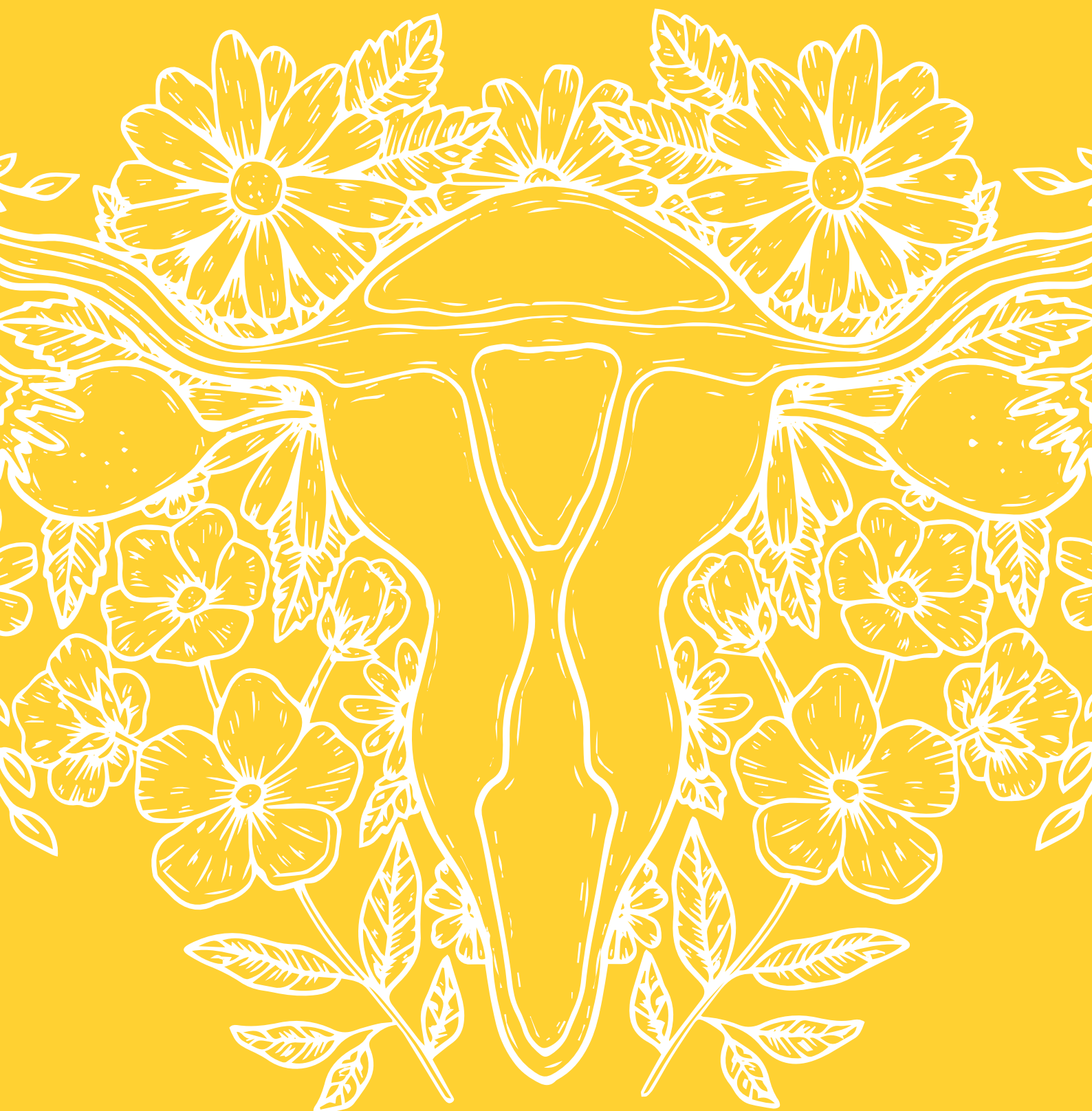


MENSTRUAL INFORMATION PACK





PHILOSOPHY OF CYCLES

It involves acceptance that the nature of life on Earth (work projects, stages of life, the activity cycle of live organisms) is cyclical or periodic. After the bloom or development phase, the project reaches its peak, following which the deliverables of the work can be enjoyed, but there is also time for evaluation, lessons learned and rest.

