

Fibromyalgia

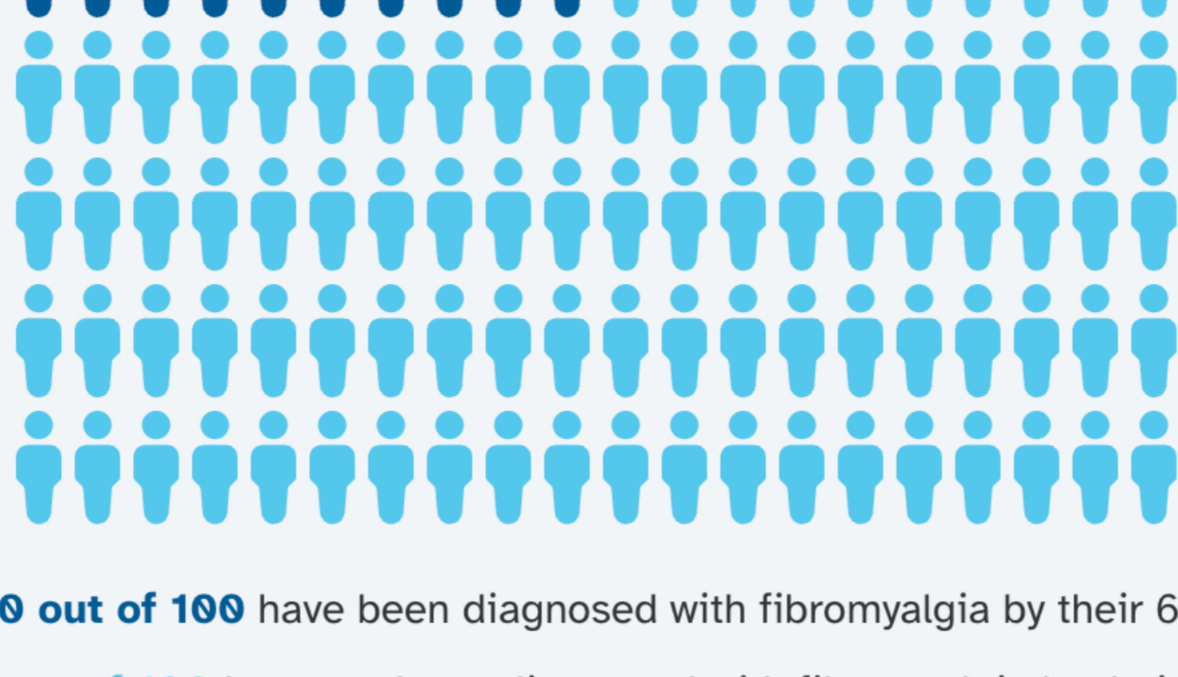
POWERED BY 23ANDME RESEARCH

Fibromyalgia is a condition characterized by chronic pain and tenderness throughout the body. Other symptoms can include moderate to extreme fatigue, trouble sleeping, and feelings of anxiety or depression.



Jamie, your genetic result is associated with a **typical likelihood** of developing fibromyalgia.

An estimated **10 out of 100** people with genetics and other factors like yours have been diagnosed with fibromyalgia **by their 60s**. This is within what is considered typical, which can be anywhere from 4 to 17 out of 100 people. These values were calculated using data from female 23andMe research participants of European descent.



10 out of 100 have been diagnosed with fibromyalgia by their 60s
90 out of 100 have not been diagnosed with fibromyalgia by their 60s

This estimate is based on currently available data and may be updated over time.

Ways to take action

For people who have fibromyalgia, experts agree that healthy lifestyle habits are important for managing symptoms and improving quality of life.

- Try to get regular exercise. A combination of moderate, low-impact aerobic, muscle strengthening, and flexibility exercises can help alleviate symptoms.
- Practice good sleep habits. Going to bed and waking up at the same time every day; having a quiet, comfortable, and relaxing sleep environment; and avoiding caffeine, sugar, alcohol, and food before bed can help improve quality of sleep.
- Manage stress as much as possible. Stress can bring on or worsen fibromyalgia symptoms.



