

Your Bible for
Hacking Your Hormones

by The Fit Clinic



**All Profits in the Sale of This
E-Book Will Be Donated to**

**The Miscarriage Association
of Ireland**

Thank You For Your Support x



Introduction..

We are so excited to finally release this project that we have been working on behind the scenes!

Myself and the three nutritionists at The Fit Clinic who specialise in female hormones have worked with thousands of women to help them hack their hormones and feel their best - Be it regaining their cycle, coming off the pill, fixing hormonal acne, improving PMS or preparing for pregnancy and beyond.

We have collaborated to design this e-Book for women who want to become more educated and empowered about their hormones and cycle - The effect they have on our bodies and needs, and how to get the absolute best out of those fluctuating hormones.

As a woman, there is nothing as empowering as becoming more in tune with how our fascinating bodies work!

Choose a chapter a night and enjoy!

Dr Michelle Hone
& The Fit Clinic Team



Contents..

1

OESTROGEN & PROGESTERONE

Want To Hack Them - You Need To Know Them!

2

NUTRITION & YOUR CYCLE

Using Food To Support Your Hormones

3

TRAINING & YOUR CYCLE

The Right Training For Your Phases

4

THE PILL

Weight Gain on The Pill and What To Know
When Coming Off It

5

PLANNING TO CONCEIVE

How To Prepare Your Body and Your Eggs!

6

OVULATION

How To Pin Point If And When You're Ovulating

1



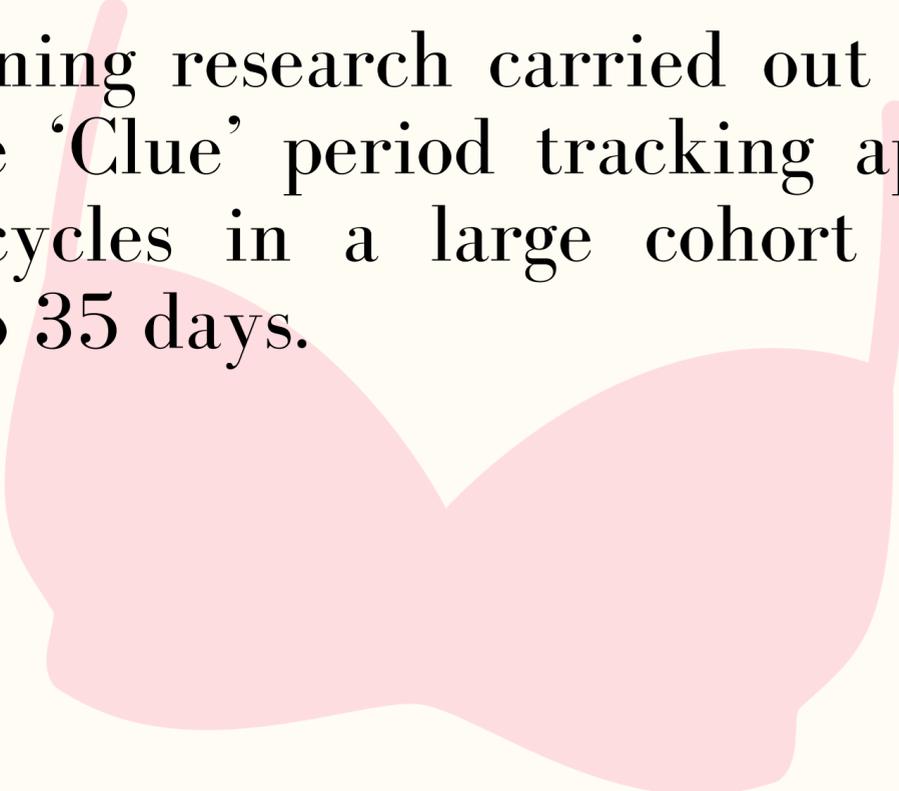
Oestrogen &
Progesterone

Temperature, pulse, respiration rate and blood pressure - These are referred to as our four vital signs which are routinely monitored by doctors and other health professionals. **But the American College of Obstetricians and Gynecologists refers to the menstrual cycle as a fifth vital sign for women's health.**

This is because your cycle, or lack of, can tell you a lot about your body. A healthy, regular cycle lets you know that your body is healthy and well. But if you're stressed or sick, you might lose your cycle, which signals something is wrong. Similarly, debilitating symptoms such as extreme cramps, very heavy bleeding or bad mood swings can also signal that something is not quite right.