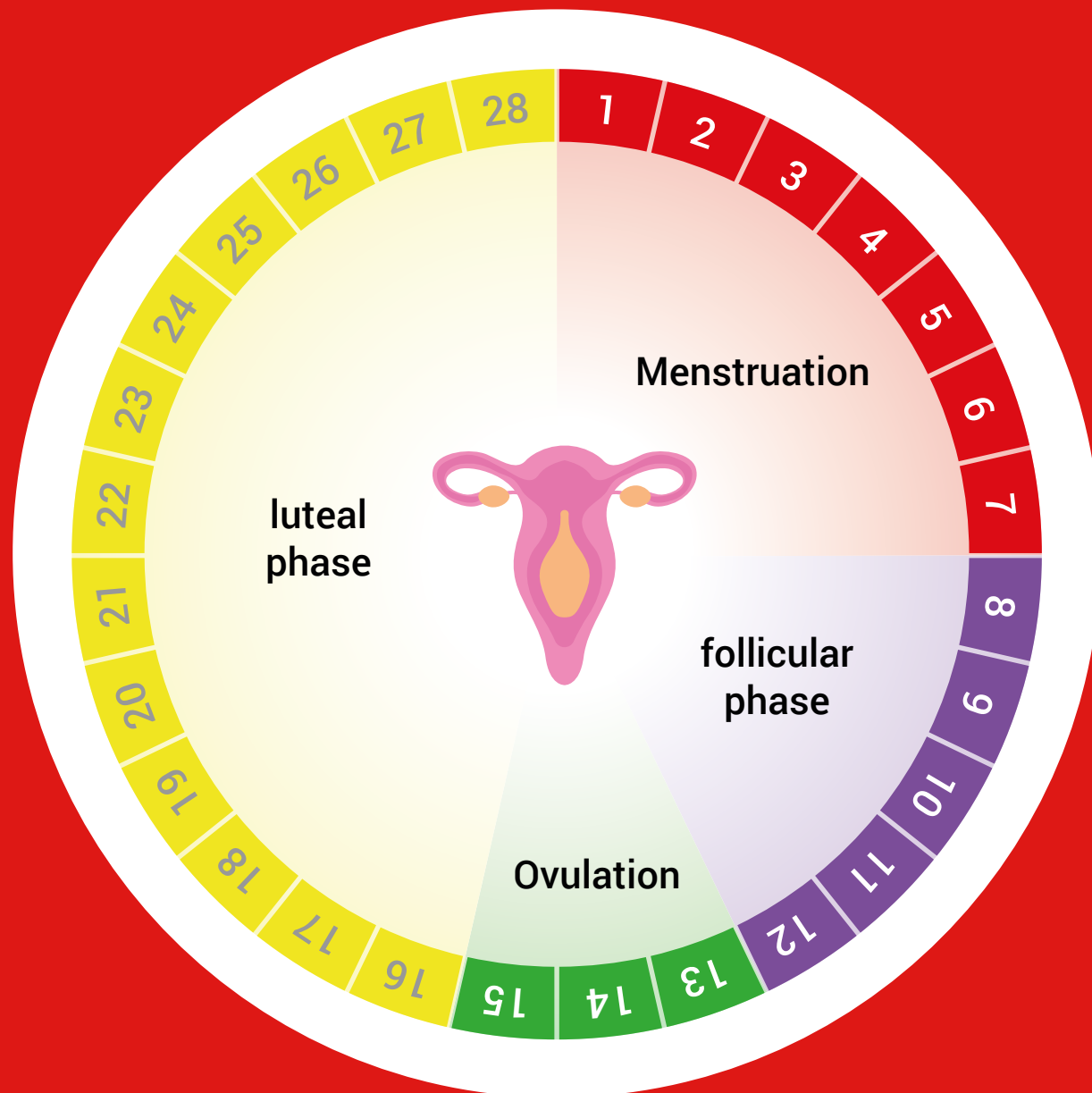
When planning your work/activity, you could consider the needs of your body, the cyclical nature of your organism.

