

Menstrual Cycle

The average Canadian woman spends over \$6000 on menstrual products over their lifetime.¹

63%

of Canadian women regularly or occasionally miss school, work or social activities due to their period.²



As of December 2023, all federally regulated workplaces in Canada must offer free menstrual products.³

What is the menstrual cycle?

The menstrual cycle is the body's monthly process of preparing itself for possible pregnancy. During each cycle, hormones released by the brain signal important changes to take place in the reproductive organs. In the ovaries, thousands of eggs are growing in tiny fluid-filled sacs, called follicles. Once an egg has fully developed, this 'mature egg' is released by one of the ovaries in preparation for possible fertilization by a male sperm. This process is known as ovulation and should occur once during every cycle. In the meantime, the uterus (womb) builds a thick lining called endometrium; this lining provides the perfect environment for a fertilized egg to grow during pregnancy. If the mature egg is not fertilized and pregnancy does not occur, this lining along with the egg will be passed during your period.

What is menstruation?

Menstruation is the technical term for a period. About once a month, women will experience menstrual bleeding for 2 to 7 days. This bleeding occurs because the thickened lining of the uterus contains many tiny blood vessels. When the lining is shed during a period, these blood vessels release somewhere between 1 to 12 tablespoons of blood.

Is my menstrual cycle 'normal'?

No two menstrual cycles are alike, every woman will learn what is 'normal' for their body.

Your menstrual cycle is counted from the first day of one period to the first day of the next. Typically, most women will count 21-35 days. Your cycle may be regular – the same length every month – or irregular.

Your period should last from 2-7 days. During some cycles, your period may be longer, shorter, pain-free, heavy or light. Tracking your cycle helps identify patterns and changes so you can establish what is normal for your body. It's important to note that when you start having a period for the first time, it may take a few months for your body to establish your typical cycle.

Reach out to your healthcare provider if:

- Your cycle is frequently shorter than 21 days or longer than 35 days
- Your cycle becomes irregular after previously being regular
- Your period lasts for over 7 days
- Your periods suddenly stop for >90 days and you are not pregnant
- You experience heavy menstrual bleeding ie: using >1 tampon/pad in 1 hr and/or passing clots
- You experience bleeding in-between periods
- You experience significant pain during your period interrupting your daily life

The 4 phases of the menstrual cycle

Each menstrual cycle is broken down into 4 distinct phases. Each of these phases encompasses unique hormonal and physical changes as outlined below.

1. Menstruation (day 1-7)

The first day of menstrual bleeding is considered day 1 of the cycle. In the absence of pregnancy, progesterone and estrogen hormone levels fall causing the uterine lining to begin to shed and your period to start.

There are other symptoms besides bleeding that can accompany or precede menstruation. Lower abdominal cramps, bloating, tender breasts, fatigue and mood changes are all common towards the end of the luteal phase into menstruation.

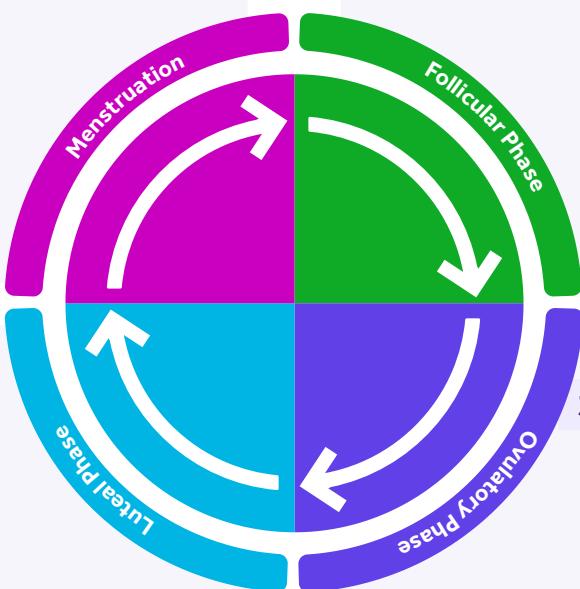
Find more information about periods on the next page.

