

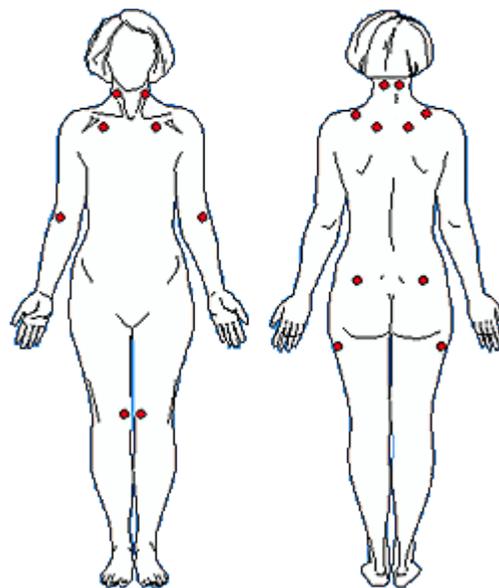
Fibromyalgia Syndrome

By Tamara Mitchell



Fibromyalgia is a chronic disorder characterized by widespread pain, fatigue, anxiety, and depression.¹ The best description we found states that it feels somewhat like having a bad flu, where every muscle in your body hurts and you feel like all of your energy has been sucked out of you.² It also often involves abnormal brain activity during sleep, so it's difficult to get a good night of sleep. Headaches or migraines, bowel and bladder problems, restless legs syndrome, impaired memory and concentration (FibroFog), skin sensitivities and rashes, ringing in the ears, and dizziness, are included in the many possible symptoms.³ Approximately 10 million Americans suffer from FMS, primarily women of childbearing age, but it can occur in children, the elderly, and men of all ethnic groups.^{1,2,3} The disorder is often seen in more than one member of a family and incidence rises with age.³ Experts in the field of FMS and chronic fatigue syndrome (CFS) believe that these two syndromes may be the same thing, but not enough is yet known to understand either one of these disorders.^{1,2} In fact, 33-50% of fibromyalgia patients also suffer from multiple chemical sensitivity, so there is significant overlap with that disorder also. Unfortunately, since symptoms are so widespread, it is common to misdiagnose FMS for other disorders. One study found that nearly 59% of metalworkers diagnosed with repetitive strain injuries (RSI) fulfilled the test for FMS, so many of the RSI cases were more properly defined as FMS cases.⁴

Diagnosis of FMS involves testing of 18 specific tender points in the neck, spine, shoulders, and hips. The test for FMS was defined by the American College of Rheumatology (ACR) in 1990.^{1,5} All of the tender points are where muscles attach to ligaments or bones and they tend to exhibit pain with just the pressure of a thumb. The size of the points are relatively small, from about the size of penny to a quarter.⁶ Some people have tender points that are not on the standard chart and these may be the most painful. Often the pain is not confined to the tender points, but includes widespread body pain resembling the flu.⁶ Pain must be in both sides of the body and pain must exist in four specific quadrants of the body, both above and below the waist. According to the ACR test, pain must exist in 11 of the 18 tender point sites.^{5,7} Authorities feel that many people have pain in less than the 11 required tender points, but they have widespread pain and many of the other common symptoms associated with



1990 American College of Rheumatology criteria for Fibromyalgia:

18 tender points for testing.

Illustration from Reference 7

FMS.^{2,7} Widespread pain in all four quadrants of the body for at least 3 months is also considered a diagnostic criteria.³

