen in months of looking! Keep your spirits up and do not let the charting dominate your life. Try to enjoy the other dimensions of your life and keep the charting in the background.

Please **download** a **black** and white **blank** chart from the tool bar to help you follow the instructions below.

Charting Your Fertility Cycle to Achieve Pregnancy

For a pregnancy to occur, three elements are needed:

- 1. Fresh sperm from the man
- 2. A live egg, produced by the woman at ovulation





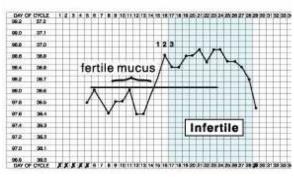
3. Fertile cervical mucus to nourish and transport the sperm

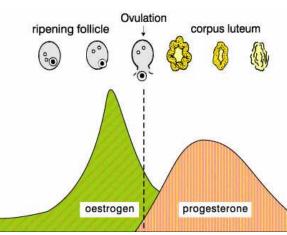
For couples trying to achieve pregnancy, two indicators are valuable:

- Variations in body temperature
- Changes in cervical mucus

1. The Temperature Method

We start with the temperature indicator because so many couples in infertility clinics are given temperature charts but often do not have the correct instructions on how to keep them. When done correctly, temperature charts are very useful both to patient and doctor because the rise in temperature highlights where the ovulation occurred in the cycle. After 3 high readings, the rest of the cycle is infertile. However, for those trying to conceive, **the most fertile days are the last 3 days BEFORE the temperature rises.** So, while the temperature chart gives useful information about the cycle, it does not actually help couples to time intercourse to maximise their chances of pregnancy. This will be explained more fully later.





Temperature is normal

Temperature is raised

The reason for the rise in temperature is illustrated in this diagram which shows the two major hormones in a woman's cycle.

Oestrogen, in the first half of the cycle, which comes from the ripening follicle, has no effect on body temperature. So it remains normal until the egg is ready for release.

At ovulation, the ripe follicle bursts and sheds the egg into the fallopian tube. The empty follicle recycles itself to become the **corpus luteum** (pregnancy gland) and produces the hormone **progesterone**. It is this hormone that raises body temperature. So the temperature rises **after** ovulation and remains raised for 10 – 16 days. It drops as the period starts.

Once released, the egg it is fertilizable for about 12 hours only. The temperature rise may occur up to 48 hours after ovulation.

The most fertile days on the temp. chart are the last 3 days BEFORE the temperature rise, when fertile mucus will be present.

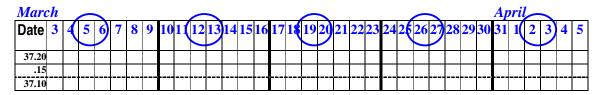
(Explained later in section on mucus)

It is vital that charting rules are understood and used correctly. Please download a chart so you can follow the instructions more easily

How to take your temperature correctly

- 1. Take your temperature **on waking in the morning**, in bed, at the same time (as far as possible) before any activity, cups of tea etc. If it is taken **later**, the temperature will **rise and make you think you have ovulated when you haven't!** When you oversleep at weekends, it could completely confuse your chart, unless you recognise it as a disturbed reading and mark it as such on your chart. Conversely, if taken **earlier**, the temperature will **fall**. (*See later notes*)
- 2. Digital thermometers are easy to read, usually requiring only a minute, but some can be erratic if not used properly. Trap the tip/ bulb of the thermometer **under the tongue**, well back in the soft flesh at the base of the tongue, in the same place each time, without talking or falling asleep. Hold it in place to stop it moving and losing contact.
- 3. Mercury thermometers must be shaken down before use, they are slower (*requiring 5 mins. orally*), but charts are usually very stable. Use under the tongue as for digitals.
- 4. The readings can be recorded on the chart **in the evening**, when you record your mucus symptom. Mercury holds the morning reading till shaken down. Most digital thermometers have a memory device which enables you to read the morning's reading later in the day.

