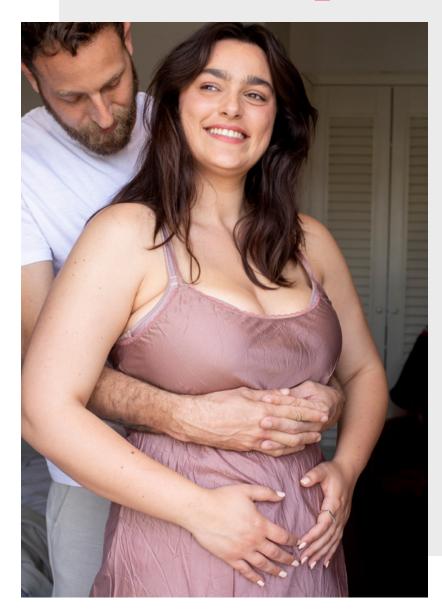
## Improve your chances of conception

with our healthy, happy, preconception guide

If you've reached us because your aim is to have a happy, healthy pregnancy then we hope that this guide will provide insights to help you reach your goal. This guide will focus on the pre-conception stage.





Who of us ever thought the perfectly natural desire of trying for a baby could be so taxing and even heartbreaking. Isn't it supposed to be easy? You have sex, and you fall pregnant. That's what we're all taught, right?

"My trying-to-conceive journey left me frustrated with myself. I thought I was doing something wrong and doubted myself. I was stressed about my period constantly, never knowing if it was going to show up or not, and when it was late, I would become so depressed because I'd gotten my hopes up." - Elisha

The reality for many, though, is it's not always a simple road to pregnancy.

Our goal, via this guide and other supporting resources, is to help you track your key fertility signs so you can:

- understand your own body,
- know when you are approaching ovulation and confirm when you have ovulated, and

 make natural improvements to your health based on what you see in your fertility chart.

Statistics show that 50% of couples don't know when their fertile window is and that they may be trying to conceive on the wrong days.

# How can tracking your fertility be of help, and how can Tempdrop guide your fertility journey?

In order for conception to occur, you need:

- 1. Cervical mucus to be present This is essential to keep sperm alive and nourished (and it can keep sperm alive for up to 5 days) so that sperm can reach the egg. You can track and monitor this at home.
- 2. A viable egg to be released You can also track and monitor this at home using basal body temperature (BBT).
- **3.** Healthy sperm to reach the egg This of course goes without saying. But as we said before, it's important to know there is cervical mucus present to keep the sperm alive until ovulation is confirmed.
- **4.** An adequate luteal phase There needs to be enough time after ovulation and a suitable environment

for the fertilized egg to implant. Tracking your temperatures can help you identify if the time from ovulation to your next period (luteal phase) is at least 12 days long.

By tracking your key fertility signs (biomarkers), you are making the most of the time available to you. Because the egg is only viable for 12-24 hours, and sperm can only stay alive for five days, there is only a brief window each cycle when conception can occur.

Tracking these signs puts you in the driver's seat of your health, and helps you pinpoint ovulation so you can time intercourse, in real time, and understand what is happening with your own body. So let's dig into how we do this.

## Let's start with identifying ovulation

The number one key when it comes to conception is identifying ovulation. Ovulation is the event that dictates when fertilization can occur, as well as the success of the menstrual cycle process.

Having a period doesn't necessarily mean you are ovulating. Even if you experience bleeding at regular intervals, it's not a solid sign that ovulation actually happened. This is where tracking your fertility signs comes in.

Tracking your basal body temperature (BBT) along with other biomarkers, like cervical mucus, will give you the extra data you need to confirm **if**, **and when**, ovulation occurs.

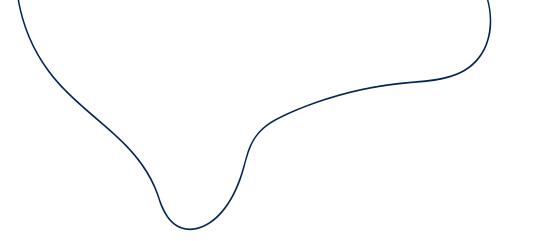
#### What is BBT?