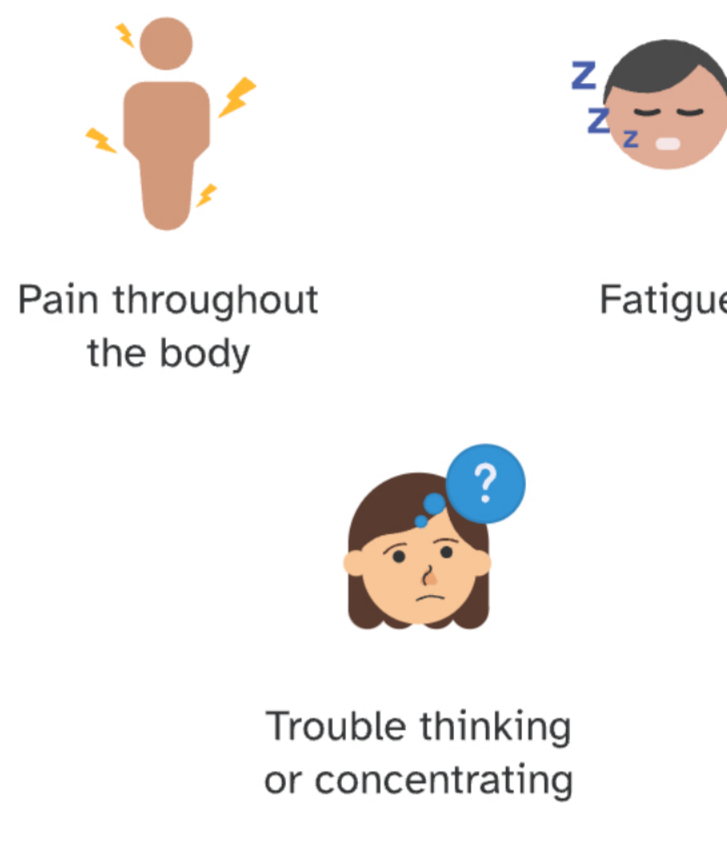
Talk to a healthcare professional if you have any concerns about fibromyalgia or, if you have fibromyalgia, for help creating a management plan. In addition, for people who have fibromyalgia, seeking psychological support like cognitive behavioral therapy can help treat underlying depression, anxiety, and/or stress, as well as provide insights about managing pain.

[Learn more from the National Fibromyalgia Association*](#)

About fibromyalgia

What is fibromyalgia?