The symptoms associated with FMS may include:^{2,3,8}

- Pain - People describe the pain as deep muscular aching, throbbing, shooting and stabbing, or intense burning. Pain and stiffness are often worse in the morning *in muscle groups that are used repetitively*.
- Fatigue - The feeling of being drained of energy and unable to concentrate, varying from mild to incapacitating.
- Sleep disorder - Sleep does not feel refreshing and the person wakes up feeling exhausted. There appears to be abnormal brain activity during sleep that may be result in loss of restful sleep and thus less restful sleep.
- Chronic headaches - Headaches similar to migraines or tension headaches occur in about 50% of patients.
- Chemical sensitivities - Many patients experience sensitivities to noise, bright lights, odors, medications, and certain foods.
- Irritable bowel syndrome - 40-70% of patients experience diarrhea, constipation, and abdominal pain and gas.
- Jaw pain including temporomandibular joint dysfunction - Close to 75% of FMS patients have a varying degree of jaw discomfort, typically related to the muscles and ligaments surrounding the jaw joint rather than the joint itself.
- Other common symptoms - Premenstrual syndrome (PMS) and painful periods, chest pain, morning stiffness, cognitive or memory impairment, numbness and tingling sensations, muscle twitching, irritable bladder, skin sensitivities, dry eyes and mouth, dizziness, and impaired coordination.

Unfortunately, people with FMS tend to visit many doctors and go through many tests before receiving a diagnosis, averaging 5 years to accurate diagnosis.^{1,3} Not all doctors are familiar with fibromyalgia and its treatment, so it's important to find a doctor who has the necessary knowledge to diagnose and treat it.¹ Today, more doctors are informed than in previous years, but the response can still be that you are a chronic complainer or somewhat strange.⁶ Although FMS is a chronic condition and may last a lifetime, it is not a progressive disease and does not worsen over time, it does not damage the joints, muscles, or internal organs, it is never fatal, and sometimes it does improve over time.¹ Many people are able to determine what their personal triggers are and by eliminating them from their life, they can lead quite normal pain-free lives.⁶

Causes and Triggers

The actual cause or causes of FMS is unknown.³ Recent research suggests that an imbalance of chemicals and hormones in the nervous system or brain that amplify sensation may be the cause.¹ The super-sensitivity to pain appears to be genetic; the disorder runs in families, and researchers found that genetic factors may predispose someone to FMS.⁹ People with FMS have higher than normal levels of a neuropeptide called Substance P in the spinal cord that is involved in pain signals as well as subnormal levels of serotonin and norepinephrine, hormones that modulate pain and act as a messenger between nerve cells.^{2,3,9} Substance P and nerve growth factor are increased threefold and fourfold, respectively, in the spinal fluid of people with FMS, though it is unknown why these elevations exist.² The most recent area of research is trying to determine if there is a interpretive defect in the central nervous system that results in an abnormal perception of pain.³

For some people, onset is slow, but for most people an event triggers the onset of FMS.³ A viral or bacterial infection, automobile accident, injury, rheumatoid arthritis, lupus, emotional stress, pregnancy, or even exposure to certain drugs or chemicals may trigger the disorder.^{1,2,6} Once the disorder has been triggered, certain aggravating factors may contribute to flare-ups including changes in the weather, cold or drafty environments, hormonal fluctuations (PMS or menopause), stress, depression, anxiety, and over-exertion.²

Treatment

Treatment for fibromyalgia requires a comprehensive approach. A combination of exercise, change in diet, medication, physical therapy, and relaxation works the best.^{1,8} Learn what factors aggravate your symptoms and avoid them.^{2,6} What works for one person may not work for someone else, just as symptoms vary widely from one person to another.⁹ Many Western doctors do not know where to start when attempting to treat patients with FM, so it's best to start educating yourself about the problem and finding what works best for you. Western medicine does not have satisfactory answers and cannot explain the causes of FM.

Exercise - Regular physical activity, at least 30 minutes daily, has been found to be one of the most effective treatments. Muscle pain may increase during exercise, but the pain usually dissipates within 30 minutes and will lessen gradually after the first few weeks as you become more conditioned.⁹ Low impact aerobic activity such as swimming, walking, warm water therapy, or bicycling is excellent.^{8,10} High impact activities like jogging or basketball are not advisable.¹ Yoga, tai chi, and isometric strengthening are gentle and can ease stiffness and pain as well as increase strength.¹⁰ Find activities that you like so you will stay with an exercise program, take frequent rest breaks to tone down muscle pain during our workout, and don't overdo it because that will only set you back!¹⁰

