



Fibromyalgia

Questions and Answers about Fibromyalgia

July 2014

This publication contains general information about fibromyalgia. It describes what fibromyalgia is, who gets it, and what causes it. It also explains how fibromyalgia is diagnosed and treated. At the end is a list of key words to help you understand the terms used in this publication. If you have further questions after reading this publication, you may wish to discuss them with your doctor.

What Is Fibromyalgia?

Fibromyalgia syndrome is a common and chronic disorder characterized by widespread pain, diffuse tenderness, and a number of other symptoms. The word “fibromyalgia” comes from the Latin term for fibrous tissue (*fibro*) and the Greek ones for muscle (*myo*) and pain (*algia*).

Although fibromyalgia is often considered an arthritis-related condition, it is not truly a form of arthritis (a disease of the joints) because it does not cause inflammation or damage to the joints, muscles, or other tissues. Like arthritis, however, fibromyalgia can cause significant pain and fatigue, and it can interfere with a person’s ability to carry on daily activities. Also like arthritis, fibromyalgia is considered a rheumatic condition, a medical condition that impairs the joints and/or soft tissues and causes chronic pain.

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In addition to pain and fatigue, people who have fibromyalgia may experience a variety of other symptoms including:

- cognitive and memory problems (sometimes referred to as “fibro fog”)
- sleep disturbances
- morning stiffness
- headaches
- irritable bowel syndrome
- painful menstrual periods
- numbness or tingling of the extremities
- restless legs syndrome
- temperature sensitivity
- sensitivity to loud noises or bright lights.

A person may have two or more coexisting chronic pain conditions. Such conditions can include chronic fatigue syndrome, endometriosis, fibromyalgia, inflammatory bowel disease, interstitial cystitis, temporomandibular joint dysfunction, and vulvodynia. It is not known whether these disorders share a common cause.

Who Gets Fibromyalgia?

Scientists estimate that fibromyalgia affects 5 million Americans age 18 or older.¹ For unknown reasons, between 80 and 90 percent of those diagnosed with fibromyalgia are women; however, men and children also can be affected. Most people are diagnosed during middle age, although the symptoms often become present earlier in life.

¹Lawrence RC, Felson DT, Helmick CG, Arnold LM, Choi H, Deyo RA, Gabriel S, Hirsch R, Hochberg MC, Hunder GG, Jordan JM, Katz JN, Kremers HM, Wolfe F; National Arthritis Data Workgroup. Estimates of the prevalence of arthritis and other rheumatic conditions in the United States. Part II. *Arthritis Rheum.* 2008 Jan;58(1):26-35.

People with certain rheumatic diseases, such as rheumatoid arthritis, systemic lupus erythematosus (commonly called lupus), or ankylosing spondylitis (spinal arthritis) may be more likely to have fibromyalgia, too.

Several studies indicate that women who have a family member with fibromyalgia are more likely to have fibromyalgia themselves, but the exact reason for this—whether it is heredity, shared environmental factors, or both—is unknown. Researchers are trying to determine whether variations in certain genes cause some people to be more sensitive to stimuli, which lead to pain syndromes. (See “[What Research Is Being Conducted on Fibromyalgia?](#)”)

What Causes Fibromyalgia?

The causes of fibromyalgia are unknown, but there are probably a number of factors involved. Many people associate the development of fibromyalgia with a physically or emotionally stressful or traumatic event, such as an automobile accident. Some connect it to repetitive injuries. Others link it to an illness. For others, fibromyalgia seems to occur spontaneously.

Many researchers are examining other causes, including problems with how the central nervous system (the brain and spinal cord) processes pain.

Some scientists speculate that a person's genes may regulate the way his or her body processes painful stimuli. According to this theory, people with fibromyalgia may have a gene or genes that cause them to react strongly to stimuli that most people would not perceive as painful. There have already been several genes identified that occur more commonly in fibromyalgia patients, and NIAMS-supported researchers are currently looking at other possibilities.

How Is Fibromyalgia Diagnosed?

Research shows that people with fibromyalgia typically see many doctors before receiving the diagnosis. One reason for this may be that pain and fatigue, the main symptoms of fibromyalgia, overlap with those of many other conditions. Therefore, doctors often have to rule out other potential causes of these symptoms before making a diagnosis of fibromyalgia. Another reason is that there are currently no diagnostic laboratory tests for fibromyalgia; standard laboratory tests fail to reveal a physiologic reason for pain. Because there is no generally accepted, objective test for fibromyalgia, some doctors unfortunately may conclude a patient's pain is not real, or they may tell the patient there is little they can do.