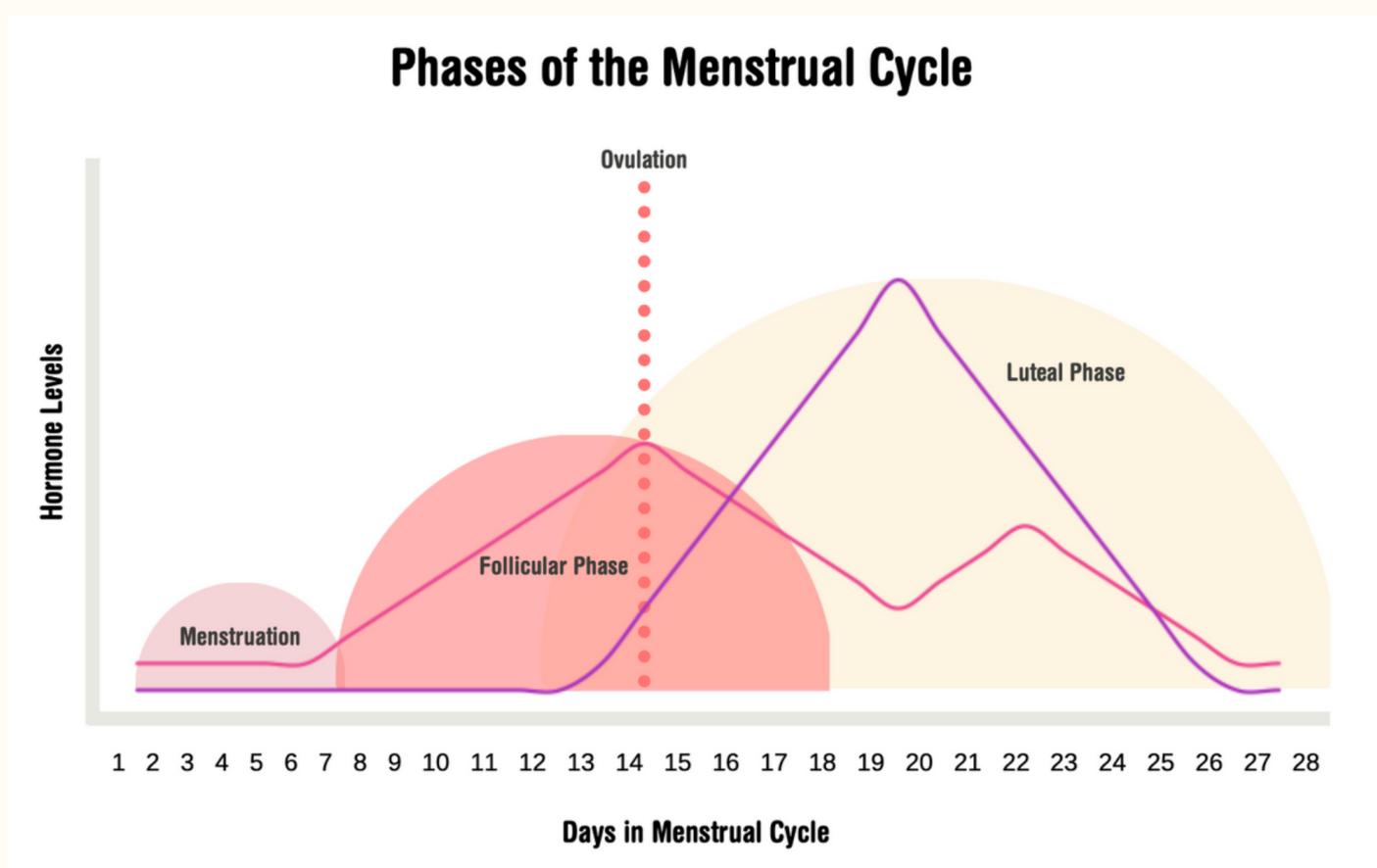
The menstrual cycle is composed of two distinct phases over an average of 28 days. 28 days is just an average textbook figure, and each woman's individual cycle will vary.

Interestingly, data mining research carried out in collaboration with the 'Clue' period tracking app found that healthy cycles in a large cohort of women can be closer to 35 days.



Follicular Phase

- Your cycle begins with the first day of your period - Day 1 (if you commonly experience spotting in the days leading up to your period, you count day 1 on the day of your first full bleed)
- Day 1 to approximately day 14 is known as the follicular phase
- Progesterone is low, while oestrogen increases throughout this phase, reaching its peak at ovulation
- Ovulation occurs right in the middle, around day 14
- Ovulation is typically when women feel their best, have the best energy levels and the highest libido!