BBT is the temperature of your body at rest, or during sleep. A basal (base) or resting temperature is needed

as the change in temperatures caused by the menstrual cycle is **subtle**, and temperatures when awake can fluctuate greatly.

Prior to ovulation, temperatures generally run in a lower range; once ovulation has occurred, they will jump to a higher range. The difference is usually  $0.5^{\circ}$  –  $1^{\circ}$ , or  $1^{\circ}$  to  $2^{\circ}$ . This rise in temperatures remains sustained from the time of ovulation to the end of the cycle, when it will drop down again around the time you get your next period. In the case of successful pregnancy, temperatures will remain elevated beyond the next expected period.

NOTE: BBT doesn't predict ovulation, but it is excellent at helping to confirm ovulation has happened and giving you insights into hormone levels. Read more about this in our <u>Starter Guide to Fertility Awareness</u>.

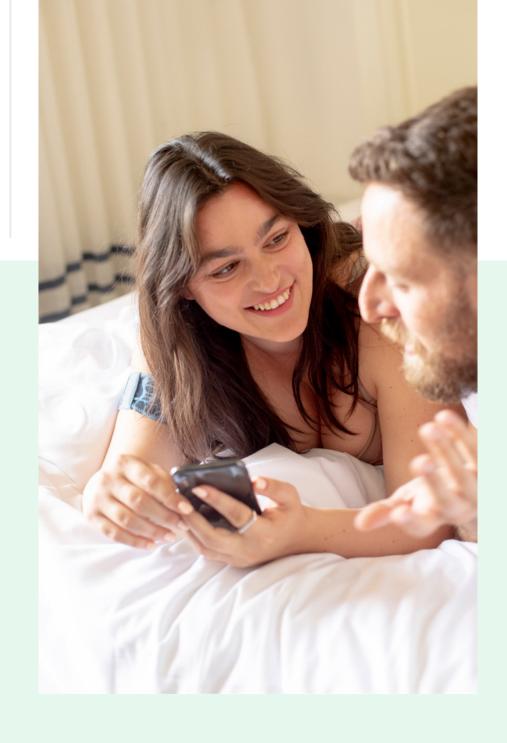


Once ovulation is confirmed, you can accurately start counting the days past ovulation to know when your next period is due – or when the right time to test for pregnancy is. These insights will save you from the disappointment and frustration of trying to guess where you are in your cycle, thinking you are late for your period, and testing too early.

Additionally, tracking your temperatures gives you insights about your hormone health. For example:

- Are you ovulating regularly?
- Is the time from confirmed ovulation to your next period (luteal phase) at least 12 days long?
- Are there any unusual temperature patterns occurring?

Accessing this key data about your own body can provide you with the <u>best chances of a healthy, happy pregnancy.</u>



#### What is Cervical Mucus?

The second fertility biomarker we recommend tracking is cervical mucus (CM). As mentioned before, CM (also known as cervical fluid, CF) is what enables sperm to survive long enough to fertilize an ovum.

Without cervical mucus, sperm can only last a few hours at most.

CM is produced in the cervix, which is the opening to the uterus and is situated at the end of the vagina. The cervix has something called cervical crypts, which create the different types of cervical mucus depending on your body's hormone levels. Under the influence of our sex hormones, specifically estrogen and progesterone, the crypts produce the different types of cervical mucus.

By observing the changing type and quantity of CM, you will understand when ovulation is approaching, which will help you take advantage of your optimal fertile days. We cover the specifics of how to observe and track in Tempdrop Academy, available in the Tempdrop app (iOS/Android).



Temp**drop** 

What other fertility signs can I add to my chart for extra fertility insights?



#### Answer

- Cervical position
- Luteinizing hormone (note this can be unreliable if you have PCOS)
- Symptomatic data (bleeding patterns, energy levels, PMS symptoms)

In summary, tracking this data about your own body provides you with the knowledge to be able to identify when it is (or isn't) possible to get pregnant, confirm if and when you have ovulated and make the most of the window of opportunity to get pregnant (remember this window of opportunity is only around 6 days each cycle - 5 days that sperm can stay alive plus the hours that ovulation happens).