How to Keep a Chart



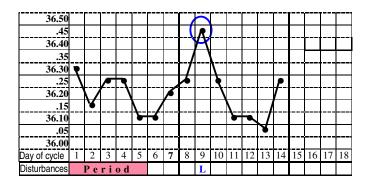
- 1. Mark the date across the top of the Temperature Chart to serve for both Temperature and Mucus Chart, as shown in the example above.
- 2. **The first day of the period is Day 1 on the chart.** Spotting before the period is not counted, it is still part of the previous cycle
- 3. Each day has its own column. Every 7th line is **bold** to help keep the columns in line on both charts.
- 4. Circle the weekends to highlight potential disturbances which often occur at weekends, such as late nights, oversleeping, travelling and alcohol consumption, which may affect readings.
- 5. Record the reading for each day with **a large dot in the centre of the square** opposite the appropriate temperature on the scale. Join the dots up to make a graph. (*See later examples*)
- 6. The rise in temperature after ovulation is actually quite small (*only between 0.2C and 0.6C on average*). Therefore the chart uses **half centigrade readings** to show the rise more clearly by making it look larger. If, on the small chart above, you had a reading between 37.10 and 37.20, then put the dot in the square marked 37.15.

Disturbed temperature readings

The waking temperature is affected by many things. False rises and dips can be caused by

- taking it at different times; being ill, having a fever, a migraine etc.
- events the night before drinking alcohol, heavy late night meal, disturbed night's sleep.

How to deal with disturbances



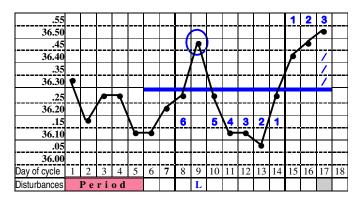
The most common factors are listed at the bottom of the temperature chart.

New thermometer (NT), alcohol (A), Late (L), early (E), disturbed night (D), unwell (U), travel (T), holidays(H), cystitis (C), thrush (Th),medicines (M)
Read the list and mark any disturbances, which may have altered a temperature reading, by putting the letter code given e.g. A for alcohol, or L for taken late, etc. in the last row of squares of the Temperature Chart.

In the above chart, the reading on Day 9 is raised because it was taken later by 2 hours. So it is circled to highlight it, labelled with **L** for **Late** and discounted when interpreting the chart.

It is vital that "disturbed" readings are recognised to be able to interpret a chart accurately.

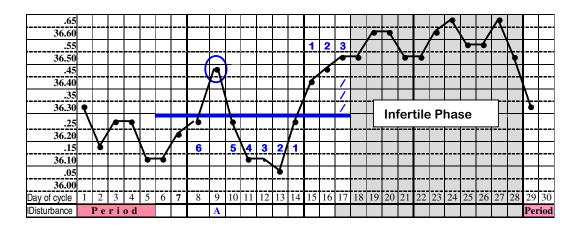
How to Interpret a Chart



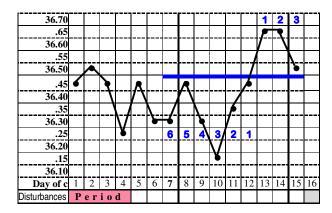
When 3 readings (Days 15,16,17 in this example) have risen above the preceding temperatures, and they are disturbances, draw cover-line immediately above the last 6 low readings (excluding disturbances) and number them back 1-6, as illustrated. This establishes a visual dividing line (the blue line) between the low and the high readings. Number the raised readings 1, 2, 3.

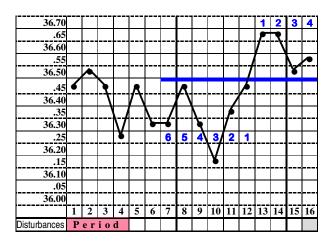
Those avoiding pregnancy need to check that the 3rd high reading (Day 17 in this example) has risen to at least 0.2C above the cover-line as a re-assuring rise and mark the rise with 3 little flashes to confirm the rise, as shown on the chart on Day 17.

The chart finished as a fairly typical 28 day cycle. The period on Day 29 starts a new chart. For those avoiding pregnancy, the Infertile Phase **after** ovulation begins on the evening of the 3rd raised temperature (*Day 17 in this chart*) and continues till next period. **For those achieving pregnancy,** the most fertile days on this chart are Days 12, 13, 14 before the temperature rise.



The majority of temperature charts follow the previous rule. However, in about 20% of charts, the temperature rise is more erratic and you may not recognise the correct rise.