Sleep - Establish regular sleeping habits to improve energy and mood, paying attention to your biological clock which normally sets sleep from about 10 pm to 6 am.^{3,8,11} In fact, stress, negative emotions, worry, or anger appear to be associated with FM. Life does bring a host of issues that tend to keep people from sleeping well, so it's likely that in many cases the loss of sleep is attributable to preoccupation with these many worries and the loss of sleep is then a trigger for FM.¹² Go to bed and get up at the same time every day, avoid caffeine, sugar, and alcohol several hours before going to bed, and make sure that your bedroom is quiet, dark, cool, free from distractions, with a comfortable bed.^{1,3} Sources of caffeine include coffee, tea, soft drinks, chocolate, and some medications.¹ Do not exercise within 3 hours prior to bedtime and allow yourself to wind down before bed, get off the computer, listen to soft music, take a warm bath, and read something pleasant, not a suspense novel.¹ Avoid spicy foods and foods that may cause indigestion in the evening and lots of liquids that may necessitate lots of trips to the bathroom during the night.¹

Naps can rob you of restful sleep at night, but it is a good idea to allow yourself to lie down when you need a break, allow yourself to zone out and reduce the chatter in your head.^{1,11} If you must nap, set a timer and do not allow yourself to sleep longer than one hour.¹

Diet - To start with, a healthy diet low in animal fat and high in fresh fruits, vegetables, and whole grains usually goes a long way to enhancing your health and sense of well-being.^{8,13,14} No specific diet has been proven to influence fibromyalgia, but everyone's body chemistry is unique, so it's important to pay attention and make connections between your eating habits and specific foods as they will likely have a significant effect on how you feel.¹ Eating small meals throughout the day can help keep energy levels constant so that you don't have periods of the day when your energy level drags.¹³ Always eat breakfast and include some protein and some whole

grains.¹³ To reduce inflammation, exclude polyunsaturated vegetable oils and sources of trans-fatty acids such as margarine and hydrogenated oils. Increase omega-3 fatty acids^{3,8}

Many people report significant reduction in pain by avoiding certain foods. It appears that, just as symptoms vary from person to person, food sensitivities are quite individual. Once eating healthier has become a way of life, start eliminating some of the common trigger foods and keep a diary to see how your FM pain responds.¹⁵ Over time you should be able to identify if there are specific foods that trigger a flare-up and which should be avoided. Avoiding certain foods only makes sense if you are sensitive to them. For example, eliminating gluten from your diet if you are not gluten intolerant will limit availability of many nutrients associated with wheat and grains, as well as thousands of foods that contain some gluten. It will make food choices unnecessarily difficult and will rob you of nutrition, so do not eliminate any foods for prolonged periods of time if you are not noticing a reduction in your symptoms.

Gluten intolerance is something that should be suspected even if you test negative for celiac disease.¹⁶ There are several components of wheat and other grains that can result in a huge array of symptoms, but that are totally unrelated to celiac disease or a true wheat allergy.¹⁶ For a long time, the medical community did not recognize this as a problem, but they are slowly gaining an understanding of the complexity of the issue and the huge numerous problems from skin issues to schizophrenia, that can arise since it can affect almost every cell in the body.¹⁶ The only way to find out if gluten is a problem for you is to *totally* eliminate it from your diet for 30 days and then add it back in.¹⁶ In fact, since casein (milk protein) is often an intolerance associated with gluten intolerance, it is recommended that people go completely without any gluten or milk products for the 30 day trial period, which is called the Paleo diet.¹⁶ If symptoms do not improve after 30 days, it is highly likely that these foods are not a problem for you.

Two tests that should be considered are lactose intolerance and celiac disease.¹⁷ There are certain substances that appear to be problems for a large number of FM patients. Aspartame (NutraSweet), MSG (monosodium glutamate), and nitrates (preservatives commonly found in lunch meats) are three substances that are quite easy to eliminate from the diet and have helped many patients feel better overall.¹⁴ All of these substances are classified as excitotoxins and they help stimulate the opening of a pain receptor in the nervous system called NMDA, associated with chronic pain. It appears that people with FM already have overly active NMDA receptors, so consuming excitotoxins makes them even more susceptible to stimulation.¹⁴ Many people who don't have FM don't tolerate these substances well, but people who have FM can have even more pronounced reactions to them. Apparently other artificial sweeteners such as Splenda, saccharin, and stevia do not have the same effect as aspartame.¹⁴

