



Premenstrual syndrome (PMS) is a disorder marked by physical and emotional symptoms that occur repetitively in the second half of the menstrual cycle. Although the onset, duration, and symptoms vary in all women, PMS usually begins one or two weeks before the beginning of a woman's menstrual period and ends shortly after menses begins. PMS is very common among women. According to the American College of Obstetricians and Gynecologists (ACOG), approximately 75% of women of child bearing age experience the physical and emotional symptoms of premenstrual syndrome (PMS). Although the exact cause of PMS is not completely understood, it appears that the hormones progesterone, estrogen, and testosterone are involved, as well as serotonin according to the ACOG.

SYMPTOMS

The symptoms of PMS and the intensity of these symptoms vary greatly among women. Listed below are some of the more common symptoms of PMS:

- Bloating
- Breast tenderness
- Headache
- Mood swings
- Appetite changes (food cravings; overeating)
- Weight gain
- Depression
- Irritability
- Gastrointestinal upset
- Muscle pain
- Extreme sense of fatigue

FOOD CRAVINGS

Food cravings vary widely among women. Many crave carbohydrate rich or high fat foods, sweets, or salty snacks. Some studies have shown that women consume more calories, both before and during their menstrual cycle than they do after their cycle. This may be due to hormonal fluctuations associated with the menstrual cycle, and the influence of these hormones on appetite control and eating behavior. Although past research has suggested that women crave and consume more carbohydrates to compensate for reduced serotonin levels during PMS, most of this research has been disproved. It is likely, however, that women often seek "comfort foods" (often high in calories, fat, and sugar) during PMS, which often leads to weight gain and lethargy.

WEIGHT GAIN

Many women gain weight during their cycle and/or during PMS. This weight gain may be caused by consuming excess calories or by water retention. The symptoms associated with PMS often cause women to stray from their normal diet and exercise regimen, causing weight gain thereby exacerbating the symptoms of PMS. Bloating or water retention is also common during PMS. Try reducing salt consumption and increasing water consumption. Less salt means less water retention, and better hydration will help alleviate some symptoms of PMS.

CALCIUM

Recent studies have shown that adequate calcium levels can reduce some of the symptoms of PMS. Indeed, women who received approximately 1200 mg of calcium carbonate per day experienced improvement in their mood and concentration and had reduced water retention during their premenstrual phase. To reap the potential benefits of calcium, be sure to consume 3 servings of dairy or other calcium-rich foods each day. It may take at least three menstrual cycles for noticeable improvement of symptoms.

TREATMENT

The American Academy of Family Physicians offers the following tips for controlling PMS:

- Eat complex carbohydrates (such as whole grain breads, pasta and cereals), fiber, and protein. Cut back on sugar and fat.
- Avoid salt for the last few days before your period to reduce bloating and fluid retention.
- Cut back on caffeine to feel less tense and irritable and to ease PMS breast soreness.
- Try eating up to six small meals (to avoid spikes in blood sugar) a day instead of three larger ones.

- Exercise 30 minutes a day, 4 to 6 times a week. Exercise may help reduce the symptoms of PMS by reducing stress and improving your mood.
- Get plenty of sleep – about eight hours a night.
- Keep to a regular schedule of meals, bedtime, and exercise.
- If possible, try to schedule stressful events for the week after your period.

For additional information, visit these Web sites

The American College of Obstetricians and Gynecologists Web site at: www.acog.org

The American Academy of Family Physicians Web site at: www.aafp.org

The Mayo Clinic Web site at: www.mayoclinic.com

Reference

Penland J.G., Johnson P.E. "Dietary calcium and manganese effects on menstrual cycle symptoms." American Journal of Obstetrics and Gynecologists 168(5): 1417-23 1993.

If you are a registered University of Illinois student and you have questions or concerns, or need to make an appointment, please call: **Dial-A-Nurse at 333-2700**

If you are concerned about any difference in your treatment plan and the information in this handout, you are advised to contact your health care provider.

Visit the McKinley Health Center Web site at: <http://www.mckinley.uiuc.edu>