A doctor familiar with fibromyalgia, however, can make a diagnosis based on criteria established by the American College of Rheumatology (ACR): a history of widespread pain lasting more than 3 months, and other general physical symptoms including fatigue, waking unrefreshed, and cognitive (memory or thought) problems. In making the diagnosis, doctors consider the number of areas throughout the body in which the patient has had pain in the past week.

How Is Fibromyalgia Treated?

Fibromyalgia can be difficult to treat. Not all doctors are familiar with fibromyalgia and its treatment, so it is important to find a doctor who is. Many family physicians, general internists, or rheumatologists (doctors who specialize in arthritis and other conditions that affect the joints or soft tissues) can treat fibromyalgia.

Fibromyalgia treatment often requires a team approach, with your doctor, a physical therapist, possibly other health professionals, and most importantly, yourself, all playing an active role. It can be hard to assemble this team, and you may struggle to find the right professionals to treat you. When you do, however, the combined expertise of these various professionals can help you improve your quality of life.

You may find several members of the treatment team you need at a clinic. There are pain clinics that specialize in pain and rheumatology clinics that specialize in arthritis and other rheumatic diseases, including fibromyalgia.

Only three medications, duloxetine, milnacipran, and pregabalin are approved by the U.S. Food and Drug Administration (FDA) for the treatment of fibromyalgia.² Duloxetine was originally developed for and is still used to treat depression. Milnacipran is similar to a drug used to treat depression but is FDA approved only for fibromyalgia. Pregabalin is a medication developed to treat neuropathic pain (chronic pain caused by damage to the nervous system).

Doctors also treat fibromyalgia with a variety of other medications developed and approved for other purposes.

²All medicines can have side effects. Some medicines and side effects are mentioned in this publication. Some side effects may be more severe than others. You should review the package insert that comes with your medicine and ask your health care provider or pharmacist if you have any questions about the possible side effects.

Analgesics

Analgesics are painkillers. They range from over-the-counter products to prescription medicines. For a subset of people with fibromyalgia, narcotic medications are prescribed for severe muscle pain. However, there is no solid evidence showing that for most people narcotics actually work to treat the chronic pain of fibromyalgia, and most doctors hesitate to prescribe them for long-term use because of the potential that the person taking them will become physically or psychologically dependent on them.

Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)

As their name implies, nonsteroidal anti-inflammatory drugs, including aspirin, ibuprofen, and naproxen sodium, are used to treat inflammation.³ Although inflammation is not a symptom of fibromyalgia, NSAIDs also relieve pain. The drugs work by inhibiting substances in the body called prostaglandins, which play a role in pain and inflammation. These medications, some of which are available without a prescription, may help ease the muscle aches of fibromyalgia. They may also relieve menstrual cramps and the headaches often associated with fibromyalgia.

³ Warning: Side effects of NSAIDs include stomach problems; skin rashes; high blood pressure; fluid retention; and liver, kidney, and heart problems. The longer a person uses NSAIDs, the more likely he or she is to have side effects, ranging from mild to serious. Many other drugs cannot be taken when a patient is being treated with NSAIDs, because NSAIDs alter the way the body uses or eliminates these other drugs. Check with your health care provider or pharmacist before you take NSAIDs. NSAIDs should only be used at the lowest dose possible for the shortest time needed.

Complementary and Alternative Therapies

Many people with fibromyalgia also report varying degrees of success with complementary and alternative therapies, including massage, movement therapies (such as Pilates and the Feldenkrais method), chiropractic treatments, acupuncture, and various herbs and dietary supplements for different fibromyalgia symptoms. (For more information on complementary and alternative therapies, contact the National Center for Complementary and Alternative Medicine. See “[Where Can People Find More Information About Fibromyalgia?](#)”)

Although some of these supplements are being studied for fibromyalgia, there is little, if any, scientific proof yet that they help. FDA does not regulate the sale of dietary supplements, so information about side effects, proper dosage, and the amount of a preparation’s active ingredients

may not be well known. If you are using or would like to try a complementary or alternative therapy, you should first speak with your doctor, who may know more about the therapy's effectiveness, as well as whether it is safe to try in combination with your medications.