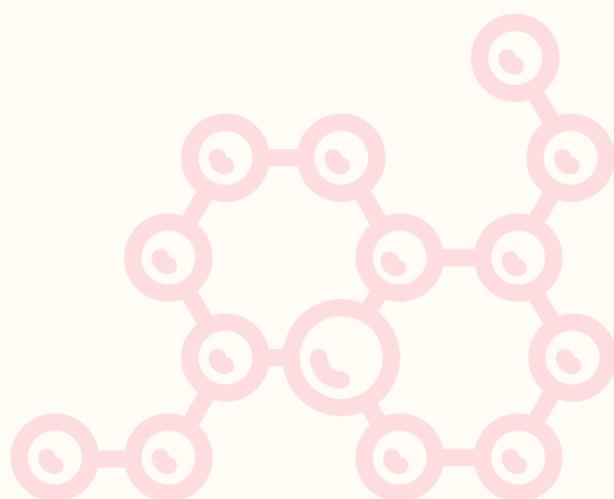


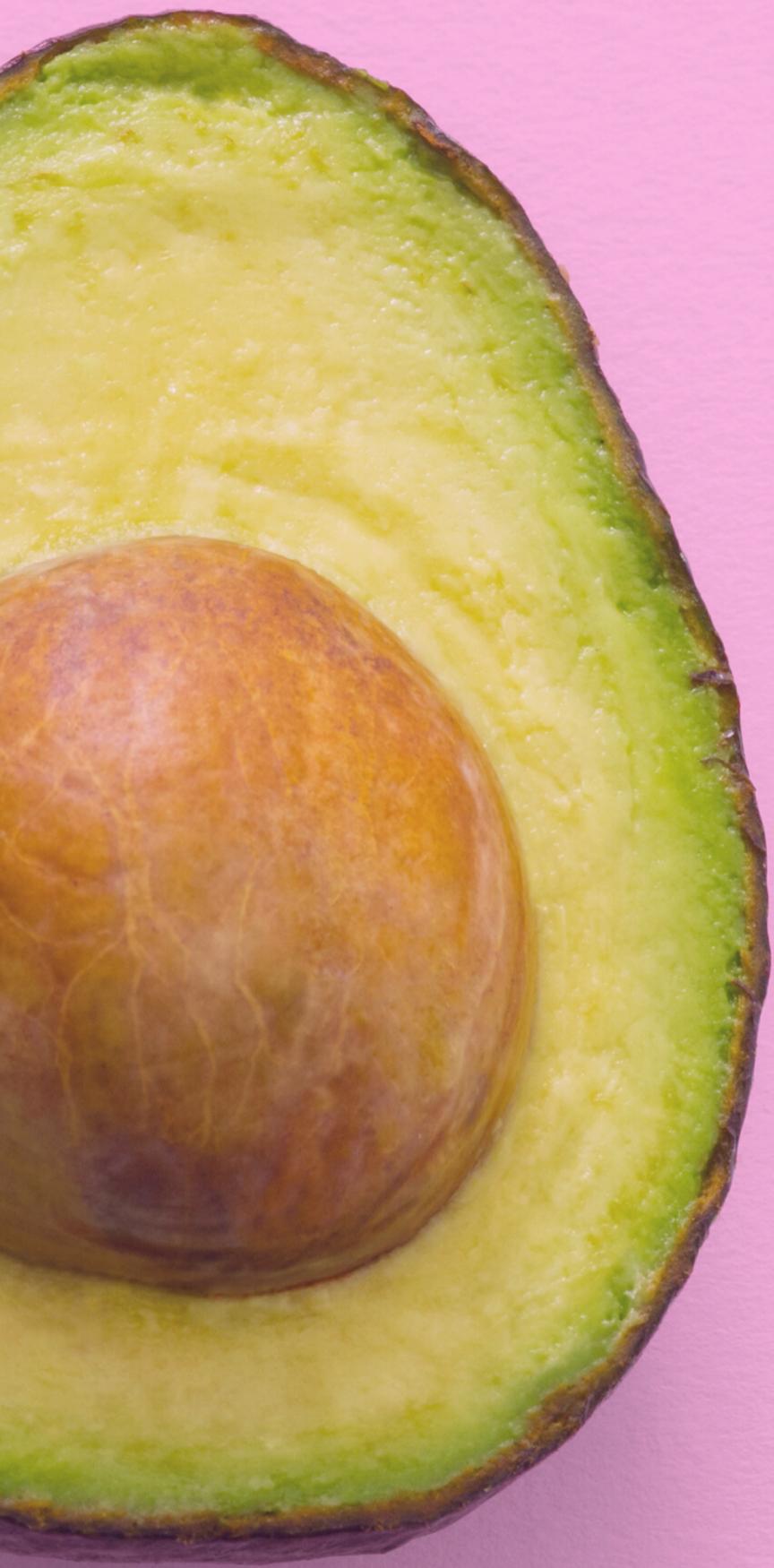
Luteal Phase

- Days 15 to 28 are known as the luteal phase
- PMS usually occurs in the late luteal phase i.e. Right before your next period
- Symptoms vary, but a major symptom is increased appetite and cravings
- You may also experience lower mood, crying spells, disrupted sleep and bloating

So as you can see, your cycle has a lot of different effects on your body. It can affect appetite, mood, digestion, and even body image - **It's been shown that women typically have higher levels of body satisfaction in the follicular phase, and have lower levels of body confidence in the luteal phase!**

So for these reasons, it's important to understand your cycle, and to work with it, not against it.