All you need is balance, namely the alternating phases of activity and relaxation, balance between acting and giving versus receiving and replenishing your energy. When you fulfil basic need, your work will be highly effective.

– by Natalia Miłńska

PHASES OF THE MONTHLY CYCLE

There are four phases involved in the menstrual cycle:



Benefits of adapting your diet to your menstrual cycle

Your internal organs are responsible for different tasks depending on the phase of the cycle, so it is worth taking certain micronutrients on certain days. You can support your cycle with what you eat. What you should remember, however, is that the various phases of the cycle transition smoothly from one to another and are interdependent. Therefore, eating the right nutrients at specific phases can make you feel better. A proper diet helps to optimise your cycle, reduce menstrual problems, reduce pain and increase your energy level.

Benefits of aligning your physical activity to the phases of your menstrual cycle

No two cycles are the same and women experience the phases of the cycle differently. Some women struggle with pain during menstruation, while others find ovulation the most difficult. Everyone can decide for herself what level of activity and exercise she can afford during this time and what can be good for her. This is why physical activity should be personalised at every phase of the menstrual cycle. This enables the woman to use her capabilities optimally and ensures the most benefits such as:

- improved mood,
- better performance and strength,
- lower risk of injuries,
- muscle building or fat burning,
- lower fatigue during exercise,
- improved performance,
- potential to achieve the desired goals.



MENSTRUATION PHASE

Days 1–7 of the cycle

Menstrual bleeding: where the exfoliated endometrium is expelled along with menstrual fluid, it lasts for 3 to 5 days on average (although bleeding that lasts 2 to 7 days is also considered optimal).



Your recommended diet for this phase

During the first phase of the cycle, which is when your period bleeding begins, progesterone and oestrogen levels are at their lowest. This is the cause of your lack of energy and feeling generally unwell, among other things. Depending on the length and course of your cycle, the amount of blood lost during menstruation can further put you at risk of lower iron levels, which are also associated with low energy and fatigue. It is therefore important in this phase to increase the content of iron in your diet as it helps your body to make red blood cells and distribute oxygen all over your body. The best and easily absorbable sources of iron are lean beef, fish and egg yolks. Sources of iron of plant origin include buckwheat and millet groats, legumes, nuts, pumpkin and sunflower seeds.

You could also combine supplementation of iron with vitamin C, an antioxidant that not only promotes immunity, skin health and wound healing, but also helps the body absorb iron more efficiently. Combine your iron-rich meal with citrus fruits or vegetables such as peppers, tomatoes and leaf vegetables. For instance, this could be a bowl of vegetable chili with lime juice or braised tofu with peppers. Sources of magnesium that has a relaxant effect, such as oatmeal, brown bread, bran, pumpkin seeds, buckwheat groats, cocoa, nuts and almonds, are also important.

What should you avoid then? Definitely tea and coffee, since they hamper the absorption of iron. Moreover, foods high in salt will increase water retention in the body and cause bloating. Fatty foods will boost the production of prostaglandins, which can make your cramps worse. Therefore, at this stage, your go-to meals should contain lots of vegetables and fruits, and plenty of water.



Physical activity

During menstruation, the levels of oestrogen, progesterone and testosterone are low. This phase is characterised by:

- Low mood,

- Sleep problems,
- Tiredness,
- Increased exertion,
- Lower fatigue threshold,
- Greater risk of injury,
- Extended reaction time,
- Poorer coordination.

Excessive physical exertion during menstruation is not recommended. It is better to choose a lighter activity that can relax your muscles and alleviate pain. Remember to reduce the intensity of your regular exercise.