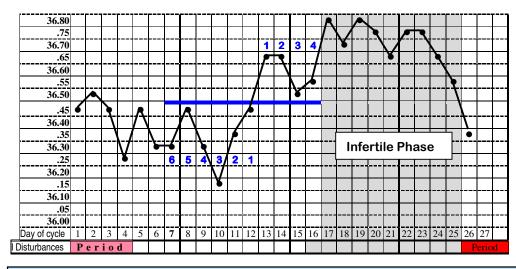


In this chart, the 3rd high temperature is just hovering above the line, but looks as if it is coming down again! Are days 13 and 14 unrecognised disturbances? These are questions that go through your mind. If they are genuine readings, then trust them. If the 4th reading is higher than the preceding 6 low readings, this is good proof of a temperature shift, even if it is "hovering".

Some people have very high temperature shifts. Others just scale the line. It is no cause for anxiety. Studies have shown that the height of the temperature chart does not reflect the height of progesterone levels. Some people have good hormone levels but low temperature shifts. Just look for a shift and check that a "cover line can be drawn between the last 6 lower readings and the first 3 (or 4) raised readings.

The completed chart below shows how well the rules work. Don't be surprised by a zigzag chart. The temperature stabilised later and finished as a 25 day cycle. Day 26 is the start of the period and Day 1 of a new chart.

For those avoiding pregnancy, infertility lasts from the night of 4th high temperature in this chart (*Day 16*) until the period starts. For those achieving, the most fertile days are Days 10, 11 & 12.



Although the temperature rose higher on Day 17, the real ovulation shift is Day 13

It is a common mistake to keep looking for "really high" rises which keep going up!

Please note that **temperature levels vary in different people**. The charts given are just examples. Your temperature may be lower than the examples, or higher. Occasionally some people's readings drop below the chart! If this happens regularly, you may need to re-write the readings on the side of the chart to fit your own personal range. **However, the rules for interpretation remain the same.**

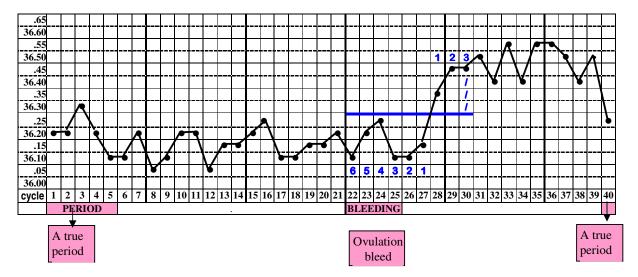
A Cycle without a Temperature Rise

If a cycle occurs at any time *without* a temperature shift in it, there are two possible explanations for this "cycle".

- 1. It may be a genuine anovulatory cycle (i.e. a cycle without ovulation), and the next cycle after it may be the same or a completely normal cycle.
- 2. However, it could also be a "stress cycle" with delayed ovulation, which can have a different result and this type of cycle needs to be watched carefully.

Below is a typical example of the "stress type" cycle.

The cycle started normally with a period and low phase temperature readings. This person normally had a fairly typical cycle between 27 - 30 days in length. Normally she would expect to ovulate between days 13 - 17, but they came and went with no temperature rise at all. She continued charting and to her surprise she suddenly started what she thought was another period on Day 22.



Fortunately, she contacted an NFP teacher, who was able to advise her appropriately:

- She was told **NOT** to start a new chart as the bleeding on Days 22 25 was **not a true period**.
- As suspected, the bleeding led immediately into ovulation and the temperature rose after it.
- Her TRUE period came 13 days later, on Day 40. So in fact, it ended as a 39 day cycle, with "ovulation bleed" occurring on days 22 25.

With this advice, she was able to understand what had happened.

Such cycles can be caused by 'flu and other illness, and also by stress situations, such as baby very ill, Mum or Dad in hospital, final exams, job interviews, moving house etc.. Sometimes cycles can stop completely for weeks / months even, in cases of acute stress!

Many such cycles can also occur in the pre-menopause years before they finally stop.

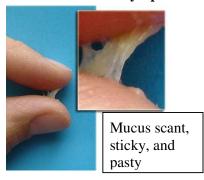
For those who are not monitoring their cycle, there could have been real confusion. They would have assumed that the bleeding on Days 22 – 25 was an early period. As many people do, they would also have assumed they were infertile after it for a couple of days and may not have had intercourse at that time. In fact, the bleeding led into the **most fertile time** (**Days 26, 27**) of the **whole 39 day cycle**. So you can see that when people are well informed on NFP charting and actually document their cycles that explanations often become available to "strange" cycles.

(This chart is explained more fully later when the mucus descriptions are included.)