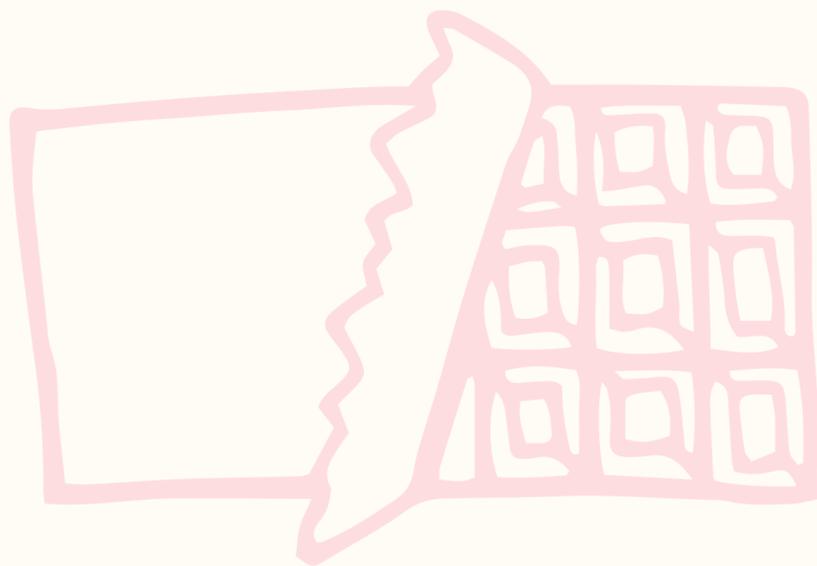


2

Nutrition &
Your Cycle

Appetite and Cravings

As we saw, the luteal phase brings with it some symptoms such as increased appetite. This isn't random though - This is due to an increase in body temperature and a subsequent increase in energy expenditure of anywhere in the region of 100-300 calories a day. In other words, it's our body telling us that it needs some more fuel in the tank. So, what should you do in this phase when cravings and hunger are high? **This 7 day stretch leading up to your period is a great time to take advantage of increased expenditure and increase calories by a small amount (~200 or return to maintenance) and incorporate foods that you're craving in moderation.** By eating a little more and managing hunger, this will keep you satisfied and not restricted while staying on track, resulting in a decreased likelihood of overeating or binging which could derail your progress.



It has also been shown that including ~200kcal of chocolate during the luteal phase results in better long term adherence to dieting, as well as better body composition changes over time - Win win! Research has also linked women's increased chocolate cravings during the luteal phase to the body's increased need for magnesium - Dark chocolate is a rich source of magnesium (so, it's not all in your head!) It's also a great time to make use of high volume foods such as veggies and fruit to bulk up your meals to increase satiety. **Honour your hunger in this phase - Eating a little more might actually be beneficial!**

Nutrition and Recovery

Recovery can also be affected in the luteal phase. You might notice that you have more muscle tenderness or soreness after sessions, for example. During this phase of your cycle, your window of recovery after exercise is also reduced, meaning that this is one of the scenarios where meal timing may become even more important.

In order to ensure you recover adequately, it's recommended you have a meal or snack containing protein and carbohydrates within 60 minutes of finishing your workout.

Nutrition and Period Cramps

Some conditions such as endometriosis, pelvic inflammatory disease and uterine fibroids can cause severe period cramps, so it's very important to get checked by your doctor if pain from your period is interfering with every day activities. However, some light cramping is normal around your period. **Period cramps are caused by substances known as prostaglandins.** Prostaglandins play a key role in regulating inflammation. They are also involved in muscle contractions, blood vessel constriction, blood clotting, and pain.

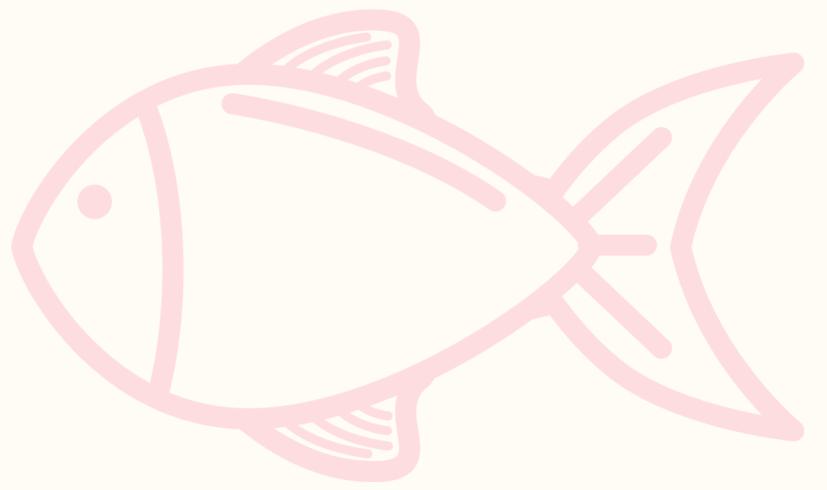
On the first day of your period, prostaglandin levels are high which is why cramps can be at their worst around this time. **Given the close proximity of the uterus and the bowel, prostaglandins can also impact stool movement for some women, often making them looser around the time of the menstrual bleed.** As menstruation continues and the lining of the uterus is shed, prostaglandin levels decrease. Pain usually decreases as the levels of prostaglandins decrease. In terms of reducing the severity of period cramps there are some effective dietary strategies that you can implement below..