How to use your potential

“During menstruation, your energy directs inward, you connect with your deepest self. This is the time where the outside lights fade, and the inner light turns on. Then, you can slowly walk out of your inner cave and head towards the world again. You become more creative, get a desire to act, gain a new level of motivation. You are filled with vitality, have a slightly thicker skin, you can handle all sorts of difficult things,” Alexandra Pope.

In the first two days of menstruation, your uterus sheds its inner lining and is then extremely sensitive to external stimuli. Your body is more sensitive to noise, stress or temperature (cold). This is a time that women prefer to spend under a blanket, on a walk or meeting a friend. At this time, your body requires peace so you can recharge for the weeks to come. You should be caring and gentle with yourself, take care of your needs, eat nutrient-rich diet, relax, and not force yourself to do what you don't feel like doing. Your period encourages you to get in touch with yourself. Not only is it a time to get rid of the accumulated things, but also a time to get inspiration and lay directions for the next month.

Needs: Being mindful of yourself and your needs, of your right to rest, of the possibility to assume a comfortable body position, to avoid meetings, and to have a work environment free of menstrual taboos.

Strengths: regeneration, creating a vision for the future, “dreaming”, creative work.



Suggested activities

walking, fartlek, stretching exercises, yoga, Pilates, relaxation exercises, low-intensity cardio, Swiss ball and resistance band exercises, swimming.

Not recommended

lower body and abdominal exercises, intense strength-training exercises, strong and vigorous trunk twists, jumping and intense skips, inverted positions (candle pose, head and arm stands)



FOLLICULAR PHASE

Days 8–12 of the cycle

In this phase, the FSH hormone makes a dominant ovarian follicle appear in the ovary; the cervix accumulates mucus, which becomes sticky and translucent; on the last day that the mucus is present in the vagina, the next phase of the cycle begins.



Your recommended diet for this phase

The second phase is a good time for foods with high nutritional value, particularly slow digesting carbohydrates. The idea is to provide the body with valuable fuel to build the endometrium again. For instance, it could be a serving of oatmeal with fruit for breakfast, whole grain bread for lunch, yams baked in maple syrup with cinnamon for dinner. At this time, it is worth to eat a lot of cereal, whole grain products such as quinoa, bran as well as fibre-rich berries, broccoli, kale, flax, beans and nuts.

A key role in the production of cell membranes – including endometrial regeneration – is played by Omega-3 acids. They are also responsible for supporting the proper functioning of sex hormones and improving uterine blood supply. Cod, pollock, sardines, herring and sprats are a good source of Omega-3 acids.

Vitamin E should also be an important part of your diet during the follicular phase since it supports epithelial regeneration, including regeneration of the endometrium. Studies showed that taking 600 mg of vitamin E improved endometrial thickness in more than a half of the women tested, which is why it is often called the “fertility vitamin”. Rich sources of vitamin E includes for example avocados, pumpkin and sunflower seeds, nuts. You should also make sure to enrich your diet with products rich in selenium (fish, seafood, milk and milk derivatives, yeast, dark chocolate) and zinc (whole-grain cereal products, almonds, pumpkin and sunflower seeds, cocoa), which also contribute to proper regeneration of the endometrium.



Physical activity

At this phase of the cycle, progesterone levels are low, which means women feel at their best during this time. This is when they have the most energy, strength and motivation. At the follicular phase, you can do almost any type of training. It is a great time to do strength training and build your muscles.



Suggested activities

- To calm yourself down: yoga, Pilates, stretching exercises
- Muscle building: you can train with your maximum weights.
- Increased exercise intensity

Examples

sprints, intervals, jump rope, boot camp, squats, reverse lunges, forward lunges, planks, crunches, pull-ups, weight training, bodyweight exercises, kettlebell exercises, long-distance running, triathlon, climbing, long walks, long bike rides, team sports.

At the end of the follicular phase, we recommend less strenuous exercises. Try running at a steady pace instead of sprints and take smaller weights for strength training.