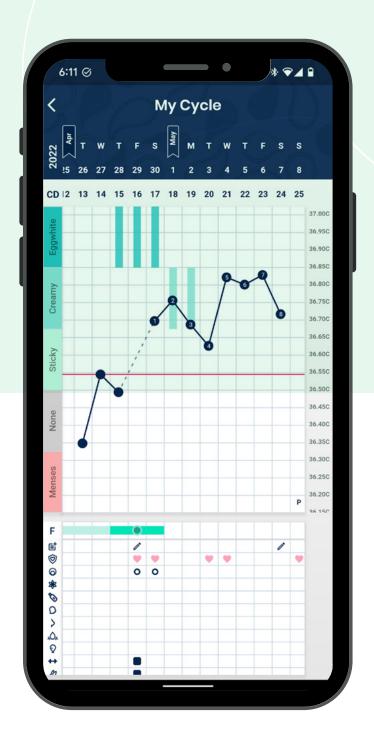
You can also use your personal data to identify potential issues, and resolutions. Use the examples below as a guide.

### **Putting it into Practice**

### Short luteal phase

You identify from your BBT patterns that your luteal phase (time from ovulation to your next period) is only 8 days long. (Not enough to be able to sustain a viable pregnancy - the ideal is a minimum of 12 days). This helps you to know you need to lengthen the luteal phase and improve your progesterone levels.

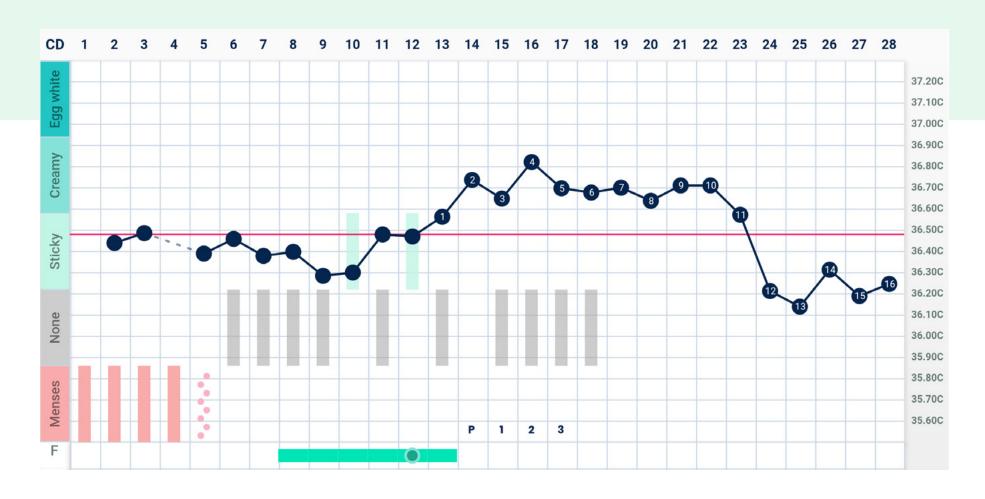
This information enables you to do some personal research and make some simple lifestyle changes in conjunction with recommendations from your practitioner. Over a time, you see your luteal phase lengthen to the point that you can sustain a healthy, happy pregnancy.