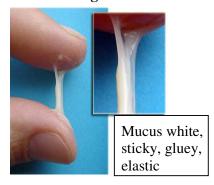
2. The Mucus Symptom

Unlike the temperature rise, the mucus symptom appears for several days *before* ovulation as a result of the oestrogen surge. The mucus is needed to feed, transport and keep sperm alive until the egg is released. This sequence of photos of mucus, taken up to the time of PEAK FERTILITY, gives an example of how the mucus changes and develops up to the time of ovulation, and what qualities you need to look for:

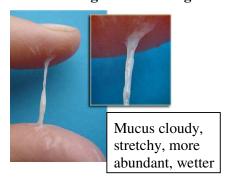
1: Start of mucus symptom



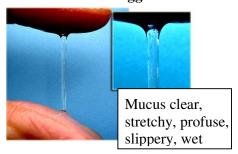
2: Increasing in amount



3: Increasing and becoming clearer



4. Clear like raw egg-white



- 1. Some women have no mucus discharge at all after a period and so, when this scant sticky mucus appears, it is the start of their the fertile phase. However, the mucus is not at its best quality yet. It is still a bit acidic and has few swimming lanes in it.
- For others, this type of scant mucus may be their "constant discharge" and for them it is not fertile at all. This is an individual learning situation.
- 2. This level of mucus would be potentially fertile for all women, because it is more profuse and showing stretchy qualities.
- It would cause a change in sensation for the woman. She would no longer feel DRY but instead would have a damp, even wet, sensation at the vaginal opening (vulva).
- Although still quite dense in appearance, more swimming lanes will be opening up in it and it is becoming more alkaline.
- 3. Now the mucus has more water content, is stretching more, and despite the whitish dense areas, it is definitely showing clearer areas, indicating increasing alkalinity and the opening of even more swimming lanes. The sensation at the vulva would now be much wetter.
- 4. This last photo shows how clear, wet, stretchy and slippery the fertile mucus can become around ovulation and why it is usually compared with raw egg-white. It may not seem quite so clear every cycle, or you may just miss seeing it at this level.
- Sometimes it may even look a bit brown or reddish, due to tiny loss of blood at this point.
- When the mucus has this appearance, ovulation is very close. This is the most fertile time of the whole cycle. The last day of this mucus is called PEAK day

The Mucus Symptom highlights the Fertile Phase

As seen from the photos, the build up and changes in the mucus symptom give warning of approaching ovulation. You may not see good quality mucus every cycle.

How to observe the mucus symptom:

- Look for mucus at the vulva each time you visit the toilet.
- Observe before and after passing urine, by wiping from front to back across the vaginal opening with toilet tissue.
- The tissue will pick up any mucus, which can then be quickly observed on the paper, before it is absorbed.
- Mucus will usually be shiny and needs to be stretched between the fingers, or tissue, to recognise its changing qualities.
- The passage of mucus can be assisted down the vagina by using a bearing down action as if having a bowel motion and repeating it in quick succession for a few seconds. Many women find their best mucus sample after a bowel motion, for this reason.
- You can also assess the mucus internally with your finger, but there are always transudate fluids internally and you need to learn to distinguish between these transudates and genuine cervical mucus.

Each day, describe the mucus symptom following the code "SCAT" which represents:

Sensation - Colour - Amount - Type

Sensation:

As you went about your daily work today, what feeling did you have at the vulva (vaginal opening)? Were you **Dry** or **Moist** or **Wet?** When you wiped from front to back over the vaginal opening with tissue, at each visit to the toilet, was it pulling, or did it slip indicating the presence of a wet lubricative mucus? Each day you mark one of those sensations on your chart.

Colour:

If there was mucus on the tissue, what colour was it? White/ yellowish or cloudy? Was it clearer or absolutely clear? Note that it may only look clear when stretched, either on tissue or fingers.

Amount:

How much mucus was there? For scant mucus mark 1; for an increased amount mark 2; for a lot of mucus mark 3. Mucus usually increases in amount the nearer ovulation approaches.

Type/ Texture:

How did the mucus feel between your fingers or tissue? Standard descriptions used by women worldwide for the mucus when it first starts after the period are:

milky, creamy, sticky, pasty, clotty, crumbly, tacky, gluey

Nearer ovulation, they describe it as **more stretchy, slippery to feel, resembling raw egg-white.** For some, the mucus is so thin and watery, they can't find any to finger test, but feel continuously very wet. **If different types of mucus appear on the same day,** mark them all on the chart.