Eat Your Greens

Especially the cruciferous ones - This means broccoli, kale, brussel sprouts and cabbage. These particular greens contain a compound known as Diindolylmethane or DIM. DIM is a metabolite of the phytonutrient found in these greens - indole-3-carbinol. **DIM helps to maintain healthy oestrogen levels in the body.** It assists with the clearance of excess oestrogen by converting oestrogen into more favourable metabolites for excretion.

Fill Up on Fiber!

A high fibre diet is really important for supporting hormonal health as it aids with the excretion of excess oestrogen metabolites. Oestrogen is removed from the bloodstream by the liver, which sends it through the bile duct and into the intestinal tract. **Fibre then acts like a sponge and removes the oestrogen from the body via bowel movements.** Including foods such as vegetables, fruit, beans, lentils, wholegrains, oats, nuts and seeds is a great way of upping your fibre intake.



Anti-Inflammatory Foods

Prostaglandins can promote inflammation which in turn results in pain. Including mono- and polyunsaturated fat sources in your diet can have anti-inflammatory effects. Include foods such as extra virgin olive oil, oily fish such as salmon, mackerel and trout, walnuts, flaxseeds and chia seeds to ensure you're getting plenty of those all important omega 3s.

Limit Omega 6s

Omega-6 and omega-3 fatty acids compete for enzymes in the body. High intakes of omega-6 fats coupled with low intakes of omega-3 fats can lead to an imbalance of fatty acids within the body, promoting inflammation. **This imbalance has also been reported to be associated with increased period pain.** Limiting consumption of omega-6 fats along with increasing intake of omega-3 fats (such as the examples above) is recommended.

Raspberry Leaf Tea

Raspberry leaf tea has been used for many years to relieve period cramps. **This is because it contains a substance known as fragarine, which is known to help tone and tighten muscles in the pelvic region.** This can thereby help with the cramps caused by spasms of these pelvic muscles.

Supplement with Magnesium

Magnesium biglysiniate or citrate may also help ease menstrual cramps. Magnesium is known to help with cramping and to act as a muscle relaxant. **Magnesium is one mineral which can be depleted by the contraceptive pill,** so supplementation may be of particular importance if you are on the pill. Magnesium rich foods include leafy greens, black beans, chickpeas, bananas and almonds.

Limit Salt Intake

Bloating and water retention can be worsened in the late luteal phase. Limiting high sodium processed foods is recommended in the run up to your period.

3



Training &
Your Cycle

Research has shown that our cycle plays a huge role in variations in strength and recovery..

- Strength is highest in the follicular phase (Days 1-14). These two weeks are the best time to include the heaviest, strength-based training into your routine.
- As our cycle progresses into the luteal phase (The two weeks leading up to our period), women are likely to feel more fatigued and not recover as well.

A recent study investigated the effect of placing the majority of training volume in the follicular phase and decreasing volume in the luteal phase, versus placing the most training volume in the luteal phase and decreasing volume in the follicular phase. Both groups did the same total number of workouts, the only difference was the time of their cycle where they placed the most volume. **The group who prioritised training volume in the follicular phase had the greatest gains in muscle mass.**

Other studies have also shown similar results with prioritising the most volume during the follicular phase resulting in greater strength and muscle gain.

This research translates to:

- Placing your heaviest strength based training in days 1-7 of the follicular phase (6-8 rep range)
- Prioritising high repetition, hypertrophy based training in days 7-14 (8-12 rep range)
- Continuing with this training in the early luteal phase but decreasing the weight or reps if you need to (Days 14-21)
- Taking a de-load week in the late luteal phase (Day 21-28) where you drop weight and volume or overall intensity of your training

Of course, this may not be possible if you are sticking to a structured training program designed by a trainer or coach - **But it is important to know why some days your training may be feeling a little off.**

The caveat of this too is that we are all so different, so tuning in to what works best for your body is key.





