

Using Foods Against Menstrual Pain

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What Causes the Pain?

Most women experience some menstrual pain. For up to 15 percent, it is severe enough to interfere with work and other activities for one or more days every month.¹ Sometimes the pain diminishes after childbirth, but for many women it continues.²

In the 1960s, it became evident that chemicals called prostaglandins are a central part of the problem. These chemicals are made from the traces of fat stored in cell membranes, and they promote inflammation. They are also involved in muscle contractions, blood vessel constriction, blood clotting, and pain.

Shortly before a period begins, the endometrial cells that form the lining of the uterus make large amounts of prostaglandins. When these cells break down during menstruation, the prostaglandins are released. They constrict the blood vessels in the uterus and make its muscle layer contract, causing painful cramps. Some of the prostaglandins also enter the bloodstream, causing headache, nausea, vomiting, and diarrhea.²

Researchers have measured the amount of prostaglandins produced by the endometrial cells and found that it is higher in women with menstrual pain than for women who have little or no pain. This helps explain why nonsteroidal anti-inflammatory drugs (NSAIDs) work for menstrual pain. Ibuprofen (Motrin), naproxen (Aleve), and other NSAIDs reduce the production of prostaglandins. NSAIDs have been found to decrease menstrual flow, which may reduce menstrual pain.³

Using Foods Against Pain

There may be a more fundamental approach. Rather than focus on the prostaglandins themselves, it may help to focus on the cellular “factories” that make them. Oral contraceptives lower the production of prostaglandins by inhibiting the growth of the endometrial cell layer. As a result, 90 percent of women who take oral contraceptives experience reduced menstrual pain.⁴ However, diet changes may be able to accomplish much the same thing.

In every monthly menstrual cycle, the amount of estrogens

in a woman’s body rises and falls. Estrogens are female sex hormones, a sort of hormonal fertilizer that makes the cells of the body grow. Estrogens are responsible for breast development at puberty, and each month they cause the lining of the uterus to thicken in anticipation of pregnancy.

A measurement of the amount of estrogens in a woman’s bloodstream as her period ends and a new cycle begins finds that estrogen is gradually rising. For about two weeks, it rises toward a peak and then falls quickly around the time of ovulation. It rises again in the second half of the month and then falls just before her next period. The uterus sheds its lining in a menstrual flow, accompanied by crampy pain.

How Foods Change Hormones

The amount of estrogen in a woman’s blood is constantly being readjusted. A low-fat, high-fiber diet can significantly reduce estrogen levels.⁵ Cancer researchers have taken a great interest in this phenomenon, because lowering the level of estrogen in the blood helps reduce the risk of breast cancer.⁶ Less estrogen means less stimulation for cancer cell growth.

If a woman eating a Western diet cuts her fat intake in half, her estrogen level will be about 20 percent lower.⁷ If the amount of fat is cut even more, the estrogen level will drop further, which is a good change because a lower hormone level will have less effect on the uterine cells. In addition to lowering estrogen, a low-fat diet may also be beneficial because high-fiber vegetables, beans, fruits, and whole grains help the body eliminate estrogens.

Estrogen is normally pulled from the bloodstream by the liver, which sends it through a small tube, called the bile duct, into the intestinal tract. There, fiber soaks it up like a sponge and carries it out with other waste. The more fiber there is in the diet, the better the natural “estrogen disposal system” works.

Animal products do not contain fiber. When an individual’s diet consists predominantly of animal products such as chicken, fish, or yogurt, daily fiber needs may not be met. The result can be disastrous. The waste estrogens, which should bind to fiber and leave the body, pass back into the bloodstream. This hormone “recycling” increases the amount of estrogen in the

blood. However, the reabsorption of estrogens can be blocked with the fiber found in grains, vegetables, beans, and other plant foods.

So, by avoiding animal products and added oils, estrogen production is reduced. And by replacing chicken, skim milk, and other non-fiber foods with grains, beans, and vegetables, estrogen elimination is increased.

In a research study published in *Obstetrics & Gynecology* in February 2000,⁸ a low-fat, vegan diet significantly reduced pain and PMS for many women. The diet change was designed to do two things. First, it eliminated all animal fats and nearly all vegetable oils. Second, its emphasis on plant-based foods means that there was more fiber in the diet.

Putting Foods to Work

The key to success is to follow the diet strictly, so that the beneficial effects it has are evident after a cycle or two.

Have plenty of:

- whole grains: brown rice, whole-grain bread, oatmeal, etc.
- vegetables: broccoli, spinach, carrots, sweet potatoes, Swiss chard, Brussels sprouts, etc.
- legumes: beans, peas, lentils
- fruits

Avoid completely:

- animal products: fish, poultry, meats, eggs, and dairy products
- added vegetable oils: salad dressings, margarine, and all cooking oils
- fatty foods: doughnuts, French fries, potato chips, peanut butter, etc.

This sounds like a significant change, and it is. However, while everyone feels a bit at sea for the first several days, vir-

tually everyone makes the change in about two weeks. Those who have the best time with it are those who experiment with new foods and new food products and who enlist the support of their friends or partners at home.

As the benefits kick in—reduced menstrual cramps, weight loss, and increased energy—most women find the diet change is so rewarding that they wish they had tried it sooner. It is important to avoid animal products and oily foods completely. Even seemingly modest amounts of them during the course of the month can cause more symptoms at the end of the month.⁸

Be sure to choose foods in as natural a state as possible, brown rice instead of white rice and whole-grain bread instead of white bread, in order to preserve their fiber.

Give this experiment a careful try for just one or two cycles, and see what it can do. The power of foods will be demonstrated in a very different way.

References

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