The last day of wet, slippery, clear mucus is called PEAK DAY – peak of oestrogen, peak of fertility – the most fertile day in the whole cycle!

How to chart the Mucus Symptom

														P	1	2	3												
Day of cycle	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Period / spotting	X	X	X	X	X																								X
Dry/Moist/Wet						D	D	D	Μ	Μ	Μ	W	W	W	Μ	D	D	Μ	Μ	D	D	D	D	D	D	D	Μ	М	
Colour and consistency of mucus								•	White creamy	White tacky	White tacky	Cloudy stretchy	Cloudy stretchy	Clear slippery	White tacky			White tacky	White tacky			•					White tacky	White tacky	
Mucus quantity: 1-3									1	1	2	2	3	3	1			1	1								1	1	

Menstruation

Day 1 of a true period is Day 1 on the chart. A true period means there was a proper cycle before it with an ovulation and a charted temperature rise. Put an \mathbf{X} in the "period/spotting" line for each day the period continues.

Dry Days

If there are **Dry** days after the period, with no mucus seen or felt, mark **D** in the "sensation" line.

Mucus Days

Mark either **M** for *moist* or **W** for *wet* in the sensation line. Then add a description below in the "appearance" block following the code "SCAT" as already explained, and also assess quantity (1-3) (*Fertility has begun.*)

Peak Day

When the mucus develops *stretchy, slippery qualities, like "raw egg-white"*, this is the highly fertile type and it means ovulation is very close. When this mucus disappears, the last day of its presence is marked as **Peak Day**, meaning Peak of fertility. The amount of mucus does not define Peak Day. It is simply **the last day** of any wet, slippery type mucus, regardless of quantity. Sometimes it can be blood stained.

Why is PEAK DAY important?

PEAK DAY is the closest marker of ovulation. In most women, ovulation occurs either on, or just after PEAK DAY and that is why it is considered the most fertile day of the cycle. Always mark it with a **P** as shown in the chart above (Day 14 in this example). Note the temperature will usually still be LOW at this time, telling you nothing!

After PEAK DAY, the symptoms change giving several possible patterns:

- For some, the mucus disappears completely and DRYNESS returns.
- Others experience a continuous white, sticky discharge, feeling DRY or MOIST.
- while others alternate between the above two mucus symptoms, as shown above.

Amount of Mucus

Mucus secretion normally <u>increases up to ovulation</u> and then decreases after it. It is a useful sign to chart and so, below where you describe your mucus, there is a row to mark **the amount** of mucus you thought you had. It's not a precise measurement, just 1 = small amount, 2 = increasing, 3 = means lots means lots of mucus. You may not be able to assess it for your first chart, but by the 2^{nd} and 3^{rd} chart you should have a rough idea of what is a small amount and what is more abundant for <u>your</u> mucus pattern.

														P	1	2	3												
Day of cycle	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Period / spotting	X	X	X	X	Х																								X
Dry/Moist/Wet						D	D	D	Μ	Μ	Μ	W	W	W	Μ	D	D	Μ	Μ	D	D	D	D	D	D	D	Μ	Μ	
Colour and						ı	ı	ı	creamy	tacky	tacky	stretchy	stretchy	slippery	ı			tacky	tacky	▮			ı	ı	ı		e tacky	e tacky	
consistency of mucus									White	White	White	Cloudy	Cloudy	Clear	White			White	White								White	White	
Mucus quantity: 1-3									1	1	2	2	3	3	1			1	1								1	1	

The best days for intercourse to achieve pregnancy are the days when the mucus descriptions are wet, cloudy stretchy or wet clear slippery – in this chart Days 12, 13, 14. In long cycles it will be much later. Please note you do not have to have intercourse EVERY night of the fertile time. It actually only requires ONE act of intercourse in the presence of good fertile mucus, and nature does the rest. The sperm are transported up into the cervical crypts (See Tutorial How your Fertility Works). There they are stored, primed, matured, selected and sent up the fallopian tubes to seek out the egg. Knowing your cycle takes a lot of pressure off a couple and enables them to time intercourse with more flexibility of days based on accurate knowledge and not guess work.