Some people with FM have severe food allergies to dairy, wheat, corn, nightshade family plants (tomatoes, potatoes, eggplant, and peppers), while others do not.¹⁵ For some people, acidic foods appear to be a problem, or red meat, foods containing sugar, coffee, carbonated beverages, or chocolate.¹⁵ FM is not a specific illness, it's a symptom complex, and what causes symptoms for one person may not be a problem for another person. In fact, it may be that there are underlying secondary illnesses that, when treated, result in a relief in all of the symptoms.¹⁴ Some feel that fibromyalgia may not even be a correct diagnosis in some cases. The correct diagnosis may be the food sensitivity.¹⁴

Chinese medicine recommends a warm diet. Since one of the conditions common in FM is what Chinese medicine calls "dampness", it is recommended that the patient eat foods that are associated with drying out and warming up the clammy, phlegmy conditions of the body associated with FM.^{15, 18} There is a long list of foods to avoid, but basically fats and oily foods,

dairy and dairy products, sweets, chocolate, sodas, all alcoholic beverages, raw fruits and vegetables, watermelon, cucumber, mint, processed or chemically treated foods and artificial sweeteners.¹⁸ Foods that remove dampness are hulled barley, rye, amaranth, corn, alfalfa, azuki beans, celery, lettuce, turnips, kohlrabi, sea weeds, raw goats milk, raw honey, scallions, white pepper, bitter herbs, chamomile, cinnamon, ginger, and mushrooms.¹⁸

Clearly, there are some contradictions, but there are a lot of parallels, too. Where most Western diets recommend eating lots of fresh fruits and veggies, Chinese medicine recommends only specific ones. Clearly if one tests positive for gluten intolerance or has a sensitivity to corn, it would not be advisable to consume these foods recommended on the list of Chinese warming foods. Warming meats in Chinese medicine are red meats, whereas most dietary recommendations in Western literature are to avoid red meat with FM. Overall, the commonalities are to avoid caffeine, carbonated beverages, fats and fatty foods, processed foods, alcohol, sweets, and to include plenty of plant-based foods. Find out what makes you feel better. If you feel better eating cooked fruits and vegetables rather than raw, then that is what you should eat, but you won't know until you try. You should test dietary changes systematically so that you know what contributes to your issues and so that you do not eliminate foods unnecessarily that do not cause you problems.

Supplements –

Omega-3 fatty acids – Research continues to show the benefits of Omega-3 fatty acids in reducing inflammation. Consumption of foods high in Omega-3 fatty acids and low in Omega-6 fatty acids as well as adding Omega-3 supplements should be part of everyone's regime and especially those who are struggling with FM.^{8,10} Fish high in Omega-3 fatty acids include herring, mackerel, and salmon, though consumption of large amounts of fish can be considered hazardous due to high levels of mercury and PCBs.¹⁹ Most sources recommend taking fish oil supplements, but the process of deriving fish oil from fish involves use of chemicals or high heat, deodorizing, bleaching, and concentration through more chemical processing.¹⁹ In addition, most of these are farm raised fish kept in crowded pens, fed antifungals, parasiticides, and antibiotics, and often contain dangerous levels of mercury, PCBs, and other toxins.¹⁹ Krill oil is often also touted as a good source of Omega-3s, but they are usually not harvested in a sustainable way, threatening species who feed on them by depleting their feeding grounds.¹⁹ Finally, to make you feel like you're getting your money's worth and to make the capsules larger, the capsules are filled with "carrier oils" such as olive oil or other oils, with a small fraction of the rest being the highly refined fish or krill oils.¹⁹

Research has found that the anti-inflammatory properties of the New Zealand green lipped mussel are much superior to those of fish oils, they do not cause blood thinning as fish oil does, there is no fishy aftertaste, and green lipped muscle oil causes no allergic reactions among people who have shellfish or seafood allergies.^{19,20,21} In 1986, a method of stabilizing the mussel extracts was developed which dramatically improved the effectiveness of the green lipped mussel, increasing its effectiveness as an anti-inflammatory and in reducing the symptoms of osteoarthritis.²⁰ This stabilized oil is called Lyprinol. In fact, green lipped mussels appear to have an even more potent anti-inflammatory and free-radical scavenging component called furan fatty acids (F-acids) that may be more effective than eicosapenoic acid (EPA) found in fish oil.²²

