nutrition

# Nutrition for Optimal Health During the Menstrual Cycle

Member

Virgin active

## The Menstrual Cycle

Around 50% of the population experience the menstrual cycle, yet it remains a taboo subject in the context of health and well-being.

While there is limited high quality evidence on how diet influences the menstrual cycle, there are certain nutritional considerations that may support hormonal balance, alleviate symptoms and promote overall mental and physical well-being.

## Phases of the menstrual cycle

The menstrual cycle has different phases: the menstrual, follicular, ovulation and luteal phases, often broken down more broadly into the follicular and luteal phases.

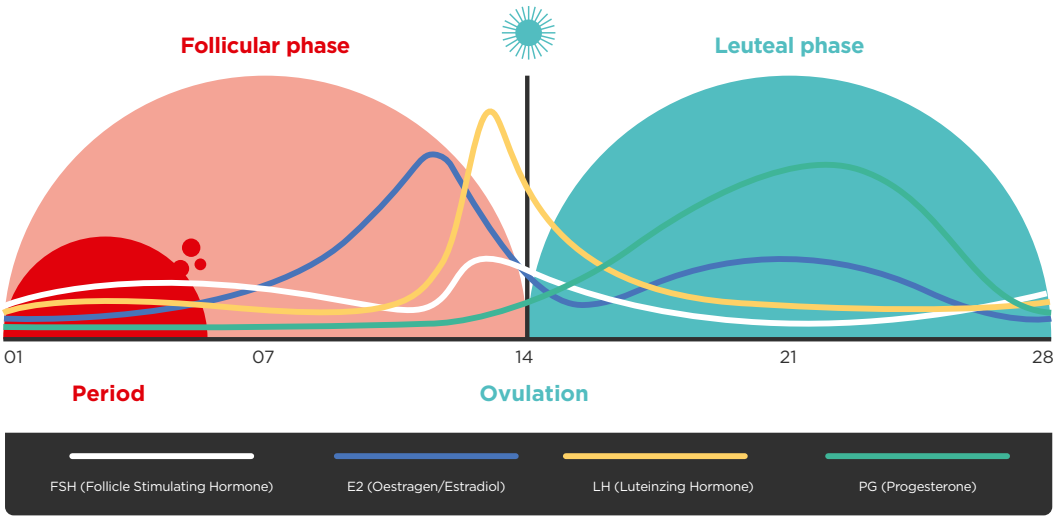
The first phase within the follicular phase is the menstrual phase, when a female gets her period and oestrogen and progesterone drop, typically lasting 3-7 days.

Ovulation typically occurs around day 14 as luteinising hormone (LH) is released in response to the follicular phase's rising oestrogen.

The final stage, the luteal phase, sees progesterone rise with a slight increase in oestrogen. This is where pre-menstrual syndrome (PMS) symptoms are frequently experienced, such as bloating, headaches, weight fluctuations, food cravings and sleep disturbances, lasting typically 11-17 days.

It is important to note that only a small percentage of menstrual cycles last 28 days. Typical cycles may range from 25 to 31 days. However, if your cycles are irregular or longer than 35 days, speak to your GP.

### Complete Menstrual Cycle



## The Menstrual Cycle and Nutrition

Despite limited high-quality evidence around how nutrition influences the menstrual cycle, there are certain nutritional considerations that may support physical and mental well-being during each phase.

**Phase 1: Menstrual Phase (day 1-5)**


### 1) Iron-rich foods

During this phase, iron levels may be lower due to blood losses. Iron-rich foods will replenish iron stores to prevent iron-deficiency anaemia:

- Lean red meat, poultry and fish
- Dark leafy greens (spinach, kale)
- Legumes (beans, lentils)
- Fortified cereals and breads

### 2) Vitamin C

Consuming vitamin C-rich foods, such as citrus fruit, strawberries, bell peppers and tomatoes, alongside iron- rich foods will enhance iron absorption. A simple tip is to drink a glass of orange juice with iron-rich foods.

- Kiwi fruit
- Red pepper
- Citrus fruits
- Vegetables

### 3) Avoid consuming coffee or tea around main meals.

Coffee and tea contain phytochemicals that inhibit iron absorption. Aim to consume these at least an hour before or after meals.

### 4) Limit foods that stimulate the gut

- Coffee
- Spicy food
- Sugar-free foods with sweeteners (that contain polyols)
- Alcohol

## Phase 2: Follicular Phase (Day 6-14)

In the follicular phase, the rate of metabolism declines and there is an increased inflammatory response. A well-balanced diet high in fruits and vegetables is recommended to assist in the anti-inflammatory process, offering a range of vitamins, phytochemicals and minerals to support the immune system and offset excess inflammatory signalling.