4. Luteal Phase (day 17-28)

The luteal phase makes up the second half of your menstrual cycle, beginning just after ovulation and ending with the start of your next period.

During this phase, the ovarian follicle that previously released its egg during ovulation starts to produce high levels of progesterone in preparation for pregnancy. In the absence of a fertilized egg, this follicle (now referred to as the corpus luteum) breaks down, progesterone falls and your period begins.

Pre-menstrual symptoms (PMS) may begin towards the end of the luteal phase. These symptoms (as listed above) occur in 3 out of 4 menstruating women.⁶



2. Follicular Phase (day 1-14)

The follicular phase overlaps with menstruation beginning on the first day of your period and lasting anywhere from 10 to 14 days. This phase is aptly named to reflect the rising levels of follicular stimulating hormone (FSH) released by the brain.

FSH triggers the growth and development of follicles in the ovaries that contain eggs. Estrogen levels also begin to rise, signaling the uterine lining to thicken in preparation for possible pregnancy.

Towards the end of this phase many women will start to notice increased energy levels and libido.

3. Ovulatory Phase (day 12-16)

The ovulatory phase is shortest phase of the menstrual cycle. Ovulation occurs around day 14 of your cycle, or about 1 week after the last day of your period.

During this phase, luteinizing hormone (LH) is released from the brain to trigger the 'winning' follicle to release a mature egg. The egg will travel from the ovary into the uterine (fallopian) tube where it may be fertilized by sperm.

Some women may notice a change in vaginal discharge during ovulation. The discharge will likely be clear, sticky and similar in consistency to raw egg whites.



Periods: what's normal, what's not

Seven years of a woman's life are spent actively menstruating - that's hundreds of periods over thousands of days.⁵ Committing the same amount of time to any other subject would make you an expert in that field; so why do so many women still struggle to manage symptoms and learn what's normal for their body?

Yes, it's true that individual experiences vary from cycle to cycle but even with regular tracking of cycles and symptoms, many women are at a loss on how to best optimize their period health.

The first step in addressing any concern about your period is to educate yourself:

- Educate yourself on your body by tracking your cycle, symptoms and concerns using an app or notebook
- Educate yourself on period health using trusted resources either online or through discussion with your care provider

Our team at Teladoc Health is here to help you navigate health resources and locate care providers so you can begin (or continue) your educational journey of better understanding your period. The remainder of this fact sheet will answer some common questions many women have about their period and outline how our team can help address your concerns.

What should my period look like?

Colour

- Bright red blood indicates a healthy flow and is most common during first few days of your period.
- Dark red blood indicates a slower flow and is very common towards the end of your period.
- Brown/black blood also indicates a slower flow and is very common towards the end of your period.
- Pink blood is a result of blood mixed with cervical fluid and is commonly seen shortly before your period starts.
- Orange blood is also a result of blood mixed with cervical fluid.

It's important to note that pink or orange blood may also indicate an underlying health problem. Pink blood may be related to a nutritional deficiency and orange blood (especially if foul-smelling) may indicate an infection.

Consistency

The consistency of period blood ranges from thin and watery to thick and sticky. Small blood clots less than the size of a quarter are considered normal. Larger clots should always be discussed with your care provider.

How much blood should I lose during my period?

Period flow describes the amount of blood passed during your period ranging from heavy to light. Women with heavier flow may lose up to 12 tablespoons of blood during each period, whereas women with light flows may lose less than 1 tablespoon. Sometimes a heavy flow may indicate an underlying health problem or require additional support.

A heavy flow requiring the use >1 tampon/pad in 1 hour should always be discussed with your care provider.

How long should my period last?

Most women experience menstrual bleeding lasting 2 to 7 days.

If your period is consistently lasting longer than 7 days, especially if the flow remains heavy through 7 or more days, it's worth discussing with a care provider.



Is it normal to have spotting between periods?