Melatonin and Valerian – Melatonin can help regulate your body's internal clock and improve the quality of sleep.¹⁰ Valerian is an herbal supplement that has mild sedating properties and may help assist in relaxation as well as falling and staying asleep.¹⁰

SAMe – Formally known as S-adenosylmethionine, SAMe has been found to be helpful to fibromyalgia patients in 3 out of 4 double-blind studies, however these studies either used

injections of SAME either intravenously, in muscle tissue, or injections combined with oral doses.^{23,24} Only one double-blind study of 44 people with fibromyalgia used oral dosages of 800 mg daily for 6 weeks with no injections. Since injections often have very different results than oral, this later study is the only one we can really rely on. The results of this study showed reduction in disease activity, pain at rest, fatigue, morning stiffness, and mood. SAME did no better than a placebo in reducing the pain in tender points.²³ More research is required to determine whether SAME's primary effectiveness is in reduction of depression or if it is helping the physical symptoms. The study was relatively small and no studies have attempted to replicate the findings. Since SAME is expensive at this dosage, other methods of relieving symptoms are advisable unless the patient can afford to experiment with this treatment. In addition, SAME can interact with prescription antidepressants, so consult your physician before adding this supplement to your regimen.¹³

5-HTP – Short for 5-hydroxytryptophan, 5-HTP is used to treat depression and thought to increase the amount of serotonin in the brain.²³ Only one double-blind study of 50 people with fibromyalgia studied the effect of 300 mg of 5-HTP for 30 days. Interestingly, both the group receiving 5-HTP and the group receiving a placebo reported significant improvements in sleep patterns and pain, however, the group receiving 5-HTP reported more marked improvement and also reported reduced anxiety and fatigue.²³ Results are preliminary and further research is needed to determine the effectiveness of 5-HTP, however it could help some people sleep better.¹⁰ Importantly, since it increases serotonin in the brain, 5-HTP should be avoided by people taking other medications that increase serotonin.¹⁰

Capsaicin – Capsaicin is the compound that makes hot peppers hot. One small study of 45 people had participants rub capsaicin gel or a placebo into the tender points on one side of their body 4 times a day for 4 weeks. Those using the real capsaicin cream reported less tenderness in and increase grip strength.²⁴ As with SAME and 5-HTP, more research is needed since one small study is not conclusive enough to allow a recommendation.

Homeopathy – One study of 30 patients diagnosed with fibromyalgia were found to have symptoms significantly reduced when treated with a highly diluted tincture of *Rhus toxicodendron* (poison oak). The number of tender spots was reduced by about ¼ and the improvement was significantly better than a placebo.²⁵ More research is needed.

Chinese herbs - Chinese medicine offers several possible explanations based on imbalances of Qi (vital energy), and impairment of various organs in the body such as the liver, spleen, heart, and large intestine.^{12, 15} Chinese medicine has been quite useful to many people in bringing relief, so consulting with a licensed practitioner will help to identify the specific imbalances and Chinese herbal treatments to use. If you are interested in trying Chinese medicine, there are a lot of Chinese herbs that can be prescribed depending on the type of imbalance you have. Experimentation on your own is not advised because you can cause more problems. For instance, taking Chinese herbs generally recommended to increase energy will leave you even more sapped of energy if you have not built up your system and corrected the imbalances first.¹⁸