1) **Complex carbohydrates:**

Oestrogen is known to reduce carbohydrate oxidation. As oestrogen is lower in the early follicular phase, slightly increasing starchy carbohydrate intake may support training around this phase. Additionally, complex carbohydrates provide sustained energy and support serotonin production to enhance mood and reduce PMS symptoms, as well as providing a good source of B vitamins.

- Wholegrains (oats, brown rice/pasta, quinoa)
- Fruit and vegetables; cruciferous vegetables such as broccoli, cauliflower and Brussel sprouts
- Legumes and lentils
- Cereals
- Potatoes

## 2) Healthy fats

Healthy fats, such as monounsaturated and polyunsaturated fatty acids, support hormone production, facilitate the absorption of fat-soluble vitamins and assist in the anti-inflammatory process.

- Avocados
- Nuts and seeds (almonds, walnuts, chia seeds)
- Extra virgin olive oil
- Fatty fish (salmon, mackerel)

### 3) Fruits and vegetables

Cruciferous vegetables (broccoli, cauliflower, Brussel sprouts, cabbage) may help support optimal levels of oestrogen. Foods rich in vitamin E, such as sweet potato and green leafy greens, and spices such as ginger and turmeric, will assist in the anti-inflammatory process.

## Phase 3: Ovulation phase (Day 14)

The only way of knowing exactly when you're ovulating is to track your cycles. If you are not tracking cycles or trying to conceive, nutrition around this day is less essential.

### 1) Antioxidant-rich foods:

During ovulation, the body experiences increased oxidative stress. Include antioxidant-rich foods to support overall health and reduce inflammation.

- Berries (blueberries, raspberries)
- Leafy greens (spinach, kale)
- Colourful vegetables
- Green tea

## 2) Essential fatty acids

Polyunsaturated fatty acids support hormone balance and reduce inflammation.

- Fatty fish (salmon, mackerel, sardines)
- Chia seeds
- Flaxseeds
- Walnuts

### 3) Fibre

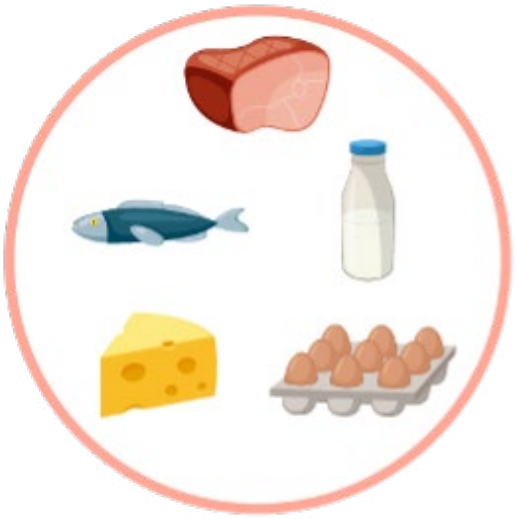
Foods high in water and fibre, such as colourful fruits and vegetables, will help regulate water retention.

- Quinoa, barley
- Wholegrains (brown pasta/rice, wholegrain bread)
- Fruit and vegetables

### 4) Vitamin B-rich foods

This is the time of the month where you are most fertile. If you're looking to encourage a pregnancy, supplementation with folic acid has been associated with reduced risk of foetal neural tube defects (important to supplement pre-conception) and higher rates of implantation. Additionally, leafy green vegetables, peas, kidney beans and fortified breakfast cereals are high in B vitamins.

- Wholegrains
- Meat
- Eggs
- Dairy
- Nuts and Seeds



## Phase 4: Luteal Phase (Day 15-28):

Progesterone is an appetite enhancer, whereas oestrogen is an appetite suppressant. During the early luteal phase, hunger and cravings may increase not because you 'lack will power', but because of the lower oestrogen compared to progesterone. Additionally, sleep disturbances are more frequent, which may also influence our food choices and hunger.

### 1) Protein at each meal and snack

Progesterone promotes protein breakdown. Consuming protein with each meal and snack will support the increased protein use, supporting hunger and cravings.