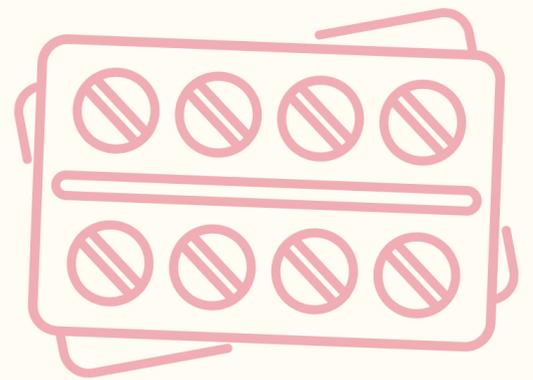
4H

Oral
Contraceptive
Pill

Weight Gain

A common concern with our clients and followers is whether or not being on the contraceptive pill will affect their weight or body composition. It's important to firstly note that the pill does not directly make you gain weight. **However, it does affect important factors which can contribute and influence weight gain**, which we have outlined below.

Increased Appetite



One of the most notable effects of the contraceptive pill is an increase in appetite. It is thought that **this is due to the progesterone content of the pills**. With an increased appetite usually comes an increased caloric intake, which could either make fat loss efforts harder or lead to weight gain. To manage a higher appetite, choose high-protein foods such as lean meats, fish, eggs and Greek yogurt, as protein is the most satiating or filling macronutrient. Including plenty of high fibre foods such as wholegrains, fruit, vegetables, beans and lentils is also beneficial as fibre can contribute to feeling fuller for longer.

Water Retention

The pill can also cause increased water retention in the body. It's important to bear in mind that this isn't fat gain, but can make users weigh in heavier and feel more bloated. Limiting your intake of high sodium foods such as processed, convenience foods, combined with drinking plenty of water, will help to manage any water retention you might experience. **Water retention can cause a lot of fluctuations on the scale, so using other measures of progress like measurements, photos and how you feel can often be a better predictor of progress.**

Coming Off The Pill

Coming off the contraceptive pill is something that can cause a lot of stress for some women, simply because they just don't know what to expect and fear they will not be able to manage symptoms they once had pre-pill. Many women have been on the pill for so long that they forget what having a natural cycle is like. **As a general rule of thumb, when you come off the contraceptive pill you can expect your cycle to be similar to how it was when went onto the pill (maybe not straight away though..)**

So, if you used to experience bad PMS symptoms and a heavy period, chances are that this is what your cycles will resume to in time, unless your nutrition and lifestyle has improved significantly since last time you were off the pill. This surprises many women as they are under the impression that the pill had treated their menstrual issues, **but in reality the pill merely suppressed the natural cycle and these symptoms.**

It can take anywhere between 3 and 9 months for your cycle to regulate after coming off the pill and it is common to have some anovulatory cycles (cycles where you do not ovulate - More on this later on) while your body adjusts to producing and managing its own hormones again.

Be sure to download a period tracking app to record any periods you get. If you get a period every 40-50 days, your aim should be to get them closer and closer to a 28 day cycle each month.

But also, try not to worry too much! As stress can wreak havoc with our cycle too. Most women's periods will naturally resume - Our bodies are very smart and know what to do! But for some women, they need a little extra help from a nutritionist to help get things back to normal.

Post-Pill Acne

Post-pill acne is a common concern amongst women who are coming off the pill. Acne can occur as a result of excess androgens (male hormones) in the body - Think of when teenage boys hit puberty and suffer with their skin, it's a very similar concept. **Androgens usually peak at around 6 months post-pill and start to decrease thereafter.** Your skin may therefore be at its worst at 6 months, but it should improve thereafter, so try to persevere. It's frustrating that for some women they were put on the pill to help their skin, and now it will be what causes your skin to become worse.

There are many ways you can support your body in managing the changes in hormone levels and surging androgens after taking the pill, such as through tailored nutrition and the use of some key supplementation. We will not be making blanket recommendations for managing the post-pill phase, as supplementation recommendations in particular needs to be entirely individualised to each person - We recommend working with a nutritionist, so they are aware of your medical background and can advise the best approach for you.

A close-up photograph of a person's hand resting on a soft, pink, wrinkled fabric. The hand is positioned with the palm facing up, fingers slightly spread. A large, semi-transparent red number '5' is overlaid on the right side of the image, partially covering the arm and hand. The lighting is soft and even, highlighting the texture of the fabric and the skin.