Alternative and holistic techniques – Alternative or holistic treatments are used in place of, or in conjunction with conventional medicine. These treatments generally combine several approaches in the belief that healing is possible through the mind, body, and spirit.²⁶ All of these therapies have been shown to help some people, sometimes significantly. Since there are so many people suffering from fibromyalgia, there are many people ready to advise you, especially regarding alternative methods. Not all of these are safe and some are simply not effective. Be discriminating when choosing alternative treatments, and look for therapies that will focus on

improving sleep and reducing pain.²⁶ Acupuncture or acupressure, manipulation including myofascial release therapy, chiropractic or osteopathic manipulation, Feldenkrais, water therapy, and massage may help relieve symptoms.^{3,8,10} Heat or cold and massage may give short-term relief, trigger point therapies, Lidoderm patches and topicals can help reduce pain at trigger points.^{1,3,10} Yoga, relaxation and breathing exercises, aromatherapy, cognitive therapy, biofeedback, or herbs may help you cope with stress that leads to further symptoms.^{3,8,9} You can change your perception of pain using mind-body methods.⁹

Self-help measures can be very effective. Self-acupressure, especially utilizing a tool such as the TheraCane, can help you work out painful knots. Refer to our self-help page for suggestions on tools that can help you with self-massage and other things you can use to make life more comfortable.¹¹ Hot water can help ease stiffness and loosen up muscles so that they respond better to self-massage.¹¹

Weather – As with osteoarthritis, weather extremes have long been associated in the minds of sufferers with flares in fibromyalgia. Most evidence is anecdotal, but according to the National Fibromyalgia Association, stormy days and cold temperatures are notorious for rather dramatic worsening of symptoms in sufferers.²⁷ Controlled research is lacking and what has been done does not demonstrate a clear correlation between meteorological conditions and fibromyalgia symptoms. Some studies found no correlation^{28,29,30} while others did find an effect for both weather and time of day, with symptoms worse in the morning and evening.³¹

Regardless of the research findings, one study found that 90% of patients claimed that weather was one of the most important influences on their fibromyalgia symptoms.³² According to the website *Fibromyalgia Symptoms*, the five major weather factors that appear to affect fibromyalgia symptoms are:³²

- Temperature – Rapid changes in temperature as well as cold temperatures appear to make symptoms worse, where warmer weather usually eases symptoms.
- Barometric Pressure – On fair, sunny days, barometric pressure is high while during a storm or weather front, barometric pressure drops. Changes in barometric pressure appear to trigger symptoms.
- Humidity – When humidity is low, fibromyalgia sufferers tend to report headaches, stiffness, and flares in widespread pain.
- Precipitation – Precipitation in the form of rain, snow, sleet, or hail is usually accompanied by changes in barometric pressure and may exacerbate symptoms of pain and fatigue.
- Wind – Wind generally causes a decrease in barometric pressure, so it can trigger fatigue, headaches, and muscle aches in fibromyalgia sufferers.

Many sufferers consider moving to a location with fewer weather extremes to avoid the pain associated with inclement weather. The National Fibromyalgia Association suggests the following checklist to help decide if you should relocate:

- You experience increased pain, stiffness, or fatigue when the weather changes.
- You have experienced symptom relief after a trial period of living in a different location for six months.
- You have strong medical, financial, and emotional support in your new location
- You have consulted with your physician with regard to the idea of relocating for symptom relief.

What works for one person may not work for another, so a trial period is advised before moving. If it proves helpful, but you are not in a position to move, consider staying in the warmer climate just during the months of the year when your symptoms at home are unbearable.²⁷

Making life easier for yourself –

The *Chronic Fatigue and Fibromyalgia Self-Help* website is recommended by the Fibromyalgia Network: <http://www.cfidsselfhelp.org/>¹¹ It has a library of articles and online courses to help you.

Planning, cooking, and freezing meals ahead, having potluck dinners rather than making all the food yourself when entertaining, finding places that have healthy food you can pick up for dinner or pre-cut foods you can combine in a crockpot or stir fry are all things that can assure that you have healthy food available when you're feeling exhausted and they allow you to still have a social life with friends without tiring yourself out in preparing. Use your imagination to try to figure out ways to save your energy for the important things in life.¹⁷

Most people with fibromyalgia continue to work, but it may require some modifications. Cutting down the number of hours you work or switching to a less stressful or physically demanding position are two ways to ease back on the demands you may not be able to cope with.¹ Make sure that your office is set up correctly so that you have a comfortable chair and other sources of physical stress and discomfort are minimized.¹ Repetitive motions and awkward postures are never a good idea, but for people with fibromyalgia, they can be a critical source of unnecessary strain and fatigue.¹¹ Most employers will accommodate workers who need help and they are required to care for people with disabilities.