Summary of Mucus Rules by Diagram

Stage 1: Before ovulation



DRY, NO MUCUS = infertile (double checked by Calendar Rule)

Stage 2: Fertile phase



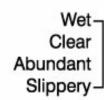
Damp-White Scant Creamy-

egg is ripening mucus is starting = fertile



Wet-Cloudy More mucus Stretchy-

egg growing quickly mucus improving = fertile



egg fully ripe, ready for release, mucus perfect for sperm = highly fertile

Last day = PEAK DAY

Stage 3: After ovulation



Dry or Thick White Mucus
= infertile from 3rd night
after peak
(double checked by 3rd
night of raised temperature)

Other Body Signs marked at the bottom of the chart

The hormones of the fertility cycle produce other effects in the body which can all be marked on the chart and help to build up a picture of your cycle. For example:

- Some women feel **pains** in their side or lower tummy, lower back, or a **bloated tummy**, around the time of ovulation.
- Some experience constipation and **rectal pressure** around ovulation.
- Another very common sign is the way the **breast changes** after ovulation. For some, the breasts are just fuller, for others they are actually painful, sometimes intermittent, for others continuous till the period starts.
- After ovulation, some women also suffer from emotional changes classed as PMS or PMT (Pre-menstrual Syndrome / Tension). No space has been given on the chart for this symptom, but it can be added if you experience it.

														P	1	2	3												
Day of cycle	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	2
Period / spotting	X	X	X	X	X																								Χ
Dry/Moist/Wet						D	D	D	Μ	Μ	Μ	W	W	W	Μ	D	D	Μ	Μ	D	D	D	D	D	D	D	Μ	Μ	
Colour and consistency of mucus									creamy	tacky	tacky	stretchy	stretchy	slippery	tacky			tacky	tacky								tacky	tacky	
						•	•		White	White	White	Cloudy	Cloudy	Clear	White			White	White			•	•	•	•	ı	White	White	
Mucus quantity: 1-3									1	1	2	2	3	3	1			1	1								1	1	
Pain, bloated tummy													X	X														П	
Rectal pressure																													
Breast changes															X	X						X	X	X	X	X	X	X	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29

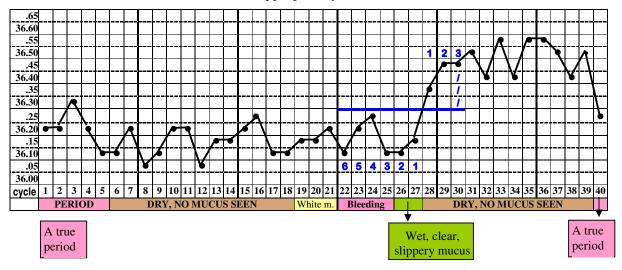
A Cycle without a Temperature Rise

If a cycle occurs at any time without a temperature shift, as already explained in the temperature section, there are two possible explanations for this "cycle".

- 1 It may be a genuine anovulatory cycle (i.e. a cycle without ovulation), and the next cycle after it may be the same or a completely normal cycle.
- However, it could also be a "stress cycle" with delayed ovulation, which can have a different result and this type of cycle needs to be watched carefully.

Below is the example of a "stress type" cycle with the mucus signs marked in.

The cycle started normally with a period but no mucus pattern developed. This person normally had a fairly typical cycle between 27 - 30 days in length. Normally she would expect to ovulate around days 13 - 17, but they came and went with no fertile type mucus evident at all. Then Days 19 - 21 showed a white creamy mucus, leading her to think ovulation was approaching, only to be followed by bleeding – much to her surprise! In some cases the bleeding is very light, but occasionally, as in this example, it was heavy enough for her to think it was a period. Notice the temperature remained at the same level up to this point (Day 22). Fortunately, she contacted an NFP teacher, who was able to advise her appropriately.



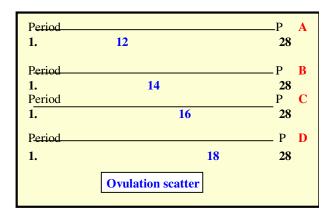
She was told NOT to start a new chart as the bleeding on Days 22 - 25 was NOT a true period. She must simply wait and see what followed. As suspected, the bleeding led immediately into classic fertile raw egg-white type mucus, ovulation occurred and the temperature rose. Her TRUE period came 13 days later. So in fact, it ended as a 39 day cycle, with "ovulation bleed" occurring on days 22 - 25.

If pregnancy had been achieved in this cycle, you can see how it would cause confusion with "date of confinement" since the woman booking into the ante natal clinic is always asked to state the date of her last menstruation! If she gave the date of the ovulation bleed, the calculations would be completely wrong.