How to use your potential

After your period ends, you experience an increased desire to do things. You feel fresh, light, you have growing self-confidence and feel as if this was a new beginning. You have a higher desire for sex and an increased sense of attractiveness. At this phase of your cycle, it is a good idea to choose where you want to invest your energy this month and pick a few challenges to focus on so that you don't use too much of your energy (especially during ovulation) on things that are not helpful.

Needs: space to act, decision-making, acceptance of the fact that you don't have to put all your ideas into action.

Strengths: effectiveness in action (sports, meetings), learning new things, brainstorming, finding new solutions, tasks that require creativity.





OVULATION PHASE

Days 13–16 of the cycle

At this phase, the ovarian follicle releases the egg cell into the fallopian tube for about 24 hours. Your body temperature rises, usually by 0.5°C. Your fertility window days are on.



Your recommended diet for this phase

At this phase of the cycle, oestrogen can decrease your appetite. This may be accompanied by a lower appetite for carbohydrates as a source of quick energy. Still, you should pay attention to what you eat and choose products with a low glycaemic index, such as whole-grain bread, oatmeal and bran, fruit such as apples, strawberries, plums, pears, and vegetables such as carrots, tomatoes, zucchini and legumes.

Your diet at this phase should be rich in proteins and healthy fats. Also vitamin B12 will help you prepare for ovulation. Deficiencies of vitamins B6, B12 and folic acid may lead to ovulation disorders and cause abnormalities in embryo implantation. This is why you should consider opting for meat, offal, fish, milk and milk products, eggs (especially yolks), nuts, green leafy vegetables, brassica vegetables and legumes during this time.



Physical activity

During ovulation, maximum levels of oestrogen and testosterone make you feel stronger and your performance increases. It is a good time to strengthen and build muscles (using the natural anabolic effect) and get yourself in shape. You can exercise with higher intensity and more repetitions.



Suggested activities

strength training, cardio and endurance exercises using body weight or training equipment, running, playing ball and other endurance activities.

Remember:

- Oestrogen weakens collagen fibres in your ligaments and makes them stretch, which increases the risk of injuries, especially in your knees. Thus you should pay particular attention to correct exercise technique.
- For some women, ovulation can be painful, sometimes even more than menstruation. If this is your case, you should limit or avoid physical activity at all.



How to use your potential

Ovulation is a time when most women experience a boost in energy. This makes us more extrovert, want to meet friends, and use our developed communication skills. It is a good time to show the world who you are, to expect people to respect you, and to speak and think well of yourself. You feel you are on fire so it is worth to plan your work in advance to avoid wasting your energy on things that are not helpful for the future.

It is also the best time to tend to your Sisterhood, to support the women around you.

Needs: to have your goals clearly defined, to redefine giving, to have space to act, and have support to show your potential!

Strengths: great time for meetings, training courses, demanding projects that require a lot of effort and commitment; leading others, momentum, public speaking skills.





LUTEAL PHASE

Days 17–28 of the cycle

This is a time when your body prepares to accept a fertilised egg. The production of progesterone and oestrogen increases. When the egg is not fertilised, hormone production decreases.



Your recommended diet for this phase

At this phase, hormonal changes are accompanied by lower mood. This is because the concentration of blood progesterone increases, causing a drop in serotonin levels. This is also the reason for your increased appetite for sweets. Most women crave sweets a few days before their period. Such an unhealthy habit is not only a source of unwanted calories, but also pollutes your body with artificial dyes and trans fats. You should therefore have some healthy sweets prepared as an alternative. Ideally, these should include fruit or homemade sweets containing natural ingredients such as oatmeal, cocoa, yoghurt, avocado, as well as vegetarian cakes, banana smoothies, baked apples, chia pudding, millet pudding. You can also reduce your appetite for sweets by choosing foods rich in vitamin B6, such as bananas, cereal products and potatoes.