Stress is always a source of fatigue. Mental and physical stress can drain you of energy and make it harder for you to cope with pain, so it's important to deal with sources of stress in your life.¹¹ Refer to our article on stress to help you better understand and deal with it. Remain calm, maintain a positive outlook, and avoid comparing your life before and after fibromyalgia.¹¹ Your outlook and attitudes can either keep you feeling optimistic or they can bring you down and make you feel bad about yourself.¹¹

Learn - There are several excellent resources for information on FMS.

- Fibromyalgia Network: Has a newsletter with information on recent research and coping strategies. (800) 853-2929, <http://www.fmnetnews.com>
- National Fibromyalgia Association: <http://www.fmaware.org>
- National Fibromyalgia Research Association: <http://www.nfra.net>
- Books listed on our Books product webpage: <https://insider.sri.com/services/ehs/ergo/pbooks.html>

Drugs – Drugs are mentioned last in this article because they are likely to be the least effective and most likely to produce undesirable side effects. Soon there may be drugs to improve treatment of FMS by reducing Substance P and increasing levels of norepinephrine and serotonin, but testing and effectiveness are not yet proven.^{1,8} Of course research is ongoing to discover new drugs that can be used, but these always come with a pretty large price to pay in terms of dangerous and unpleasant side effects. Since Western medicine does not have an explanation for fibromyalgia, the drugs used are palliative, that is they do not treat anything, but they attempt to reduce the symptoms. There are only three pharmaceuticals that are approved by the FDA for the treatment of fibromyalgia: Duloxetine, Milnacipran, and Pregabalin.³

Duloxetine (Cymbalta) was originally developed and is still used to treat depression. It works to increase serotonin and norepinephrine which tone down pain-related messages in the brain and spinal cord.^{8,3,33}

Milnacipran (Savella) was used to treat depression, but is now only approved for use in treatment of fibromyalgia. It works like Duloxetine to boost serotonin and norepinephrine.^{8, 3, 33}

Pregabalin (Lyrica) was developed to treat neuropathic pain (caused by damage to the nervous system) and is used as an anti-epileptic drug.^{8, 3, 33} This medication as well as Gabapentin, work to slow down and minimize messages sent from your muscles and other tissues that are interpreted as pain and they may aid with sleep as well.^{8, 3, 33}

Xanax (tizanidine) or Flexeril (cyclobenzaprine) are muscle relaxers that may be prescribed since people with fibromyalgia often have tight, knotted muscles that refuse to completely relax.^{8, 33}

Dopamine-enhancing drugs such as Mirapex (pramipexole) may be prescribed because for some reason, people with fibromyalgia do not release dopamine, a normal response by the brain to ease pain.³³

Use of aspirin, ibuprofen, or naproxen sodium, known as non-steroidal anti-inflammatory drugs (NSAIDs) can be used to help you begin to tolerate muscle aches, headaches, and cramps on an occasional basis.^{1,8} NSAIDs can cause stomach and intestinal irritation, ulcers, bleeding, perforation of the stomach or intestine, and they can affect kidney function.¹ The longer a person takes NSAIDs, the more likely moderate to severe side-effects will occur.¹ In addition, NSAIDs interact with many prescription drugs, so make sure you consult with a physician if you are taking prescription drugs and also take NSAIDs on a frequent basis.¹ Just because they are sold over the counter does not mean they are harmless!

Narcotics are sometimes prescribed to people with severe muscle pain.¹ There is no solid evidence that narcotics are effective in treating this pain and they are addictive physically and psychologically.¹ For this reason, they are not generally recommended for use with fibromyalgia.

Medications may be prescribed to aid in sleep or to control restless legs.^{8,3,33}

RESOURCES: (We do not receive any financial benefits from sharing resource information.)

- MOXXOR Green Lipped Mussel concentrate. <http://www.moxart.com/>
- Chronic Fatigue Syndrome and Fibromyalgia Self-Help. <http://www.cfidsselfhelp.org/>

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