### Lack of CM observed

You identify when tracking your cervical mucus patterns that your cervical mucus observations show a lack of cm - decreasing your window of opportunity. This information enables you to do some personal research and make some simple lifestyle changes in conjunction

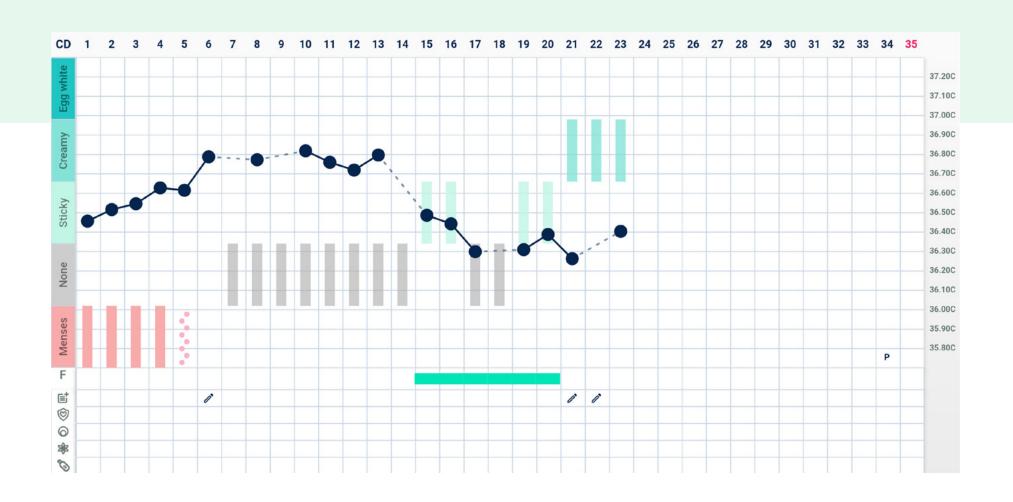
with recommendations from your practitioner. Over a time, you see your cervical mucus quality improve to the point that you can sustain a healthy, happy pregnancy.



### Delayed ovulation

You identify when tracking your key biomarkers that ovulation occurs later in your cycle than you expected - around day 25.

This information enables you to time sex around day 25, making the most of the time available.



## If you are working with a specialist

At times, you may decide (or it may be recommended to you) to work with a fertility specialist. As we've already discussed previously, tracking your fertility signs is invaluable, as well as helping you increase your chances of pregnancy, it can also provide you with insights into your health. But more than that, when working with a specialist it can enable you to feel informed about your own body, help you feel in control of the process and enable you to advocate for your own health and treatment plan.

The cycle data information you collect can be very useful to fertility specialists. Short cycles, long cycles, irregular cycles, abnormal bleeding, and other markers can help guide to the correct diagnosis and treatment options. In addition, if you have been documenting acts of intercourse consistently in your fertile window, but without conceiving, you may be offered earlier diagnosis and testing, for example after 6 months rather than the commonly used 12 month standard.



## Trying to Conceive with PCOS

Many women are told when they're diagnosed with PCOS that it's basically a lifelong diagnosis with no treatment (although many doctors suggest hormonal birth control for symptom management). But there are actually other options! Various supplements and lifestyle changes have shown to improve the condition dramatically. But how do you know if what you're doing is making a difference? One of the simplest ways, as we've already discussed, is tracking your fertility signs.

Though one of the main symptoms of PCOS is irregular and/or long cycles, charting your cycle can help you with any intention of family planning by helping you identify different parts of your cycle - and even whether you're having one.

In addition, it helps you identify key health indicators such as:

cycle length,

- if you're regularly ovulating (or ovulating at all), and
- trends in symptoms such as acne, PMS, or period pain.

If you choose to make lifestyle changes to manage symptoms, charting your cycle will help you know what is or isn't helping in your particular case. These lifestyle changes include diet, supplements, exercise, sleep habits, and more; and they reflect in your mood, illness, libido, sleep quality, and energy levels.

One of the first things many people often recognize to make them suspect PCOS is long, irregular cycles. This can cause difficulty in achieving pregnancy. If you already track your menstrual cycle (this is more than just when you bleed) you may notice ongoing vaginal discharge and delayed ovulation. It's not uncommon for people with PCOS to experience cycles longer than 35 days in length, or periods of no ovulation (with the added confusion of regular bleeding).

For those not charting, this breakthrough bleeding can easily be mistaken for true menstruation, following ovulation.