Plus, you need to make sure you are well hydrated. Having two to two and a half litres of water a day is the best thing you can do for your body. Studies showed, however, that cold water can exacerbate pain during menstruation. It is therefore advisable to drink warm or hot water then to help relieve pain and cramps. According to Chinese studies, drinking cold water disturbs the balance in your body, which affects your skin and general health. Chinese women teach their daughters not to drink cold water, especially during menstruation. This also applies to certain foods. For instance, pineapple and watermelon exert a cooling effect, which is why you should avoid eating them during menstruation.

Before your period and during menstruation, it is recommended to drink herbal teas, such as camomile, peppermint or lavender, since they reduce fatigue. Some teas, such as ginger tea, can also reduce pain. Try it with cinnamon, which is an excellent source of fibre, calcium, iron and manganese, and has antispasmodic, anticoagulant and anti-inflammatory properties.



Physical activity

At the luteal phase, progesterone levels increase, causing serotonin and dopamine levels to drop. This may result in lower mood, irritability and lack of motivation to exercise. You can also experience increased sensitivity to pain, which may cause you to reduce the intensity of your workouts. Progesterone has a more catabolic action (a process opposite to anabolism), meaning that it hampers gains in muscle tissue. The luteal phase is also accompanied by a

decrease in physical performance and your body accumulates water.

During this phase, it is best to choose moderate-intensity exercises, reduce weight load in strength exercises and/or doing fewer repetitions to avoid injury.



Suggested activities

cycling, short-distance running, strengthening exercises, fartlek, light cardio exercises, Pilates, yoga, Swiss ball or resistance band exercises.

Some 5 days before menstruation, your hormone levels drop and **premenstrual syndrome (PMS)** often kicks in.

This is a time to try exercises that can help reduce tension and calm you down.



Suggested activities

yoga, tai chi, Pilates, meditation.



How to use your potential

At this phase of the cycle, your sensory competences are increased, you are able to feel and sense more. Despite the accompanying energy decline, you are in better contact with yourself. Your sensitivity to stimuli increases and what used to be pleasant music can now turn out to be unwanted noise.

Some people consider this phase to be a time for training your emotions and feelings, a time of accountability and honesty. This means clearing your surrounding environment, making space for new things and clearing the atmosphere.

This phase is marked by the pursuit of peace and tranquillity. However, when your environment requires you to be productive and perform at your best all the time, your body revolts and responds with PMS, and you get angry.

Needs: Silence, comfort, nutritious food, being able to communicate your boundaries, greater social distance.

Strengths: Analytical tasks that require concentration, summarising, reflections, evaluations.

IMPORTANT INFORMATION

HOW MUCH BLOOD IS LOST DURING MENSTRUATION?

A regular period usually lasts from 3 to 7 days. Bleeding is most heavy in the first days and fades away in the following days.

During every period, a total of 30 to 80 millilitres of blood and mucus flow out your the body. Bleeding above 80 ml means a heavy or very heavy period (sometimes called menorrhagia).

