



# THE FEMALE HEALTH GUIDE

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# The Female Cycle

When it comes to females it is safe to say how you feel, how you look, how you think, how you perform in the gym and how you function can change dramatically over the course your menstrual cycle.

However, by having a more in-depth understanding of the female menstrual cycle and what happens throughout the different stages of your cycle can give you a valuable insight on why you feel at your best one week and the next you feel weak, bloated, emotional and heavier on the scales.

The menstruation cycle starts on day one after the unfertilized egg causes the uterus lining to break down.

A woman's menstrual cycle has different phases; the menstrual, follicular, ovulation, and luteal phases, which is often broken down more broadly into just the follicular and luteal phases.

First comes the menstrual phase, when a woman gets her period and her levels of the hormones estrogen and progesterone drop. This typically lasts 3-7 days but can vary between individuals.

This also kicks off the follicular phase, which begins on day one of your period and continues until ovulation, a total of about 16 days.

During this phase, the pituitary gland releases follicle stimulating hormone(fsh).

During the ovulation phase, luteinizing hormone (lh) is released in response to the follicular phases rising estrogen levels.

## **Wondering if you are ovulating?**

One sign is a slight rise in body temperature, which happens around day 14 of your cycle.

Finally, you enter the luteal phase. This is where you see a rise in progesterone and a slight bump in estrogen levels, followed by a drop in both hormones and the restart of the cycle (barring pregnancy).

The luteal phase is when you experience those \*lovely\* pms symptoms, like bloating, headache, weight changes, food cravings, and trouble sleeping. This phase lasts 11-17 days.



# Tracking Your Menstruation Cycle

It is important to track your cycle to get a better understanding of how your body is responding during each phase of your cycle.

By tracking your cycle you will get an insight into the trends during these phases. You will understand why your weight fluctuates and later normalises. In my experience having piece of mind knowing the trends can help you stay focused with your training throughout your cycle.

Using apps like 'flo', 'my calendar' and 'fertility friend' allows you to track your cycle and collect data over time so you can determine the average length of your cycle and anticipate changes in how your body functions across it's duration.

Tracking your cycle can help you understand when your body enters each phase, any resulting symptoms and how to adjust accordingly.

I recognize that every woman's cycle is different and a multitude of factors can play a role including the use of oral contraceptives, eating disorders, and medical conditions such as polycystic ovary syndrome (PCOS) or uterine fibroids.

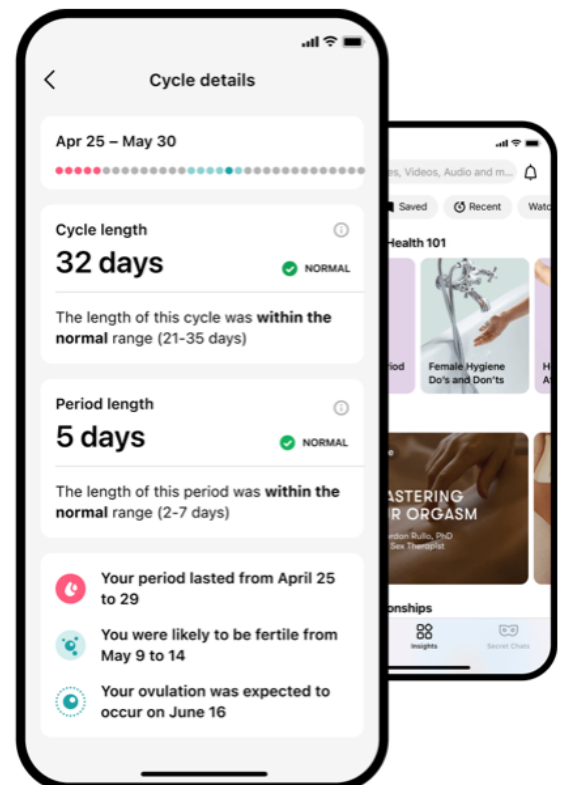
IUDS can cause the lack of a monthly period. But your cycle, and the accompanying hormone changes, is still working behind the scenes!

IUDS prevent pregnancy by either the hormone progestin (hormonal IUD) or with copper (non-hormonal IUD). Hormonal IUDS can also stop ovulation.

Tracking your cycle can be a helpful tool for women with an iud, but may be more challenging without a period.

Food journalling can also be helpful to assess for adequate macronutrient and fuelling, especially when needs are higher.