Remember, such cycles can be caused by 'flu and other illness, and also by stress situations, such as baby very ill, Mum or Dad in hospital, final exams, job interviews, moving house etc.. Sometimes cycles can stop completely for weeks / months even, in cases of acute stress! Please note this cycle & rules

Myths of the menstrual cycle

Please use actual signs (mucus and temperature) to monitor your cycle, not calculations, as offered on some web sites. Calculations are based on the assumption that all women ovulate 14 days before menses, which is not true. What actually happens is that after ovulation, the empty follicle converts to form a new gland called the **corpus luteum**, which produces progesterone. Progesterone raises the body temperature and dictates the length of time till the period starts. 'Old medical Literature says it has a predictable life of two weeks, but modern technology e.g. ultrasound scans, show that some survive for only 10 days and others for as long as 16 days. Each woman has her own pattern which she is learning. The baby implants in the womb/uterus just as easily with either a 10 day or 16 day pattern. This means that even in a group of women with regular 28 day cycles, there is a considerable individual variation in the time of ovulation, as shown in the diagram below.



In this diagram we see 4 women's cycles, all 28 days long, but all ovulating on different days of their cycle.

Woman A:

Counting the start of the period as Day 1 of a cycle, this woman ovulated as early as Day 12 and her period followed 16 days later. That means her corpus luteum (*ruptured*, *empty follicle in the ovary*) produced progesterone for 16 days before fading away, causing her period to start.

Woman B:

This woman has the text book cycle of "mid-cycle ovulation" on Day 14, with her period following 14 days later because her corpus luteum lasted exactly 14 days. This is the cycle on which all investigations are based, even if your cycle doesn't have exactly this pattern!

Woman C:

This woman ovulated on Day 16 with only a 12 day gap before her corpus luteum faded and the next period started – perfectly normal for her and no obstacle to pregnancy.

Woman D:

The last woman ovulated as late as Day 18 with only a 10 day gap to her period. The gap from ovulation to next period is called the **luteal phase** (*i.e. life of the corpus luteum*). Having this shorter luteal phase, on its own, is no cause for anxiety because the women still conceive.

However, one can see that with so much cycle variation possible, it is hard to do tests at the correct time based on Calendar Calculations. For example, a post-coital test done on day 13 will not have the best results in some cycles.

In Woman A, it's too late. The ovulation is over by Day 13 and the woman will be in her post ovulation phase with acid mucus present in stead of the raw egg-white mucus which the doctor / nurse is looking for.

In Woman D, Day 13 is too soon as the best mucus will not have started yet. The best quality mucus would be present on Days 15, 16, 17, just before ovulation on Day 18.

Similarly, ovulation/LH test kits currently on the market also fail in these patients because they tell a woman with a 28 day cycle to begin testing on Day 11 and in the first case, she will miss it. In the 4th case the limited number of test sticks will be used up before the LH surge occurs probably around Day 17.

Chart your cycle but do not try to "pinpoint" the exact time of ovulation.

Since there are different patterns of cycles for different women, do not become obsessed with trying to find the exact "day of ovulation". Without ultrasound scanning, it is impossible to define this day precisely. However, all studies have shown that **the fertile mucus and PEAK DAY** (the last day of the mucus having wet, slippery qualities) are accurate markers of **the most fertile time of the cycle**. All you need is to have one act of intercourse in the presence of raw egg-white type mucus close to or on PEAK Day, and you have done all that is needed to achieve pregnancy. Remember that the mucus can keep the sperm alive for several days until the egg is released, so intercourse does not have to occur on the actual day of ovulation itself.

Remember the rules about mucus:

As your egg ripens (for about 5-6 days), the cervix opens and produces mucus to feed and transport sperm. At the end of the fertile mucus patch, there is a surge of a hormone called LH and ovulation follows within hours. That is why doctors test for LH and there are home test kits available at chemists, if you want to try one. However, they are expensive so it is not worth using more than one month's test, just to re-assure yourself that your mucus observation is accurate. The abundant, clear, stretchy, raw egg-white type mucus is rich in sugars and mineral salts designed to support sperm life. Even after its flow seems to have stopped however, it is still potentially present in the cervix for the next 48 hours. Some women get a pain in their side or lower abdomen around the time of ovulation. The pains can come just before, at or just after ovulation. The egg is fertilizable for up to 12 hours after release. It may be released on the last day of raw egg-white type mucus, or just after. (The temperature classically rises a day after ovulation, but can be delayed. So it is little use in helping you actually plan intercourse for your most fertile time.)