Will Fibromyalgia Get Better With Time?

Fibromyalgia is a chronic condition, meaning it lasts a long time—possibly a lifetime. However, it may be comforting to know that fibromyalgia is not a progressive disease. It is never fatal, and it will not cause damage to the joints, muscles, or internal organs. In many people, the condition does improve over time.

What Can I Do to Try to Feel Better?

Besides taking medicine prescribed by your doctor, there are many things you can do to minimize the impact of fibromyalgia on your life. These include:

- **Getting enough sleep.** Getting enough sleep and the right kind of sleep can help ease the pain and fatigue of fibromyalgia (see “[Tips for Good Sleep](#)”). Even so, many people with fibromyalgia have problems such as pain, restless legs syndrome, or brainwave irregularities that interfere with restful sleep. It is important to discuss any sleep problems with your doctor, who can prescribe or recommend treatment for them.
- **Exercising.** Although pain and fatigue may make exercise and daily activities difficult, it is crucial to be as physically active as possible. Research has repeatedly shown that regular exercise is one of the most effective treatments for fibromyalgia. People who have too much pain or fatigue to do vigorous exercise should begin with walking or other gentle exercise and build their endurance and intensity slowly.
- **Making changes at work.** Most people with fibromyalgia continue to work, but they may have to make big changes to do so. For example, some people cut down the number of hours they work, switch to a less demanding job, or adapt a current job. If you face obstacles at work, such as an uncomfortable desk chair that leaves your back aching or difficulty lifting heavy boxes or files, your employer may make adaptations that will enable you to keep your job. An occupational therapist can help you design a more comfortable workstation or find more efficient and less painful ways to lift.
- **Eating well.** Although some people with fibromyalgia report feeling better when they eat or avoid certain foods, no specific diet has been proven to influence fibromyalgia. Of course, it is important to have a healthy, balanced diet. Not only will proper nutrition give you more energy and make you generally feel better, it will also help you avoid other health problems.

Tips for Good Sleep

- Keep regular sleep habits. Try to get to bed at the same time and get up at the same time every day—even on weekends and vacations.
- Avoid caffeine and alcohol in the late afternoon and evening. If consumed too close to bedtime, the caffeine in coffee, soft drinks, chocolate, and some medications can keep you from sleeping or sleeping soundly. Even though it can make you feel sleepy, drinking alcohol around bedtime also can disturb sleep.

- Time your exercise. Regular daytime exercise can improve nighttime sleep. But avoid exercising within 3 hours of bedtime, which actually can be stimulating, keeping you awake.
- Avoid daytime naps. Sleeping in the afternoon can interfere with nighttime sleep. If you feel you cannot get by without a nap, set an alarm for 1 hour. When it goes off, get up and start moving.
- Reserve your bed for sleeping. Watching the late news, reading a suspense novel, or working on your laptop in bed can stimulate you, making it hard to sleep.
- Keep your bedroom dark, quiet, and cool.
- Avoid liquids and spicy meals before bed. Heartburn and late-night trips to the bathroom are not conducive to good sleep.
- Wind down before bed. Avoid working right up to bedtime. Do relaxing activities, such as listening to soft music or taking a warm bath, that get you ready to sleep. (A warm bath also may soothe aching muscles.)

What Research Is Being Conducted on Fibromyalgia?

The National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) sponsors research that will improve scientists' understanding of the specific problems that cause or accompany fibromyalgia, in turn helping them develop better ways to diagnose, treat, and prevent this syndrome.

The research on fibromyalgia supported by the NIAMS covers a broad spectrum, ranging from basic laboratory research to studies of medications and interventions designed to encourage behaviors that reduce pain and change behaviors that worsen or perpetuate pain.

Following are descriptions of some of the promising research now being conducted:

Understanding pain. Research suggests that fibromyalgia is caused by a problem in how the body processes pain, or more precisely, a hypersensitivity to stimuli that normally are not painful. Therefore, several National Institutes of Health (NIH)-supported researchers are focusing on ways the body processes pain to better understand why people with fibromyalgia have increased pain sensitivity. These studies include:

- The establishment of a tissue bank of brain and spinal cord tissue to study fibromyalgia and to determine the extent to which chronic pain in fibromyalgia patients is associated with the activation of cells in the nervous system and the production of chemical messengers, called cytokines, that regulate immune cell function.
- The use of imaging methods to evaluate the status of central nervous system responses in patients diagnosed with fibromyalgia compared with those diagnosed with another chronic pain disorder and pain-free controls.
- An investigation to understand how the activation of immune cells from peripheral and central nervous system sources trigger a cascade of events leading to the activation of nerve cells, chronic pain, and the dysregulation of the effects of analgesic drugs against pain.
- An intensive evaluation of twins in which one of the pair has chronic widespread pain and the other does not, along with twins in which neither of the pair has chronic pain, to help researchers assess physiological similarities and differences in those with and without chronic pain and whether those differences are caused by genetics or environment.
- A study examining the use of cognitive behavioral therapy in pain patients, which researchers hope will advance their knowledge of the role of psychological factors in chronic pain as well as a new treatment option for fibromyalgia.

- The Patient-Reported Outcomes Measurement Information System (PROMIS) initiative. The PROMIS initiative is researching and developing new ways to measure patient-reported outcomes (PROs), such as pain, fatigue, physical functioning, emotional distress, and social role participation that have a major impact on quality of life across a variety of chronic diseases. The goal of this initiative is to improve the reporting and quantification of changes in PROs. The NIAMS supports an effort to develop PROMIS specifically for use in patients with fibromyalgia.

Improving Symptoms. A better understanding of fibromyalgia and the mechanisms involved in chronic pain are enabling researchers to find effective treatments for it. Some of the most promising lines of research in this area include the following:

- **Increasing exercise.** Although fibromyalgia is often associated with fatigue that makes exercise difficult, regular exercise has been shown to be one of the most beneficial treatments for the condition. Researchers are trying to determine whether increasing lifestyle physical activity (that is, adding more exercise such as walking up stairs instead of taking the elevator) throughout the day produces similar benefits to exercise for fibromyalgia, improving symptoms such as pain, fatigue, and tenderness. Scientists are also examining the potential mechanisms by which lifestyle physical activity might influence symptoms. Other research supported by the NIAMS is examining the effectiveness of a simplified form of Tai Chi on pain and other measures such as sleep quality, fatigue, anxiety, and depression.

NIAMS-supported research is also examining ways to help people maintain helpful exercise programs. Because many people with fibromyalgia associate increased exercise with increased pain, doctors and therapists often have a difficult time getting patients to stick with their exercise program. The new research is examining patients' fears that cause them to avoid exercise as well as behavioral therapies to reduce fears and help them maintain exercise.

- **Improving sleep.** Researchers supported by the NIAMS are investigating ways to improve sleep for people with fibromyalgia whose sleep problems persist despite treatment with medications. One team has observed that fibromyalgia patients with persistent sleep problems share characteristics with people who have sleep-disordered breathing—a group of disorders, the most common of which is the obstructive sleep apnea, characterized by pauses in breathing during sleep. These researchers are studying whether continuous positive airway pressure (CPAP, a therapy administered by a machine that increases air pressure in the throat to hold it open during sleep) might improve the symptoms of fibromyalgia.

Other groups of researchers are examining the link between sleep disturbance and chronic pain in fibromyalgia and are studying whether behavioral therapy for insomnia might improve fibromyalgia symptoms.

More information on research is available from the following resources:

- [National Institutes of Health \(NIH\) Clinical Research Trials and You](https://www.niams.nih.gov/Health_Info/Clinical_Research_Trials_and_You) was designed to help people learn more about clinical trials, why they matter, and how to participate. Visitors to the website will find information about the basics of participating in a clinical trial, first-hand stories from clinical trial volunteers, explanations from researchers, and links on how to search for a trial or enroll in a research-matching program.

- ClinicalTrials.gov offers up-to-date information for locating federally and privately supported clinical trials for a wide range of diseases and conditions.
- [NIH RePORTER](http://NIHRePORTER) is an electronic tool that allows users to search a repository of both intramural and extramural NIH-funded research projects from the past 25 years and access publications (since 1985) and patents resulting from NIH funding.
- PubMed is a free service of the U.S. National Library of Medicine that lets you search millions of journal citations and abstracts in the fields of medicine, nursing, dentistry, veterinary medicine, the health care system, and preclinical sciences.

Where Can People Find More Information About Fibromyalgia?