When trying to conceive, most doctors will recommend timing intercourse around day 14 of the cycle, since the textbook assumption is you'll ovulate within a day or two of day 14. We know with PCOS, this timing isn't very typical, so tracking your fertility signs can help you recognize upcoming ovulation and then confirm it.

### Where can you start if you are attempting to conceive with PCOS?

Because PCOS charting can be tricky, we suggest working with a fertility awareness educator - someone who is certified, and perhaps even specializes (or has plenty of experience in) working with those who have PCOS.

Tracking your cycle via a method can be invaluable, particularly when you are trying to conceive. If you suspect unconfirmed PCOS, tracking your cycles can be a way to gain valuable information and can be used as an aid and diagnostic tool to assist your provider in diagnosis.

The second piece is incorporating basal body temperature (BBT). As explained earlier in this guide,

while cervical mucus indicates when you're approaching ovulation, adding BBT gives you a second way to confirm ovulation. When someone experiences long, irregular cycles and irregular mucus patterns, utilizing the basal body temperature can assist in confirming when ovulation occurs AND can assist in detecting anovulatory cycles (when ovulation did not occur). Both of these signs of fertility can assist a person in gaining valuable information about their cycles and have the potential to increase your chances of conception by accurately detecting ovulation.

#### Other recommendations

We know dietary changes have the ability to help people with PCOS improve symptoms, make cycles more regular, and generally increase chances of conception. Working with a nutritionist who specializes in PCOS can help you identify the needed nutritional changes.

Many women also ask us about Luteinizing hormone testing (also referred to as LH testing or OPK testing). While this may prove useful to some women, there is a word of caution here - in some cases this can add to your confusion. If you have PCOS then you may experience multiple LH surges before ovulation actually happens. We recommend combining this with BBT tracking, so you can record your LH surge and then confirm ovulation with your temperatures. If you saw a positive LH but didn't see a temperature shift, you will need to assume it was a failed ovulation attempt and keep testing.

## Getting pregnant postpartum

The <u>postpartum period</u> can be a challenging and confusing time for cycle tracking, especially if postpartum is your first experience in charting your fertility.

We recommend using Tempdrop before the postpartum period to enable the algorithm to learn your sleeping patterns but also so you can identify your regular cycle patterns. If you are already pregnant, you can still wear your Tempdrop during pregnancy to ensure you are through the <u>learning</u> phase for the algorithm.

Many factors can impact the return of your fertility after pregnancy, and there are no hard and fast rules as to what to expect. In essence, every woman's fertility during those postpartum months will be completely different so it is highly recommended to work with a FABM instructor during this time.

### Why is it more difficult?

During pregnancy, levels of the hormones estrogen and progesterone slowly begin to rise. At birth, these hormones suddenly drop off and are replaced by a slow rise of oxytocin and prolactin. Estrogen and progesterone, which are hormones involved in regular ovulation and menstruation, may take time to eventually return.

If you decide to <u>breastfeed</u>, this will also change hormone production and act to suppress ovulation longer. The hormones involved in the production and release of breastmilk, Prolactin as well as Oxytocin, suppress both

Luteinizing and Follicle Stimulating hormones, which are key in promoting ovulation. The more you breastfeed and the more you're with baby, the more prolactin and oxytocin will be released, suppressing ovulation longer.

This means that you're basically in one very long preovulatory phase following birth. The time it takes for the return of your fertility will be based on many factors and this can differ after each pregnancy.

### When should I start taking my temperature postpartum?

This depends - BBT is still of benefit as it will help you confirm ovulation has indeed happened. But while waiting for your return of fertility, you may be tracking BBT for a long time before you notice a temperature shift. Some may wait to track BBT until they notice a changing cervical mucus pattern, which indicates your hormones are changing and ovulation may occur (this all is determined by your chosen method).

The return of your fertility depends on your breastfeeding patterns, and whether you are exclusively breastfeeding, partially breastfeeding, or not breastfeeding at all.

Approximately 60% of women will ovulate before they have their first period postpartum, which is why we recommend working with an instructor to help identify the signs that indicate the return of your fertility.