Some women may pass light pink blood before or between their periods, this is usually referred to as 'spotting'. Spotting is often lighter in both consistency and colour than bleeding. Spotting before your period is very common, however spotting or bleeding between periods is usually a sign of an underlying health issue.

Some women may experience spotting or bleeding between periods when they first start birth control pills or following IUD insertion. Stress may also contribute to spotting between periods. Other causes, such as infections, polycystic ovarian syndrome (PCOS) or endometriosis will need further testing to diagnosis.

Given the wide range of underlying causes, spotting or bleeding between periods should always be discussed with your care provider.

Is it normal to have periods twice in a month?

A typical menstrual cycle lasts 28 days but some women may have shorter cycles lasting 21 days. This means some women may regularly experience a period at the beginning and end of each month without cause for concern. For women who regularly experience 28-day cycles, having a period twice in one month may indicate an underlying health problem such as hormonal imbalances, sexually transmitted infections or fibroids. Some women may also notice more frequent and irregular bleeding as they enter perimenopause.

Given the wide range of underlying causes, it's worth speaking to your care provider the first time you experience two periods in one month.

Is it normal to occasionally miss a period?

A missed period is defined as 6-weeks or more without bleeding. There are several times in your life when irregular or missed periods are expected: when you first start having periods, during breastfeeding and at the beginning of perimenopause. Apart from these 3 life stages, a missed period may indicate an underlying health issue.

There are many reasons apart from pregnancy to miss your period. Stress, low body weight, obesity, birth control use, hormonal imbalances and polycystic ovarian syndrome (see PCOS fact sheet) can all result in missed periods.

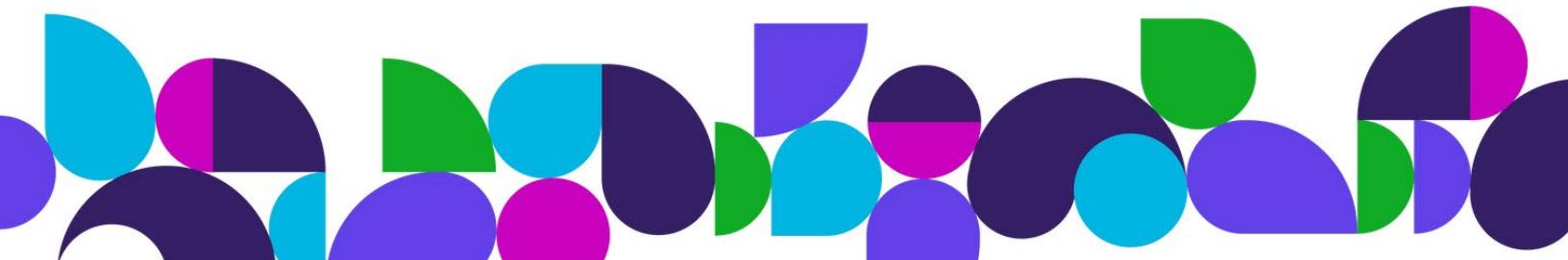
Missing a period for 3 or more months should always be discussed with your care provider.

My period is late - what should I do?

Very few women experience consistent cycles that last the same number of days each month like clockwork. More often each cycle varies in length by around 5 days, meaning most women may count a 28-day cycle one month and a 31-day cycle the next. Your period is considered 'late' after 5 days from the date when you expected it to come.

There are many reasons for a late period apart from pregnancy. Lifestyle factors such as stress, a strict diet or extensive physical activity may result in hormonal imbalances that impact your cycle. You may also experience late periods when you first start birth control pills.

If your period is more than 5 days late, it's worth taking an at-home pregnancy test if you are sexually active.



Are period cramps normal?

Period cramping or 'dysmenorrhea' varies significantly from person to person. Some people don't experience any pain during their period while 10% of women have severe pain that impacts everyday life.⁶

So, what causes period cramps in the first place? Towards the end of the luteal phase, your progesterone hormone levels fall, and your uterus (womb) starts to produce hormone-like chemicals called prostaglandins. These chemicals help your uterus contract in order to shed its thickened lining in the form of a 'period'.