**National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
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National Institutes of Health**

1 AMS Circle
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Phone: 301-495-4484
Toll free: 877-22-NIAMS (877-226-4267)
TTY: 301-565-2966
Fax: 301-718-6366
Email: NIAMSinfo@mail.nih.gov
Website: <https://www.niams.nih.gov>

If you need more information about available resources in your language or another language, please visit our website or contact the NIAMS Information Clearinghouse at NIAMSinfo@mail.nih.gov.

Other Resources

**National Center for Complementary and Integrative Health
National Institutes of Health**

Website: <https://nccih.nih.gov/>

American College of Rheumatology

Website: <http://www.rheumatology.org>

Advocates for Fibromyalgia Funding, Treatment, Education, and Research

Website: <http://www.affter.org>

Fibromyalgia Network

Website: <http://www.fmnetnews.com>

National Fibromyalgia Association

Website: <http://www.fmaware.org>

National Fibromyalgia Partnership, Inc.

Website: <http://www.fmpartnership.org>

Arthritis Foundation

Website: <http://www.arthritis.org>

Key Words

Adrenal glands. A pair of endocrine glands located on the surface of the kidneys. The adrenal glands produce corticosteroid hormones such as cortisol, aldosterone, and the reproductive hormones.

Analgesic. A medication or treatment that relieves pain.

Arthritis. Literally means joint inflammation but is often used to indicate a group of more than 100 rheumatic diseases. These diseases affect not only the joints but also other connective tissues of the body, including important supporting structures such as muscles, tendons, and ligaments, as well as the protective covering of internal organs.

Chronic disease. An illness that lasts for a long time, often a lifetime.

Connective tissue. The supporting framework of the body and its internal organs.

Cortisol. A hormone produced by the adrenal cortex, important for normal carbohydrate metabolism and for a healthy response to stress.

Fibromyalgia. A chronic syndrome that includes a history of widespread pain lasting more than 3 months and other general physical symptoms including fatigue, waking unrefreshed, and cognitive (memory or thought) problems.

Fibrous capsule. A tough wrapping of tendons and ligaments that surrounds the joint.

Inflammation. A characteristic reaction of tissues to injury or disease. It is marked by four signs: swelling, redness, heat, and pain. Inflammation is not a symptom of fibromyalgia.

Joint. A junction where two bones meet. Most joints are composed of cartilage, joint space, fibrous capsule, synovium, and ligaments.

Ligaments. Bands of cordlike tissue that connect bone to bone.

Muscle. A structure composed of bundles of specialized cells that, when stimulated by nerve impulses, contract and produce movement.

Nonsteroidal anti-inflammatory drugs (NSAIDs). A group of drugs, such as aspirin and aspirin-like drugs, used to reduce inflammation that causes joint pain, stiffness, and swelling.

Pituitary gland. A pea-sized gland attached beneath the hypothalamus at the base of the skull that secretes many hormones essential to bodily functioning. The secretion of pituitary hormones is regulated by chemicals produced in the hypothalamus.

Sleep disorder. A disorder in which a person has difficulty achieving restful, restorative sleep. In addition to other symptoms, people with fibromyalgia usually have a sleep disorder.

Tendons. Fibrous cords that connect muscle to bone.

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The mission of the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), a part of the U.S. Department of Health and Human Services' National Institutes of Health (NIH), is to support research into the causes, treatment, and prevention of arthritis and musculoskeletal and skin diseases; the training of basic and clinical scientists to carry out this research; and the dissemination of information on research progress in these diseases. The NIAMS Information Clearinghouse is a public service sponsored by the NIAMS that provides health information and information sources. Additional information can be found on the NIAMS website at www.niams.nih.gov.

For Your Information

This publication contains information about medications used to treat the health condition discussed here. When this publication was developed, we included the most up-to-date (accurate) information available. Occasionally, new information on medication is released.

For updates and for any questions about any medications you are taking, please contact

U.S. Food and Drug Administration

Toll free: 888-INFO-FDA (888-463-6332)

Website: <https://www.fda.gov>

For additional information on specific medications, visit Drugs@FDA at <https://www.accessdata.fda.gov/scripts/cder/daf/>. Drugs@FDA is a searchable catalog of FDA-approved drug products.

For updates and questions about statistics, please contact

Centers for Disease Control and Prevention, National Center for Health Statistics

Toll free: 800-232-4636

Website: <https://www.cdc.gov/nchs>

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- [¿Qué es la fibromialgia?](#) (Esenciales: Hojas informativas de fácil lectura)

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