PMS symptoms usually start up to a week or so before a period is due and disappear when the period starts, or a few days after. Symptoms can vary month to month.

Who is affected by PMS
Any women of child-bearing age but it is most common in women from their late 20s to their mid 40s.

If you have migraine, asthma, epilepsy or cold sores you may also find these conditions become worse before a period.

Causes
The causes of PMS are not clear but several factors may be involved.

Hormone changes The cause of premenstrual syndrome is not really known. It is not due to a hormone imbalance or too little of any hormone, as was previously thought. The release of an egg from the ovary each month (ovulation) does appear to trigger symptoms. After ovulation the hormone progesterone is passed in to the bloodstream from the ovaries and it is thought that women with PMS are more sensitive to normal levels of progesterone.

Chemical changes Chemicals in the brain, such as serotonin, fluctuate during the menstrual cycle. Serotonin contributes to feelings of happiness and regulates mood. It is possible that women with low levels of serotonin are more sensitive to PMS symptoms. Low serotonin levels can also contribute to symptoms of insomnia, tiredness and food cravings.

Weight and exercise Research undertaken has shown that women are more likely to have PMS symptoms if they are obese (body mass index over 30) and if they exercise very little.

Stress Stress can aggravate the symptoms of PMS, although it is not a direct cause.
**Diet** Too much salty food can contribute to fluid retention and bloating. Fizzy drinks and alcohol can reduce your energy levels and disrupt your mood. Low levels of vitamins and minerals may also worsen PMS symptoms.

**Diagnosis**
There is no laboratory test that can diagnose PMS, although blood and urine tests can rule out other causes. The condition is recognised by noting the type of symptoms and when they occur in relation to the period.

Keeping a diary for a few months will help you to recognise your PMS symptoms and when to expect them – and will also help your GP with diagnosis.

Some symptoms of PMS are shared by other conditions such as depression, anxiety, menopause, chronic fatigue syndrome (CFS), Irritable Bowel Syndrome (IBS) and thyroid gland problems.

A few women find that their symptoms are severe enough to stop them living their normal life due to more intense PMS, called Premenstrual Dysphoric Disorder.

**Treatment of PMS**
**How to help yourself** Understanding the condition is the first step. For most women, the symptoms are a mild inconvenience which they can deal with themselves.

- Keep a diary to help predict when PMS symptoms are due. Try to manage stress levels around that time e.g. rearrange potentially difficult meetings, avoid having guests to stay, arrange extra childcare etc.
- Make sure you get enough sleep, try to get 8 hours every night.
- Stop smoking.
- Talk about it to family and friends so they can understand how you are feeling.
- If bloating is a problem, wear loose, comfortable clothing with an elasticated waist band and a more supportive bra.
- Relaxation and gentle exercise is beneficial.
- Eating the right foods should lessen the symptoms of PMS.
- Generally you should try to consume less junk food, fat, sugar, salt, caffeine and alcohol, and eat more starch, fibre, vegetables and fruit. It also helps to eat small meals regularly.

**Consult your GP** if the PMS symptoms are so bad that they are affecting your work, daily routines and relationships. A number of treatments are available. Some may be more effective than others. Treatments may take several months to work fully and may not cure symptoms completely but symptoms often become less frequent or easier with treatment. The treatment of PMS is a fast-growing area of research.

**Treatments your doctor may prescribe**

**Hormone treatments**
- Combined oral contraceptive pill: thought to alleviate PMS by stopping ovulation and reducing hormonal fluctuations. However, in some women the hormones in the pill cause PMS. If symptoms return in the pill free interval then the pill can be taken continuously and a seven day break only taken if breakthrough bleeding occurs.
- Oestrogen patches and implants: there is scientific evidence that extra oestrogen given this way can relieve PMS symptoms by suppressing ovulation and reducing hormonal fluctuations.
- Mirena intra-uterine system (IUS): this is a contraceptive coil which releases a small dose of a progestogen. Some women say it improves PMS, as well as reducing the heaviness and duration of their period.
- Other powerful medicines called luteinising hormone releasing hormone (LHRH) analogues are available which temporarily switch off the ovaries. They are reserved for severe cases of PMS.
- Gonadotrophin-releasing hormone analogues are drugs that prevent ovulation and should only be used for the treatment of severe PMS. Although these work well, menopausal side-effects commonly occur which limit their usefulness in treating PMS.

**Non-hormonal treatments**
- **Selective Serotonin Re-uptake Inhibitors (SSRIs)**
  An SSRI medicine is commonly prescribed to treat more severe PMS. These medicines were first developed to treat depression. However, they have also been found to ease the symptoms of PMS, even if you are not depressed. They work by increasing the level of serotonin in the brain. These have been shown to relieve the symptoms of tiredness, low mood, food

This factsheet has been produced by Women's Health Concern and reviewed by members of our Medical Advisory Panel. It is for your information and advice and should be used in consultation with your own medical practitioner. Updated: November 2012.

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cravings and sleep problems. They do have side effects which sometimes outweigh their usefulness for PMS sufferers but there are various brands. Research suggests that taking an SSRI for just half of the menstrual cycle (the second half of the monthly cycle) is just as effective as taking an SSRI all of the time.

- **Diuretics (water tablets):** such as Spironolactone may help relieve premenstrual bloating, breast tenderness, and weight gain.

- **Cognitive-behavioural therapy (CBT)**
  This is a talking treatment (psychological treatment), during which ways to find more adaptive ways of coping with premenstrual symptoms are explored. This has been shown to be effective for some women.

**Surgery**
A hysterectomy with removal of both ovaries to prevent ovulation may be necessary for a few women who suffer from severe PMS. Removing the womb without the ovaries may not improve the symptoms as there will still be fluctuations in the hormonal cycle. This is a drastic treatment and will only be undertaken in severe cases and if all other treatments have been unsuccessful.

**Non-prescription treatments**

**Pain relievers Over the counter** pain relievers (such as ibuprofen and paracetamol) can help ease symptoms such as cramps, headaches, backaches and breast tenderness.

**Alternative therapies** Although there is little scientific evidence, many women have found significant relief from some PMS symptoms by using complementary or alternative therapies.

- **St John’s Wort** This is a herbal remedy shown to alleviate mild to moderate depression which can be purchased from pharmacies. There is limited evidence to show it is effective in treating PMS. It may interfere with the efficacy of the combined contraceptive pill.

- **Evening primrose oil (EPO)** EPO is a source of gamma linoleic acid and is is helpful in alleviating premenstrual breast pain in some women.

- **Black cohosh, wild yam root, agnus castus (chasteberry) and dong quai** have also been reported to help with PMS symptoms but there is only limited evidence to support this.

Note: check with your doctor about possible interactions if you are taking prescribed medication.

**Vitamins and minerals**

- **Magnesium** Some women with PMS have lower magnesium levels, although further research is needed.

- **Calcium and Vitamin D** taken together may help with premenstrual pain and migraine.

- **Vitamin B6**, also known as pyridoxine. For some women it helps with the symptoms of mood swings and irritability. It can be taken every day or just for two weeks before a period. Be careful not to exceed the maximum daily dose.

- **Folic Acid** To help alleviate fatigue and depression.

**Natural diuretics** are available over the counter to help with swelling and bloating.

**Useful contacts**

**National Association for Premenstrual Syndrome**
41 Old Road, East Peckham, Kent TN12 5AP
Phone: 0844 815 7311
Website: www.pms.org.uk

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