Performing sweat tests during your cycle can also be a tool to note any significant changes in fluid requirements to ensure adequate hydration and replenishing between sessions.







# The Phases Of Your Cycle

Your menstrual cycle is divided into the following three phases:

- Follicular phase.
- Ovulation phase.
- Luteal phase.

To get a better understanding of what is occurring throughout each phase let's look a bit deeper into each phase.



## Early Follicular Phase

This phase would overlap when your period arrives and starts once menstruation occurs.

Estrogen would be the dominant hormone during this time. This results in appetite being at its lowest, you will see increases in strength and recovery. greater endurance. Increased insulin sensitivity which results in better utilization of carbohydrates. This can be a good time to push training intensity and volume.



## Late Follicular /Ovulation Phase

Ovulation occurs around day 14. Estrogen has peaked and begins a decline while progesterone surges. It is normal during ovulation for a woman to feel warmer for the remainder of the cycle. Sodium handling is impacted which can result in some water retention.

This in turn influence scale readings. Some also experience cramping and bloating during this phase so adjust your routine where needed.

Metabolism will start to climb, while insulin sensitivity will begin to decline. As progesterone surges, a slight decrease in serotonin can happen and since carbohydrates can boost serotonin, food cravings can often occur at this time.

During ovulation estrogen and overall strength is peaked, testosterone increases which can result in an increase in strength. Focusing weight on training can be appropriate during this phase, while cardio may feel harder during this phase.



# Luteal Phase

The luteal phase begins on ovulation day, for which we will say is happening on approximately day 14.

After ovulation, estrogen drops and progesterone begins to rise becoming the dominant hormone.

This can bring about the usual host of PMS symptoms such as increased core temperature, reduced training performance and recovery, slower bowel movements, lowered insulin sensitivity and low mood due to a drop in serotonin and dopamine.

This can also result in cravings particularly for carbs and sugar.

Sleep can also be affected around this time due to melatonin production being impacted.



## Late Luteal Phase

During the late luteal phase, the rapid drop in progesterone causes a rebound effect and water retention again to occur due to sodium handling but this time at a greater amount compared to the late follicular phase.

It's not uncommon to see some females gain up to 7lb in fluid during this time.

During this phase your body is not primed to workout at very high intensities.

Metabolic rate also increases approximately 100 - 300 calories around this time so if overall calorie adherence is at risk, it can be a good idea to increase calories a touch from fats as opposed carbs due to progesterone's impact on insulin sensitivity.

Your body will prefer fat as its primary fuel source instead of glycogen and you might retain more water at this time due to PMS symptoms.

This might cause discomfort during short burst of exercise. Plan for lack of motivation here and stick to aerobic activities as your primary exercise.

Fat burning workouts should be emphasized during the luteal phase.

If you are doing a workout that is strength or glycolytic note that the luteal phase is not ideal for these domains and you may not perform to your usual capabilities.

This is the time of the phase to plan things like aerobic runs, easy swims and other aerobic activities that are at a slightly conversational pace.

After the luteal phase, the transition back to the menstrual phase, will bring metabolism, insulin sensitivity, body temperature and water retention back to a slightly more “normal” feeling.

Practical actions that can be taken during the luteal phase would be to possibly reduce training volume and intensity if you are not feeling at your best.

Around this time there is also a greater risk of injury due to reduced muscle remodelling and tendon strength which would be another good reason to possibly lower the intensity of sessions.

200mg magnesium citrate and 50mg vitamin b6 can help gabba production which can help mood, whilst 25mg zinc can be considered if cravings are very bad during this phase. (Always consult your gp or a medical expert before the use of any supplementation.)

Further practical actions to lifestyle can make a big difference. Look to implement and nail down sleep hygiene habits such as cutting off technology 45 mins before bed and ensuring your bedroom is as dark as possible so melatonin production isn't impacted further.

Then to help with fluid retention. Look to include more potassium rich foods in your diet such as bananas, avocados and potatoes along with replacing regular salt on your meals with low salt which will have a higher potassium to sodium ratio.

With this ensure fluid intake is consistent with a good rule of thumb being 40ml per kg body weight. Roughly 2.5-3 litres per day.





# How your cycle affects how hungry you are

There's one specific time of the month where you're more likely to be hungrier than normal. No, it's not during your period—it's in the first few days after ovulation (roughly halfway through your cycle if you have a 28-day cycle.)