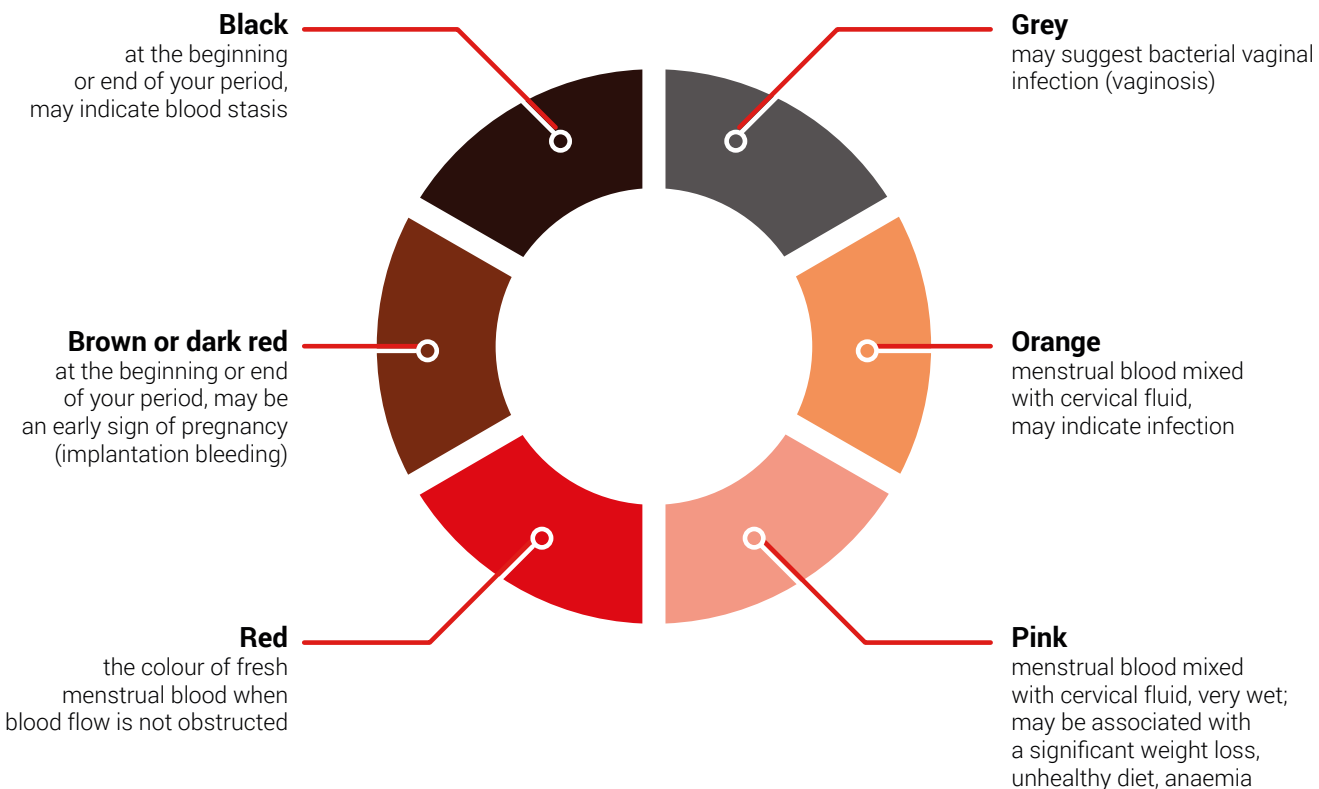
If your period products get filled up, leak and need to be changed more often than every three hours, or if you need to change your pad overnight, it is advisable to see a doctor.

THE MANY SHADES OF YOUR PERIOD

If you bleed just a little (i.e. your period flow is scanty), the discharge often lingers in the uterus before it flows out. It may therefore be brown in colour. It may also form clots and have a jelly-like texture.

Fresh menstrual blood tends to be red, which is most common with heavier bleeding or simply in the first two days of your period.

Many women have periods that are red at the start and then turn brown. This is perfectly normal.



DOES YOUR PERIOD HAVE TO HURT?

During menstruation, you may feel discomfort and pain in your lower abdomen, and sometimes in your lower back. The pain is caused by the contractions of your uterus, which are needed to exfoliate the lining and enable the blood to flow out. These cramps are caused by hormones called prostaglandins, which can penetrate the mucous membranes into the intestine and cause diarrhoea.

In most cases, your period pain can be alleviated by regular painkillers and/or muscle relaxers (also called antispasmodics). If your pain is very severe and prevents you from doing things, you should see a doctor and/or a urogynaecological physiotherapist.