### What should I expect my charts to look like postpartum?

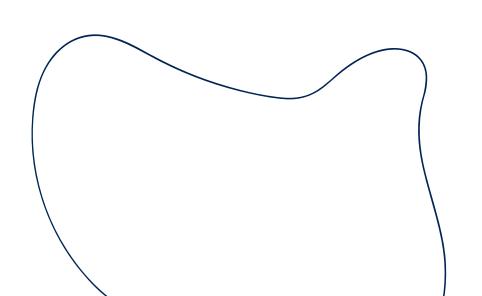
After giving birth, your hormones are competing with each other, fighting to have the loudest voice. On one hand, estrogen is trying to reach high enough levels for ovulation to occur. On the other hand, the hormones produced when you're breastfeeding, or with your baby, suppress ovulation hormones. The more you're breastfeeding and with your baby, the longer ovulation is going to be suppressed.

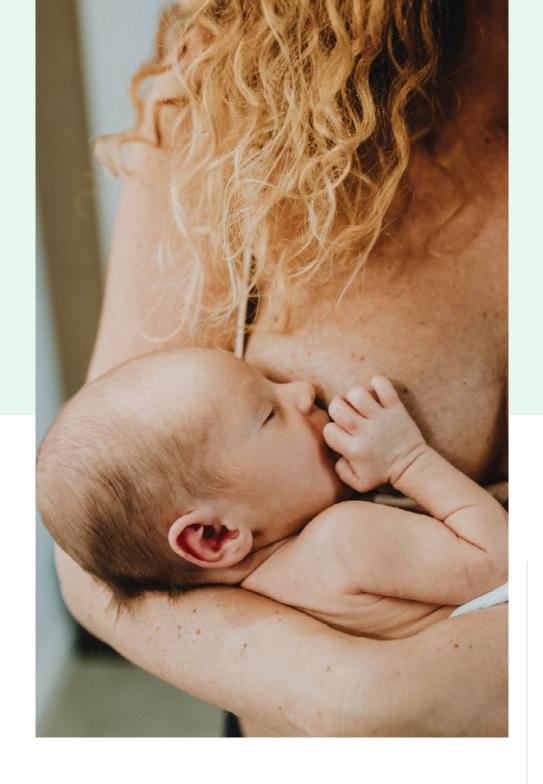
When your cycles do return (ovulation and period) you may notice a change, especially for the first few cycles. It's important to pay attention to both cervical mucus and temperature (as always), because we need cervical mucus to back up our temperature observation, and vice versa. When your cycles return, ovulation will be confirmed the same way it is always confirmed in your method - that part doesn't change. However you may notice a change from what you were used to before conceiving. Things like your luteal phase length, your cervical mucus pattern, and your cycle length may vary when your fertility does return.

## What can you do to support your body if you are postpartum but trying to conceive?

Nutrition is important as with any other time; however since you are likely still recovering from your previous pregnancy nourishing your body well is essential, and even more so if you are breastfeeding since it can also impact baby's growth.

Good nutrition during this phase can speed up your recovery and help with your overall well-being.





### About Tempdrop

Tempdrop believes in giving women clear, actionable insights about their fertility to better understand their body, take control of their health and fertility, and aid conception.

We created Tempdrop as a complete fertility solution - to give women the tools they need to effortlessly track their cycle on a daily basis, without compromising data accuracy.

#### How does it work?

Tempdrop is worn during sleep. It takes thousands of temperature readings throughout the sleep session and uses algorithms to filter out disturbances such as breastfeeding, sleep interruptions, changes to sleep schedules etc. to provide an accurate sleeping temperature. The sensor is removed at the end of the sleep session and is synced to the charting application using Bluetooth.



The temperature reading is then mapped to a fertility chart to allow you to gain critical insights about your fertile window and to confirm ovulation.

The charting application also enables you to track additional fertility symptoms, such as cervical mucus, cervical height, ovulation test results. These symptoms allow for more accurate fertile window interpretations, in real-time. You can also record personal notes to aid you. This information can also be used to inform your medical practitioners and clinicians of your hormone health status.