Nutrition

Remedies For Menstrual Cramps

By FE Chong

Did you know that excessive prostaglandins produced by your body is related to excessive pain during your menstrual cycle? Mr. Chong explains the root causes of menstrual cramps and how to avoid the monthly discomfort with diet and lifestyle changes.

any women know how bad period pain can be. Women who have painful menstrual periods have condition called dysmenorrhoea. About one out of two women experience menstrual pain for one or two days during menstruation. It may take the form of a dull, sickening ache that spreads from the lower stomach to the back, or sharp pains like indigestion. Some people also feel sick or have a headache. In more severe cases, powerful and prolonged cramps can make any sort of activity difficult. Menstrual cramps occur most often in teens; however, women in their twenties and older also suffer from painful periods. According to the American College of Obstetricians and Gynecologists (ACOG), about one in ten women experience menstrual pain so severe that they are unable to perform their normal routine for one to three days each month.

Prostaglandins & Menstrual Cramps

The discomfort or pain in the lower abdomen, during or just before a menstrual period, is primarily caused by cramping of the uterus (womb). Like all muscles, the uterus contracts and relaxes. Most of the time, women are unaware of

these contractions. During menstruation, uterine contractions are much stronger and it is these strong contractions that are most likely to be painful. During strong contractions, the uterus may contract too strongly or too frequently, causing the blood supply to the uterus to be temporarily cut off. This deprives the muscle of oxygen, causing pain.

Every month, hormonal changes in a woman's body cause changes to the uterus. This is part of the menstrual cycle and period pain is a natural by-product of the way that a woman's body deals with menstruation. When the blood vessels that have proliferated during the first part of the cycle break down, substances called prostaglandins are released, and it is these which trigger the muscles of the womb into expelling the lining. Prostaglandins are natural substances made by cells in the inner lining of the uterus and other parts of the body. The prostaglandins made in the uterus make the uterine muscles contract and help the uterus to shed the lining that has built up during the menstrual cycle. The powerful rhythmic contractions of the uterus during delivery is also brought about by the production of prostaglandins. However, if excessive prostaglandins are produced during normal conditions, you will get excessive pain or dysmenorrhoea with your menstrual cycle.

Medical Treatments

Standard medical treatments involve symptomatic treatment of the source of pain. The treatment for moderate to severe cases involves prostaglandin inhibitors aimed at inhibiting prostaglandin synthesis levels and reducing uterine contractility through non-steroidal anti-inflammatory drugs (NSAIDs). All NSAIDs are thought to be effective, relieving pain by up to 70%. But like all other drugs, NSAID has its unwanted side effects as well. Contraindications to NSAIDs include allergy, stomach upset, gastrointestinal disease and bleeding disorders.

The treatment protocol for more severe cases is to prescribe a combined oral contraceptive pill (COC). Once a woman is taking COC, her menstrual fluid will be reduced in volume and in most cycles, ovulation is suppressed completely. COC works by inducing a decrease in thickness of the uterine lining (endometrium) and as a result, fewer prostaglandins are made. These drugs contain synthetic hormones that are very close in molecular structure to the natural estrogen and progesterone produced by the ovaries. These hormones help to reduce the stimulation of endometrial

tissue and prevents the release of high concentrations of uterine prostaglandins, thereby significantly reducing menstrual pain. However, COC has its fair share of unfavorable side effects as well. Long-term taking can significantly damage the liver, cause disruption in metabolism including problems like obesity, breast cancer and leaching of vital minerals like calcium.

Understanding Prostaglandins

Prostaglandins are chemicals made from the traces of fat stored in cell membranes. They are involved in inflammation, muscle contractions, blood vessel constriction, blood clotting and pain. Although medically it is not known why dysmenorrhoeal women have higher levels of prostaglandins, many nutritionists believe that increased prostaglandins' production, excess or abnormal release of prostaglandins, and hypersensitivity to prostaglandins may be the result of, rather than the cause of, some inherent problems. Rather than just eliminating or masking symptoms, the symptoms should be used as a guide to look below the surface for the root cause.

Prostaglandins are highly potent substances that are not stored, but are produced as needed by cell membranes in virtually every body tissue. Different prostaglandins have been found to raise or lower blood pressure and regulate smooth muscle activity and glandular secretion. One of the major functions is to stimulate contraction of the uterus, to induce labor. Prostaglandins also control the substances involved in the transmission of nerve impulses, participate in the body's defences against infection, and regulate the rate of metabolism in various tissues. Several prostaglandins have been shown to induce fever, possibly by participating in the temperature-regulating mechanisms in the hypothalamus; they also play a part in causing inflammation. Inflammatory response is but a natural line of defence triggered by the body to rebalance the internal environment for optimal

performance. Therefore, it is safe to say that the body will not produce extra prostaglandins unless there is a cause. In the case of menstrual cramps, it is natural mechanism instituted by the body to expel the extra toxins accumulated, and the mechanism is conducted through the process called menstruation. More prostaglandins are needed simply to effect greater or stronger uterine constrictions for expulsion of toxins.

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It must be remembered that health maintenance is a natural and unceasing process in every organism. When the organism is overwhelmed by toxic substances beyond its ability to eliminate them in normal course, the body institutes emergency action to effect expulsion of the toxic burden.

Toxic materials accumulate in the body from two sources:

- From unexpelled body wastes that are internally generated as a normal part of our metabolism, and
- From external materials ingested, and partially or wholly retained due to inability to cope with the eliminative load

All concerted actions within the body are organic functions directed by the master control mechanism, the brain. Toxins inside the body are harmful. However, body actions (such as menstrual cramps or fever) that enable the body to eject or eliminate the toxins are not harmful. Using drugs or anything else abnormal and unnatural to the body can interfere with healthful body functions.

Preventing Menstrual Cramps

- Get plenty of rest. If you become unusually tired, nervous or constipated, you may be more likely to experience menstrual pain.
- Exercise regularly. Exercises such as walking, swimming or bicycling may improve blood flow and ease menstrual pain.
- Eat a diet rich in whole grains, fruits and green leafy vegetables. These foods are not only vitalising, they also increase the amount of roughage (fibre) in your diet, which help your body to get rid of excess prostaglandins.
- Avoid animal meat or animal products in your diet. This will reduce toxic accumulation in the body and thereby reduce the necessity of prostaglandins' production in the body.
- Drink plenty of fluids.
- Avoid smoking.
- Avoid excessive use of alcohol.
- Avoid use of mood-altering, mindaltering stimulants or sedative drugs.

Last but not least, be sure to have your foods in as natural a state as possible. Choose brown rice instead of white rice. Prefer wholemeal bread to white bread in order to preserve their fibre. This sounds like a significant change, and in fact, it is. Just give it an honest try. The key is to follow the diet as closely as possible just for one cycle (one month), and you will see what it can do for you. You will very likely start to look at the power of foods in a very different way.