One final point is to learn how to distinguish cervical mucus from seminal fluid associated with intercourse. After intercourse, seminal fluid can make a woman feel wet and it can look like fertile mucus, deceiving her into thinking she has more mucus than may actually be the case. It is easier therefore, if couples continue with intercourse, as desired, until about 5 days before she normally expects to ovulate. Then, if a couple can avoid intercourse for the few days running up to ovulation, a woman can more accurately identify her own secretions without the interference of seminal fluid. When she finally sees mucus which is wet and slippery, accompanied by a wet feeling, (and they haven't had intercourse so it can't be seminal fluid!), then she knows she is definitely in her fertile phase and can time intercourse appropriately. But do not put too many restrictions on yourselves. This is just a tip to try till you know your cycle better.

Failure to conceive causes a lot of stress, and so too can intensive charting. Therefore, to reduce the stress of daily charting, please keep a full temperature chart for only a few months, just to confirm that you are ovulating and reading the mucus signs accurately before the rise. Once you know the pattern of your mucus and the temperature levels of your pre- and post-ovulation phase. **it is better to reduce the temperature charting to the minimum,** that is, starting the thermometer as the mucus starts and then stopping as soon as three post-ovulation high readings have occurred, confirming ovulation. Once your temperature has risen, ovulation is over. **So, put the chart book away and stop thinking about it and get on with the rest of your life. Do not keep counting the days to your period!**

If your period comes, turn over the page and mark up a new chart but only begin charting when symptoms appear. You may prefer to stop the temperature chart completely and just record the mucus, which is less demanding since it can be done at any time. However, if you are attending a hospital fertility clinic, there are some advantages to keeping moderate temperature charts to back up your mucus observations.

As already said, for all couples planning to start a family, it is vital to prepare your bodies for becoming parents. Just as you would prepare and nourish the soil before you plant seeds.

You need to look at your lifestyle. Now is the time for both of you to stop smoking, this can reduce your fertility and be harmful to your growing baby before and after birth. Stop or reduce drinking alcohol as alcohol can affect male and female fertility as well as harm a growing baby. You need to eat well, avoid junk foods and increase your intake of fruit and vegetables in your diet. Carrots, broccoli, sprouts etc. have vital nutrients, much needed for healthy sperm production and healthy pregnancy. http://www.eatwell.gov.uk/agesandstages/pregnancy/trybaby/

Eating a healthy diet is the best way to absorb the vitamins and minerals needed to support your fertility and pregnancy but if you doubt whether you are receiving enough in your diet you can take minerals & vitamins in tablet form. A woman should only take **the kind specially formulated for before, during and after pregnancy.** Her partner can take a general multivitamin.

All women planning a pregnancy should take 400 micrograms of **Folic Acid** while trying to conceive and for the first 12 weeks of her pregnancy. It is very difficult to get enough folic acid in your diet. Folic acid at this dose will be present in most pregnancy vitamin and mineral supplements but can be purchased separately over the counter at most pharmacies. Folic acid has been shown to reduce the risk of neural tube defects of the brain and spinal cord (such as spina bifida) in unborn children. If there's a family history of spina bifida, or you are taking medication for epilepsy, are diabetic or have coeliac disease, speak to your doctor. They may suggest you increase the dose to five milligrams daily.

Another factor to consider is your weight, as being either too thin or too heavy are both counterproductive to fertility. Those, who eat a lot but remain underweight, need to point this out to their doctor for further investigation, while those overweight should look seriously at a weight-reducing diet.

You also need to make sure that you are up to date with vaccinations, such as rubella and varicella (the virus that causes chickenpox and shingles).

There is plenty of information for women but less for men. Apart from the advice already mentioned above, it is important to improve sperm health by keeping the testes cool. Some examples are... wearing cotton boxer shorts and having showers rather than hot baths. Men who do a job where they are sitting for long periods e.g. lorry drivers should try to stop and walk around outside regularly to cool the testes. Likewise men working in a hot environment e.g. steel works.

Further advice on preconception care can be found on the following website. http://www.direct.gov.uk/en/Parents/HavingABaby/DG 171677

We hope this advice is helpful, we will attempt to answer any further questions via our contact us section.