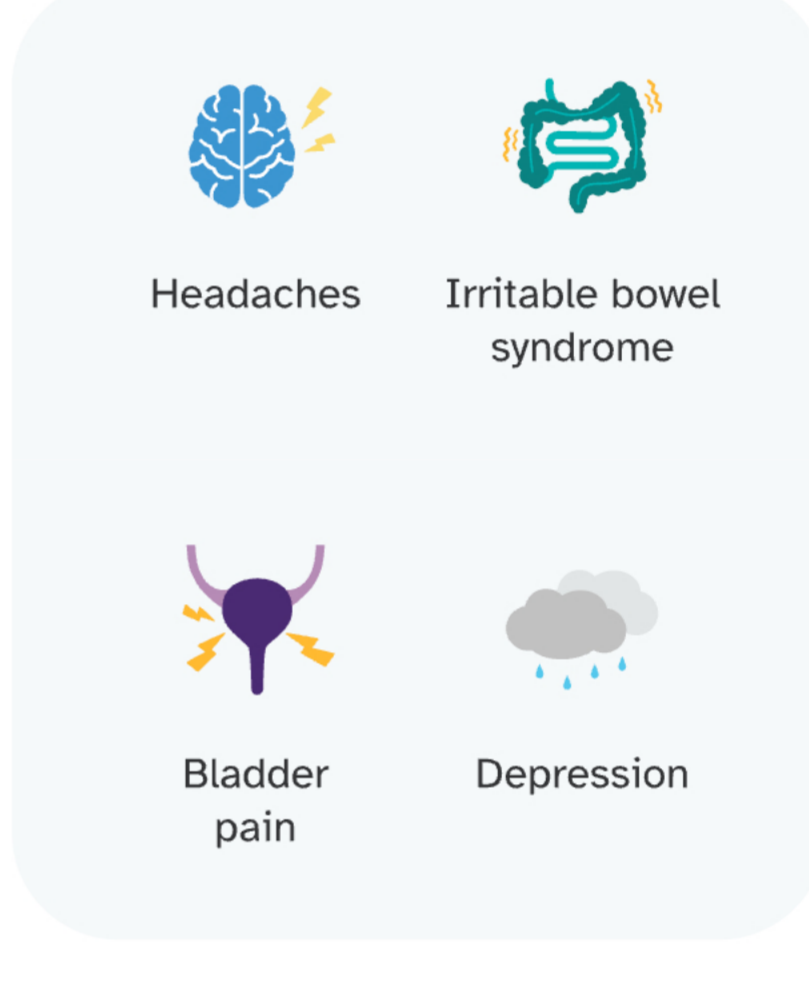
Fibromyalgia is a condition characterized by chronic pain and tenderness throughout the body that lasts at least three months. Pain caused by fibromyalgia can come and go and can move around the body. Other symptoms can include moderate to extreme fatigue, poor sleep quality, and trouble thinking or concentrating. Although the cause of fibromyalgia is not fully understood, scientists think that people with the condition may be more sensitive to pain due to processing differences in the nervous system, especially in the brain and spinal cord.



How can fibromyalgia impact your health?

Although chronic pain, fatigue, and other fibromyalgia symptoms can make day-to-day life a challenge, fibromyalgia is not life-threatening. However, people with fibromyalgia may experience other pain conditions including headaches (migraine or tension), irritable bowel syndrome (IBS), or a painful bladder (called "interstitial cystitis").

Because fibromyalgia can cause chronic pain and discomfort, it can also impact mental health. Individuals with fibromyalgia may experience feelings of depression or anxiety. Counseling and/or support groups can be an important part of some fibromyalgia management plans.



Other factors that can impact your chances of developing fibromyalgia

It is estimated that 2-4% of the U.S. population has fibromyalgia, although it is thought to be underdiagnosed, especially among males. Besides genetics, some factors that can increase a person's chances of developing fibromyalgia include:

- Sex (females are more likely to be diagnosed with fibromyalgia than males)
- Family history of fibromyalgia
- Age (fibromyalgia is most commonly diagnosed between ages 20-55, and becomes more common as people get older)
- Certain health conditions (including depression, viral infections, arthritis, and lupus)
- Stress (including periods of prolonged stress and physically or emotionally traumatic events, such as car accidents)



Keep in mind

This report **does not diagnose** fibromyalgia. **Consult with a healthcare professional** if you are concerned about your likelihood of developing fibromyalgia, have a personal or family history of fibromyalgia, or before making any major lifestyle changes.

If you have already been diagnosed with fibromyalgia by a healthcare professional, it is important to **continue any treatment plans** that they prescribe, including medications and lifestyle modifications.

The likelihood of developing fibromyalgia also depends on **other factors**, including lifestyle, age, and family history.

This report **does not account for every possible genetic variant** that could affect your likelihood of developing fibromyalgia.

This report is based on a genetic model **created using data from 23andMe research participants**. It has not been clinically validated and should not be used to make medical decisions.

[How we got your result ^](#)

Methods

This report is based on a statistical model that takes into account your genetic results at 13,040 genetic markers, along with the ethnicity and sex you reported in your account settings, to estimate the likelihood of developing fibromyalgia. We used data from 23andMe research participants to calculate this estimate. Results and estimates may be updated over time as the model or scientific understanding about this condition improves.