WHAT CAN HELP WITH MENSTRUAL PAIN



A hot-water bottle, or a cherry-pit heating pad



Gentle stretching and breathing exercises, walking



Non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen (remember to always take them as prescribed)



Plenty of sleep and comfortable clothes/pajamas



Stopping to suck your belly in

PAIN AND DIET

You should take painkillers two hours after a meal, or one hour before food during the day. You must take them with water and avoid taking them with tea, coffee, juice or fizzy drinks. High-fat meals can improve the absorption of some drugs, especially those that are easily soluble in fats. High-fibre food, on the other hand, such as fruit or cereal products, have an opposite action since they weaken the effect of drugs. Also, calcium ions that are found in milk, cheese and yoghurt, impair absorption and can decrease the effects of some drugs.

A natural food that has analgesic properties is ginger, which prevents your body from making hormones responsible for pain on the one hand and reduces inflammation on the other. This is why you should try tea with ginger, cinnamon and cloves during menstruation. Another product with

painkilling properties is olive oil. It is best to take at least two to three tablespoons of olive oil a day. Turmeric added to your meals also has a similar effect.

It is recommended to eat foods that reduce inflammation in the body, which helps alleviate menstrual cramps. These foods include fruit, vegetables, whole-grain products, legumes, nuts and seeds. Studies showed that a vegetarian diet reduces inflammation in the body.

Unfortunately, products of animal origin increase oestrogen levels in the body. The more animal products you eat, the more likely your uterine lining is to become thicker. And when it begins to exfoliate during menstruation, it will produce more prostaglandins, causing more pain. A low-fat diet rich in fibre can significantly reduce oestrogen levels in the body. Vegetables such as beans, fruit and whole-grain products help eliminate oestrogen. The more fibre you have in your diet, the more efficient your natural oestrogen removal system.



WHAT IS PMS?

Everything that happens in the days preceding your period, namely pimples, bloated belly, stress, tender breasts, is part of a phenomenon known as premenstrual syndrome (PMS). It is also characterised by many other signs and symptoms, which may be physical or mental, and the full list of such symptoms includes as many as one hundred and fifty items. The most common symptoms of PMS include dizziness, mood swings and the feeling of extreme exhaustion.

Three out of four women experience PMS symptoms a week before menstruation. Girls tend to experience the symptoms in very different ways and with various intensities. Most of them get better after a few days, and the severity of the symptoms is mild.

WHAT IS PMDD?

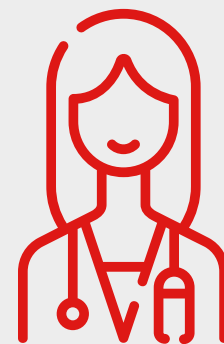
Premenstrual dysphoric disorder (PMDD) is a very severe form of PMS. It affects 2% to 5% of women and causes considerable suffering.

Apart from physical symptoms, PMDD causes emotional and mental problems in girls and women, sometimes even leading to suicidal ideations.

Poorly diagnosed PMDD can lead to inadequate psychiatric treatment (e.g. for depression or bipolar disorder). A person who suffers from PMDD should be under the care of a gynaecologist, a psychiatrist and endocrinologist.

IS THERE ANYTHING I SHOULD BE CONCERNED ABOUT?

WHEN YOU SHOULD SEE A DOCTOR



- When your first period comes before your 10th birthday
- When your breasts do not grow before your 13th birthday
- When you do not menstruate until the age of 16
- A pause in menstruation that lasts for three months or longer
- A menstrual cycle that is shorter than 21 days, or longer than 45 days
- Any abnormal vaginal bleeding, lower abdominal pain, unusual colour of your bloody discharge or anything that makes you worried!

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Information regarding diet and nutrition during the various phases of the cycle was taken from an interview with Dr. Estera Klosowicz titled "Jadłospis okresowy" (Period Diet) published in "Wysokie Obcasy" magazine of "Gazeta Wyborcza" on 13 March 2021; "Cykl menstruacyjny a dieta" (Menstrual Cycle and Diet) by Karolina Jaworska published on 31 May 2022 at dietetycy.org.pl website, and the book titled "In the FLO: Unlock Your Hormonal Advantage and Revolutionize Your Life" by Alisa Vitt.



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Find out more about menstruation
at www.kulczykfoundation.org.pl/en/menstruation