The research isn't exactly clear on why some women experience severe cramps while others feel little pain at all. It's possible that some women are more sensitive to prostaglandins and therefore experience more severe contractions and pain. In some cases, painful cramps may be exacerbated by an underlying health condition such as endometriosis (see endometriosis fact sheet), adenomyosis or fibroids.

If period pain is significantly impacting your ability to participate at work, school or social activities, speak to your care provider about further testing and treatment options.

1 in 10 women experience severe period cramps that impact everyday life.⁶

How can I help my period cramps?

Period cramps can be relieved by taking over-the-counter pain medications such as ibuprofen (Advil), naproxen (Aleve) and/or paracetamol (Tylenol). In fact, medications like Advil and Aleve work by reducing prostaglandin production. Using a hot water bottle or heating pad can also be helpful in relieving pain.

If your period pain is associated with an underlying health condition (some examples listed above) speak to your care provider about other possible treatment options.

Why do my bowel movements change during my period?

Changes in bowel movements during your menstrual cycle, also known as 'period poops' are very common. One study estimated that over 70% of women experience gastrointestinal symptoms, such as diarrhea and constipation, during their menstrual cycle.⁷

The prostaglandins released by your uterus right before your period starts also have an effect on your nearby bowel. Just as prostaglandins help the uterus contract to shed its lining, they can also cause similar contractions in the large intestine resulting in frequent bowel movements and possible diarrhea.

Rising progesterone levels during the luteal phase of your cycle can have the opposite effect and result in constipation. Women with irritable bowel syndrome (IBS) are particularly sensitive to changing hormone levels with over 50% reporting constipation and bloating related to their menstrual cycle.⁸

Speak to your care provider if these symptoms start to impact your everyday activities or persist throughout your cycle to rule out other underlying health issues.



Why do I feel emotional or irritable during my period?

Mood swings are a very common symptom associated with pre-menstrual syndrome (PMS). Your hormones are very volatile during certain phases of your menstrual cycle and these fluctuating hormone levels can result in many different physical and psychological symptoms. PMS symptoms are experienced by up to 90% of menstruating women.⁶ The symptoms can be broken down into 2 categories:

Emotional symptoms of PMS:

- Irritability
- Fatigue
- Difficulty sleeping
- Appetite changes or food cravings
- Difficulty concentrating
- Feelings of sadness or crying spells
- Mood swings
- Low libido

Physical symptoms of PMS:

- Swollen or tender breasts
- Constipation or diarrhea
- Bloating
- Cramping
- Headache or backache
- Lower tolerance for noise or light

90% of menstruating women experience symptoms of PMS.⁶

It's important to keep track of PMS symptoms throughout your cycle. There is no definitive test for PMS and diagnosis is made based on the pattern of emotional and physical changes. PMS usually begins in the 5 days leading up to your period and ends within 4 days of your period starting. Treatment of PMS varies depending on the symptoms involved but can include:

Lifestyle changes	<ul style="list-style-type: none">• Regular exercise• Limiting foods and drinks with caffeine, salt and sugar• Prioritizing sleep• Stop smoking
Medication	<ul style="list-style-type: none">• Over-the-counter pain medications (see previous page) for period cramps and headaches• Hormonal contraception for physical PMS symptoms• Antidepressants for emotional PMS symptoms
Vitamins & Minerals	<ul style="list-style-type: none">• Calcium has been shown to reduce fatigue, food cravings and depression. Calcium is found in foods such as milk, cheese, yogurt and fortified bread and cereals but can also be taken as a supplement.• Vitamin B6 has been shown to reduce mood swings, irritability, bloating and anxiety., bloating and anxiety. Vitamin B6 is found in foods such as fish, poultry, potatoes and fruit (except citrus fruits) but can also be taken as a supplement.