- Lean meat
- Fish and seafood
- Eggs
- Dairy products
- Soy products

## 2) Tryptophan-rich foods

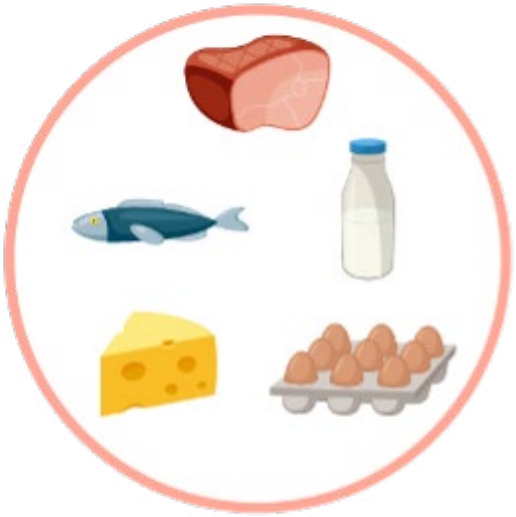
There is a natural decrease in serotonin during this phase, contributing to mood swings. Tryptophan is a pre-cursor for serotonin. Therefore, tryptophan-rich foods may boost serotonin to improve mood and may enhance sleep.

- Turkey
- Skimmed milk
- Soybeans
- Pumpkin seeds

### 3) Fibre and B vitamins

Focus on fibre-rich foods and foods high in B vitamins to support digestion, regulate blood sugar levels, reduce bloating and alleviate PMS symptoms. Consequently, these types of food will also help to reduce food cravings. Increased progesterone may also cause constipation, which may require increased fibre and water intake.

- Wholegrains
- Legumes (chickpeas, lentils)
- Leafy greens
- Lean proteins (chicken, fish, tofu)
- Bananas



### 4) Essential Fatty acids

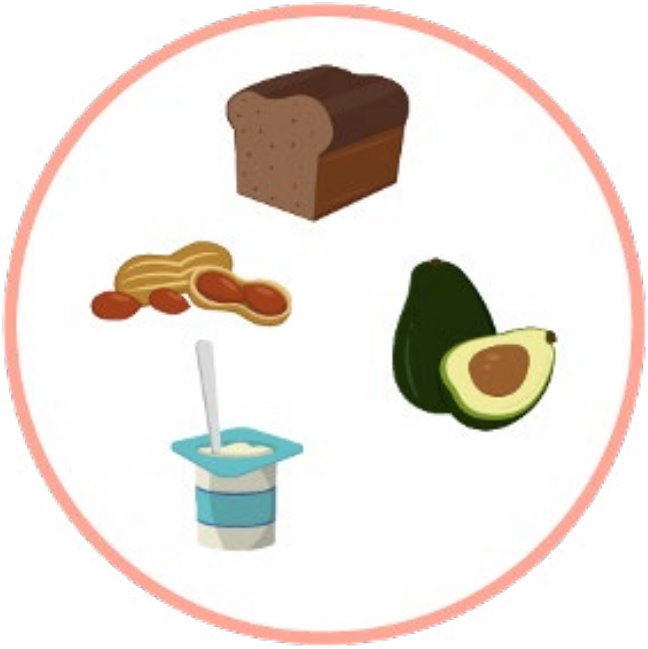
Carbohydrate oxidation is lower during this phase, and the body prefers fats as a primary fuel source during this phase. These may also reduce symptoms of PMS.

- Sunflower seeds
- Flaxseeds
- Tahini
- Oily fish
- Nuts
- Olive oil
- Avocado

5) **Magnesium**

Magnesium-rich foods help to relax muscles and ease menstrual cramps.

- Nuts and seeds (cashews, pumpkin seeds, almonds)
- Wholegrains
- Yoghurt
- Dark chocolate/cocoa
- Leafy greens
- Wholegrains
- Avocado
- Banana
- Salmon and tuna



6) **Increase energy intake.**

Hunger begins to increase as progesterone increases. Therefore, consuming slightly higher calories (200-300 kcal extra) during the luteal phase may support the increased metabolism and physiological changes that occur.

## Summary

Despite limited high-quality evidence around how nutrition influences the menstrual cycle, there are certain nutritional considerations that may support physical and mental well-being during each phase.

Aligning dietary choices with the different menstrual cycle phases may support hormonal balance, alleviate PMS symptoms and promote overall well-being.

Remember, everyone's menstrual cycle is unique, and a multitude of factors can play a role, such as oral contraceptives, medical conditions (e.g., PCOS) and much more. Therefore, it is important to personalise these guidelines based on your individual experience.

**Please speak to your GP about any concerns relating to your menstrual cycle.**