5

Planning to
Conceive

"When you're trying to get pregnant, you should act like you're already pregnant"

It takes 3 months for a female egg to fully mature. This means that it may be possible, (although not much research has been done) to manipulate the health of your egg three months prior to conception. Here are some important things to consider in the months leading up to and trying to conceive:

- Minimising stress
- Minimising training stress, especially high intensity interval training. **You shouldn't be training like you're running away from a bear when you're trying to conceive!**
- Minimise alcohol consumption
- Stop smoking and using recreational drugs
- Eat a healthy balance diet with lots of vegetables, fruit, beans, lentils, wholegrains, nuts, seeds, fish, lean meats
- Get plenty of sleep



- Minimise environmental exposure to chemicals where possible - Change your personal care products to BPA-free, non-paraben products and minimise the use of harsh chemicals like nail varnish. There is very limited research on the effects of these chemicals on egg quality or pregnancy, so we always feel it is best to err on the side of caution.
- Start taking a good quality pre-natal supplements, one that includes folate - We highly recommend **this one**

Getting Pregnant

To get pregnant an egg must be released from the ovaries and fuse with sperm. **There are 5-6 days in an average monthly cycle in which a woman is most fertile.** This occurs 5 days before ovulation (as sperm can survive this long in a woman's body) and the day after ovulation (as an egg typically survives 24 hours after being released). Typically ovulation occurs at day 14-16 in a woman's cycle (depending on the length of your personal cycle), so you can see the fertile window is quite short if you are trying to get pregnant - If you're not sure about when your fertile window is, the next chapter is for you!

6



Ovulation

Knowing when you ovulate is essential if you are planning to conceive, but also to make sure your body is functioning well. There are a number of methods to help determine when you are ovulating.