Cycle syncing

Cycle syncing, also known as menstrual syncing, is a method of adjusting your routines around different phases of your menstrual cycle. The term was coined by integrative nutritionist Alisa Vitti in 2014 but has only recently started to receive more wide-spread attention in the last few years. The concept hinges on the idea that women's bodies require a tailored approach to health based on the 4 phases of their menstrual cycle. Shifting your routine to better support your fluctuating hormones may provide additional symptom support and overall health benefits for menstruating women.

While this concept has yet to be formally demonstrated in the research, many women anecdotally report benefits to adapting their diet and exercise patterns using cycle syncing methods. Unfortunately, the evidence is too inconsistent to be convincing to the experts and so the debate continues - is this a holistic approach to women's health or another wellness trend?

If you decide to try cycle syncing, speak to your doctor first to address any possible underlying health concerns that may be contributing to your menstrual symptoms.

	Diet	Exercise
1. Menstruation (day 1-7) Menstruation is often accompanied by fatigue and it's best to focus on rest.	<ul style="list-style-type: none">Limit alcohol, caffeine, processed foods and excess saltFocus on calcium and vitamin B6	<ul style="list-style-type: none">YogaStretchingWalking
2. Follicular Phase (day 1-14) Towards the end of the follicular phase, estrogen levels rise resulting in higher energy levels.	<ul style="list-style-type: none">Focus on iron, fibre and vitamin B12	<ul style="list-style-type: none">Interval workouts (HIIT)CardioPilatesDance
3. Ovulatory Phase (day 12-16) Women tend to feel their best during ovulation, reaching peak energy levels.	<ul style="list-style-type: none">Focus on iron, B-vitamins and calcium	<ul style="list-style-type: none">Intense cardioInterval workouts (HIIT) Weight training
4. Luteal Phase (day 17-28) As your body is preparing for menstruation it's normal for energy levels to fall.	<ul style="list-style-type: none">Focus on protein, fibre and omega-3	<ul style="list-style-type: none">YogaPilatesSustained cardio (ie: biking or swimming)



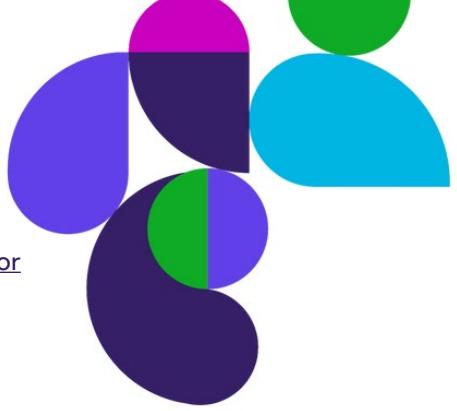
How can Teladoc Health help?

If you are looking for more information on menstrual health, our [Personal Health Navigator](#) service can locate appropriate online resources or support in your community.

If you are concerned about abnormal periods, our [Find a Doctor](#) service can locate an available family doctor or gynecologist to further discuss your symptoms and initiate testing and treatment if needed.

If you have received a diagnosis for an underlying health condition that is impacting your menstrual cycle, our [Expert Medical Opinion](#) service can locate a specialist to review your case and offer a second opinion.

If you are struggling with any emotional symptoms of PMS or a co-existing mental health disorder that is impacted by your menstrual cycle, our [Mental Health Navigator](#) service can help locate available resources and organize formal assessment and treatment.



This guide is not meant to provide medical advice or service and should not be construed as the professional advice of Teladoc Health. As such, Teladoc Health does not guarantee or assume responsibility for the correctness of the information or its applicability regarding any specific factual situation. Personal health problems should be brought to the attention of physicians and appropriate health care professionals.

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Learn more at TeladocHealth.ca

About Teladoc Health: Teladoc Health is empowering all people everywhere to live healthier lives by transforming the healthcare experience. Recognized as the world leader in whole-person virtual care, Teladoc Health leverages clinical expertise, advanced technology and actionable data insights to meet the evolving needs of consumers and healthcare professionals.