About the result

People whose result is associated with odds of developing fibromyalgia that are at least 1.5 times higher than average are considered to have an increased likelihood. Between 3% and 19% of individuals receive an "increased likelihood" result, depending on ethnicity. These results are based on many genetic markers, and random test error at one or more of these markers can lead to a small margin of error in your estimated likelihood of developing fibromyalgia. For people whose estimate is near the boundary between typical and increased likelihood, this margin of error may introduce some uncertainty about whether their estimated likelihood is considered "typical" or "increased." Your genetic result is associated with a typical likelihood. Based on the available genetic markers used to calculate your result, there is a less than 1% chance your genetic likelihood estimate could fall on the other side of the boundary and be in the range that is considered increased.

Scientific validity across ethnicities

We verified that the model meets our scientific standards for individuals of European, Hispanic/Latino, East/Southeast Asian, South Asian, Sub-Saharan African/African American, and Northern African/Central & Western Asian descent.

How we may use ethnicity and sex to customize this result

- If you indicated in your account settings that you are of European, Hispanic/Latino, East/Southeast Asian, South Asian, Sub-Saharan African/African American, or Northern African/Central & Western Asian (Middle Eastern) descent, your result is tailored based on data from individuals of that ancestry.
- If you indicated in your account settings that you are predominantly of both Hispanic/Latino and another ancestry, your result will be based on data from individuals of Hispanic/Latino descent.
- If you indicated in your account settings that you are predominantly of both Sub-Saharan African/African American and European descent, your result will be based on data from individuals of Sub-Saharan African/African American descent.
- If there is not enough data from individuals of your ethnicity or combination of ethnicities at this time, your result may be based on data from individuals of European descent because the most data is available for this population.
- Your Fibromyalgia result also takes into account the birth sex you indicated in your account settings.

See our [white paper](#) to learn more about the science behind this report.

Read More:

[Centers for Disease Control and Prevention. "Fibromyalgia." Retrieved May 15, 2022 from https://www.cdc.gov/arthritis/basics/fibromyalgia.htm.](https://www.cdc.gov/arthritis/basics/fibromyalgia.htm)

[Kia S et al. \(2017\). "Update on Treatment Guideline in Fibromyalgia Syndrome with Focus on Pharmacology." Biomedicines. 5\(2\).](#)

[Lorden L. "It's a Guy Thing: Men with Fibromyalgia." Retrieved May 15, 2022 from https://www.fmaware.org/its-a-guy-thing-men-with-fibromyalgia/.](https://www.fmaware.org/its-a-guy-thing-men-with-fibromyalgia/)

[Macfarlane GJ et al. \(2017\). "EULAR revised recommendations for the management of fibromyalgia." Ann Rheum Dis. 76\(2\):318-328.](#)

[Maffe ME. \(2020\). "Fibromyalgia: Recent Advances in Diagnosis, Classification, Pharmacotherapy and Alternative Remedies." Int J Mol Sci. 21\(21\).](#)

[Mayo Clinic. "Fibromyalgia." Retrieved May 15, 2022 from https://www.mayoclinic.org/diseases-conditions/fibromyalgia/symptoms-causes/syc-20354780.](https://www.mayoclinic.org/diseases-conditions/fibromyalgia/symptoms-causes/syc-20354780)

[Muraleetharan D et al. \(2018\). "Understanding the Impact of Fibromyalgia on Men: Findings From a Nationwide Survey." Am J Mens Health. 12\(4\):952-960.](#)

[National Fibromyalgia Association. "Fibromyalgia." Retrieved May 15, 2022 from https://www.fmaware.org/fibromyalgia/.](https://www.fmaware.org/fibromyalgia/)

[National Institute of Arthritis and Musculoskeletal and Skin Diseases. "Fibromyalgia." Retrieved May 15, 2022 from https://www.niams.nih.gov/health-topics/fibromyalgia.](https://www.niams.nih.gov/health-topics/fibromyalgia)

[Sircusa R et al. \(2021\). "Fibromyalgia: Pathogenesis, Mechanisms, Diagnosis and Treatment Options Update." Int J Mol Sci. 22\(8\).](#)