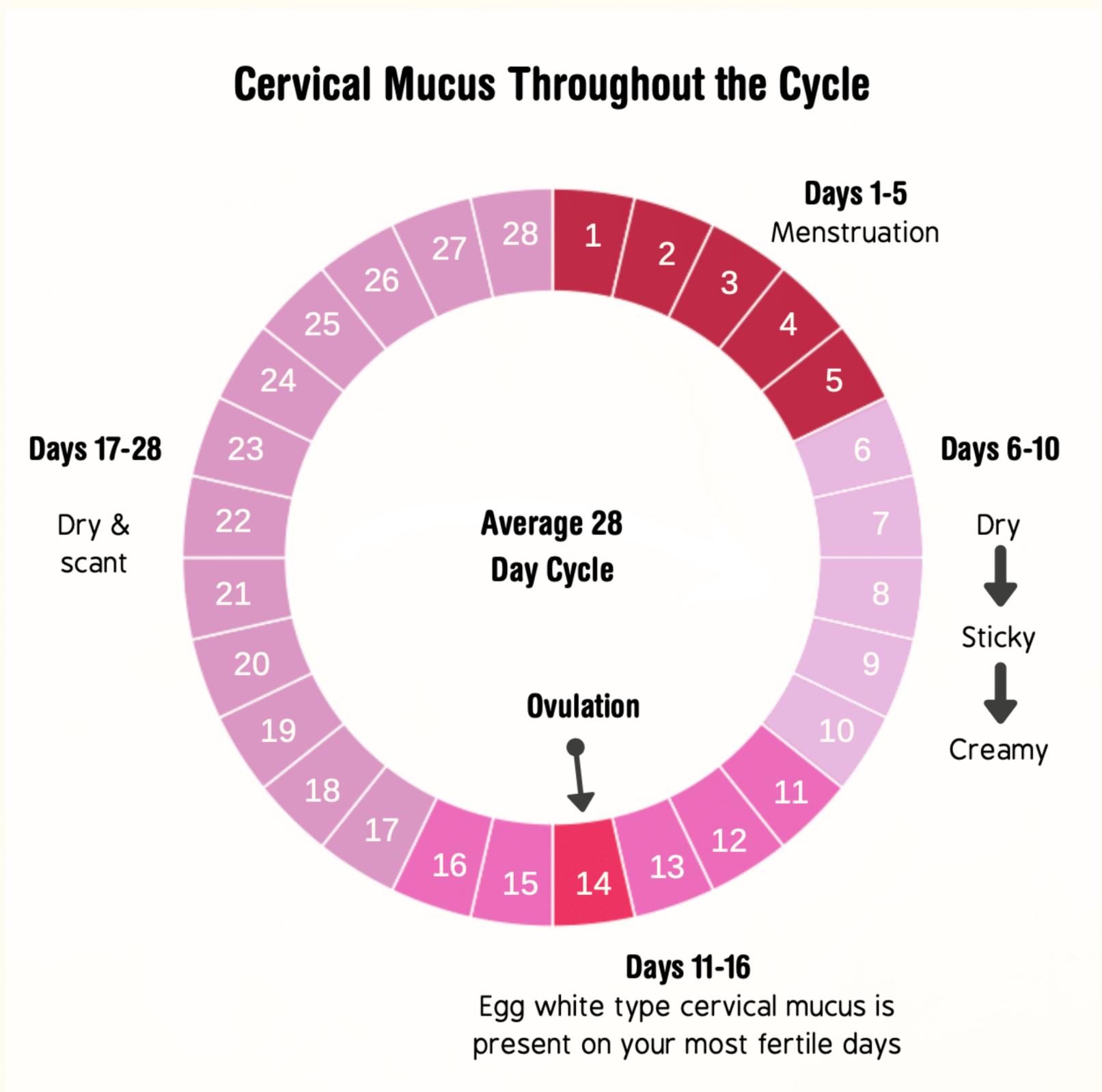
Track Your Cycle

Even if you are not trying to conceive at this time, we strongly recommend tracking your cycle. This will mean you more in tune with your phases and how you can use nutrition and lifestyle changes to support these phases. Depending on your cycle length, you can also usually predict when you ovulated, **as for most people, the luteal phase is 2 weeks long, which means you will get your period 2 weeks after you ovulate.** If you typically have a **28 day cycle, this means you likely ovulate on approximately day 14.** If you have a 32 day cycle, this means you likely ovulate on approximately day 18. However, if your cycle is shorter than 28 days, this suggests that you have a shorter luteal phase, which can indicate a 'luteal phase defect'. We recommend seeking advice from a professional if this is the case.

Our favourite and our client's favourite menstrual cycle tracking apps to use are **Flo, Clue and Eve.**

Cervical Mucus

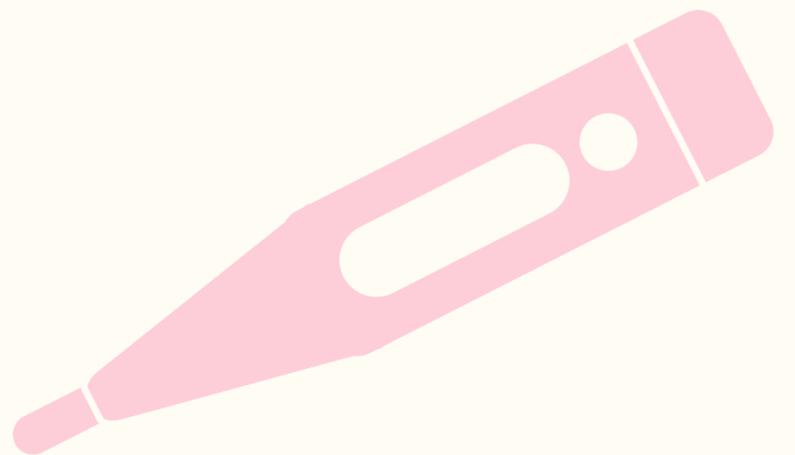
Around ovulation there will be an increase in cervical fluid or fertile mucus. This vaginal discharge has the appearance of raw egg white and is clear, stretchy and slippery. **The function of this fluid is to transport the sperm into the uterus and to the egg.** It also acts as a sign that you are fertile, so it's time to get it on (or maybe in your case, time to absolutely not get it on! Check out this graph to know what to expect during and around ovulation!



Temperature

Around ovulation your basal body temperature rises as a result of an increase in the hormone progesterone. Progesterone raises your waking temperature by approximately 0.3°C . Tracking your temperature every morning with a basal body temperature thermometer and seeing a consecutive increase helps you establish the days in your cycle where you are most fertile.

Ovulation Strips



Ovulation test strips measure luteinizing hormone (LH) which peaks just before ovulation. LH stimulates the ovaries to release an egg. Use the test strips from day 7-14 of your cycle and on **getting a positive LH result it is likely you will ovulate in the coming days hours** (Just to note if you have PCOS, your LH levels may be elevated on most days of your cycle and these strips may not be a useful method of tracking ovulation for you).

Other Signs of Ovulation

Other things to become aware of during the lead up to ovulation are increased energy levels, increased libido (makes sense doesn't it), better mood, some breast tenderness, abdominal bloating and a mild twinging pain in your lower abdomen. You may experience some or none of these and it is completely different for every woman. These are signs to be aware of but not to rely upon when planning or avoiding pregnancy.

Failure to Ovulate

If you have been tracking ovulation for three months and you are not noticing any of the above markers, it is possible that you are not ovulating. **What a lot of people don't know is that it is possible to have a normal regular cycle, but not ovulate - This is known as an anovulatory cycle.** Along with lack of ovulation markers, you may also notice that you are emotional around the days you are due to ovulate, you are experiencing spotting mid-cycle, or you are having a very heavy period later that month. Failure to ovulate can be as a result of undereating, high stress levels and conditions such as PCOS or thyroid disease. We recommend seeking advice from a professional if this is the case - It is usually an easy fix, so don't worry.

We really hope that we have helped dispel some of the uncertainties surrounding the female cycle. Tuning into our cycle and understanding why and how our bodies work is one of the most empowering things that we can do as women!

This way we can also identify when something is amiss and needs looking into, as remember - **Our cycle can tell so much about our overall health.**

As always, please reach out to us if you have any questions or concerns...

Thank you for showing your support and happy cycling!

Michelle &
The Fit Clinic Team



@thefitclinic



www.thefitclinic.ie