This period of your menstrual cycle is called the luteal phase, which is when your body's main goal is to thicken and build up the uterine lining to prepare for a potential pregnancy. Your uterus needed to support fertilization, the body requires more energy from nutrients in the luteal phase.

In other words, your body needs energy to build up the uterine lining, which is why it's sending the body a signal to eat more than usual.

Another reason why it's normal to feel hungrier at this part of the cycle is that your resting metabolic rate increases, meaning that you're burning anywhere between 2 and 10 percent more calories than normal. "In the luteal phase, there is a drastic rise and fall of estrogen and progesterone which may be contributing to this increase in metabolism.

As we burn more calories, our tendency to be more hungry is only natural. But this phenomenon essentially cancels itself out at the end of the day because if we burn more calories and then we eat more calories, it starts us back at zero.

For the average person, the luteal phase lasts between 12 and 14 days.

Don't expect to feel super hungry the entire time, that feeling is mostly concentrated in the first few days post-ovulation. But you might expect to feel ravenous again at the end of the luteal phase, which is when estrogen and progesterone levels drop.

Estrogen on its own is known to suppress appetite, and when that starts to crash down at the end of the luteal phase, right before PMS, our appetites can come back with a vengeance.





# Is It Ok To Indulge?

It's not just OK, but it's important to listen to your body before your period. Certain cravings may be happening for a reason, and your body may need more calories.

This isn't to say that you should be overindulging on the daily, of course. But, if your body's begging you for something different ahead of your period, don't beat yourself up for eating more than you might normally.

Paying attention to your body and its needs is key.

## **The foods I crave just make me feel worse!**

Yeah, that tends to happen when we eat foods high in refined sugar, salt and carbs.

Reaching for simple carbs when you're feeling tired and icky can make you feel better because of the increase in serotonin, but the effect is short lived. Having too many and you could end up feeling even more sluggish.

Instead of simple carbs, like chips, bread, or pasta, choose complex carbs that increase serotonin but make you feel better longer. These include things like beans and lentils, brown rice, and oats.

Swapping out what you're craving for healthier alternatives or limiting portions of those crave-able items can help give your body what it's screaming for without making you feel worse.

## **Satisfy a sweet tooth**

Tempting as it may be to eat an entire bag of Oreos when your sweet tooth is begging for satisfaction, too much sugar usually leads to a pretty unpleasant crash.

Go ahead and have a cookie or two if you feel inclined. However, there are other ways to satisfy a sugar craving. Some sweet and healthy ideas:

- Fruit based smoothies
- Fruit and yogurt
- Apple slices drizzled with honey
- Energy bites
- Trail mix

### **If you NEED chocolate**

Chocolate is one of the most common foods craved by .

Dark chocolate has many benefits, it not only satisfies the cravings but is also high in antioxidants and minerals and just a square or two of high-quality dark chocolate can often actually be very beneficial.

## Hydration And Your Cycle

Fluid status will change throughout your cycle and can have an impact on your ability to exercise, especially in the heat.

During the mid-luteal phase, there is a marked decrease in time to exhaustion, which is believed to be a result of increased body temperature, so pay extra attention to your water intake those days.

Increases in fluid retention can be a secondary effect of estrogen and progesterone, peaking from ovulation through the first half of the luteal phase.

This fluid redistributes throughout your body during the luteal phase, creating a drop in plasma volume, which can compromise the amount of oxygen delivered to the muscles.

This drop reduces sweat rate and since sweat helps the body cool down, it can also result in an increase in body temperature.

Due to these changes, women should be more aware of their hydration and increase fluid intake during the mid-luteal phase, especially if they are in hot and humid environments.







# Final Note

Each individual will have a completely different experience with their menstruation cycle and some will be unphased by their cycle whilst others will see a roller coaster of hormonal change across their full cycle and it will most likely have an effect on training.

This is why it is very important to track your own unique cycle and gather data on how you feel, how you train and see your weight fluctuates at different stages of your cycle.

With knowledge comes power and understanding what's happening across your cycle allows you to know when to take advantage of certain stages and when to not feel disheartened if you aren't feeling at your best and the scales is fluctuating.

Hormones will also play a huge role in your training outcomes.

Knowing exactly what phase you are in can be a great help to planning your training session and getting the most out of training through the different stages of your cycle.

As females taking a closer look at how your bodies changes throughout your cycle can be an incredibly helpful tool.

When you understand what is going on through your cycle on the inside you can set yourselves up for success in reaching your health and fitness goals.



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