

## What is a Migraine?

Migraine is an extraordinarily prevalent neurological disease, affecting 39 million men, women and children in the U.S. and 1 billion worldwide. We still don't understand what causes migraine. Current thinking about the source of migraine symptoms reflects advances in technology that help us see how the brain and nervous system work. Previously, the dilation and constriction of blood vessels in the head were thought to be the primary source of migraine pain, and early medications focused on the blood vessels as the principal target for treatment. Researchers now believe that migraine is a neurological disorder involving nerve pathways and brain chemicals. We know that migraine often runs in families. But genes aren't the only answer – studies show that environmental factors play an important role, too. Just about everyone has headaches. **But contrary to popular belief, migraine is much more than just a bad headache.** It's an extremely *incapacitating collection of neurological symptoms* that usually includes a severe throbbing recurring pain on one side of the head. However, in 1/3 of migraine attacks, both sides are affected. Attacks last between 4 and 72 hours and are often accompanied by one or more of the following disabling symptoms: visual disturbances, nausea, vomiting, dizziness, extreme sensitivity to sound, light, touch and smell, and tingling or numbness in the extremities or face. Of course, everyone is different, and symptoms vary by person and sometimes by attack. There are different types of migraines. The type of migraine is usually identified by its predominant symptom. Migraine is a moving target: symptoms can change from one attack to the next, and many sufferers have more than one type. Most people who have a migraine attack begin by treating themselves with over-the-counter medications. Sufferers sometimes consult a doctor as symptoms become more severe and disabling, but *more than half of all migraine sufferers are never diagnosed.* Migraine is a diagnosis of exclusion – it's diagnosed by a process of elimination because there's not yet a test or biomarker to show it's present. Migraine is diagnosed by analyzing the symptoms, reviewing family history, conducting medical tests, and eliminating other possible causes of the headache. Diagnosis is not always easy, however, as symptoms are often present in other conditions. It's important to consult a headache specialist if your symptoms are disabling, change, or don't respond to your usual headache remedies.

**Many people don't realize that migraine is an extraordinarily prevalent neurological disease, affecting 39 million American men, women and children and 1 billion worldwide.**

Everyone either knows someone who suffers from migraine or struggles with migraine themselves. It is the *third most prevalent illness in the world* – 12% of the population, including 18% of American women, 6% of men, and 10% of children – has migraine. **Nearly 1 in 4 U.S. households includes someone with migraine.**

Migraine can be extremely incapacitating. It is the **sixth most disabling illness in the world.** Every 10 seconds, someone in the U.S. goes to the emergency room complaining of head pain, and approximately 1.2 million visits are for acute migraine attacks. While most sufferers have attacks once or twice a month, **more than 4 million adults have chronic daily migraine, with at least 15 migraine days per month.** And many have a migraine just about every day.

In addition to the attack-related disability, many sufferers live in fear knowing that at any time an attack could disrupt their ability to work or go to school, care for their families, or enjoy social activities. More than 90% of sufferers are unable to work or function normally during their migraine attacks.

## Over 4 million adults suffer from Chronic Daily Migraine

People who suffer from chronic migraine use a combination of acute, preventive, and complementary treatments to try to control or lessen the incessant incapacitating pain. Depression, anxiety, and sleep disturbances are common for those with chronic migraine, as are many other comorbid conditions, such as bipolar disorder, arthritis and hypertension. About 88% of chronic migraine sufferers have at least one additional chronic comorbid condition. Over 20% of chronic migraine sufferers are disabled, and their overall quality of life is greatly diminished. The likelihood of disability increases sharply with the number of comorbid chronic conditions.

Although there are many contributing factors to the progression from episodic to chronic migraine, **medication overuse** is the most common. Over-the-counter and prescription drugs can cause overuse headaches. Overuse involves using pain killers, triptans, or certain other medications more than 2-3 days per week, week after week and month after month. This can create a headache-worsening pattern that results in more headaches and the need to take more medicine. Not only is the pattern itself harmful, but while in this cycle, treatments that were once effective often don't work. The only way out of this cycle is to stop the pattern of overuse, which should always be done under a doctor's care.

## What factors trigger or bring on a migraine attack?

Different things trigger migraines in different people. And the same trigger doesn't always provoke a migraine in the same person. To complicate things, everyone is different – what triggers your migraine probably won't trigger someone else's.

Triggers should be thought of as risk factors. Several factors may actually spur an attack. Keep a migraine diary and look for patterns in your attacks. By determining your personal migraine threshold – the combination of triggers it takes to produce your migraine attack – you may be able to limit how often you get migraines and how severe they are. Triggers add up, so the fewer you have at one time, the better your chances of preventing a migraine.

Contrary to popular belief, **there are no universal triggers**, but here some commonly occurring ones:

**Lifestyle Triggers:** changes in sleep patterns, fasting, skipping meals, dehydration, alcohol, over-exertion, exercise, stress.

**Environmental Triggers:** strong smells, bright or flickering lights, smoke/pollution, altitude, air pressure (as in airplane travel), motion sickness (as in a car, train, and boat travel).

**Weather-related Triggers:** humidity (both high and low), sudden or big changes in temperature, changes in barometric pressure, bright sunlight.

**Hormonal Triggers:** changes in hormone levels, pregnancy, menstruation, menopause, hormone replacement therapy, oral contraceptives.

**Medication Triggers:** overuse of pain medications (both over-the-counter and prescription), oral contraceptives, medication side-effects.

**Strong scientific evidence linking migraine to specific foods is lacking.** If they're present, food triggers differ among individuals, and specific foods may become triggers only when combined with other triggers. These foods and additives are often named as common triggers: artificial sweeteners, MSG (a flavor enhancer in many processed foods), nitrates (cured meats), and tyramines (fermented foods, aged cheeses, freshly baked yeast bread and cake), alcohol (especially red wine and beer), caffeine.

## **Migraine treatment has changed over the years, reflecting advances in technology that help us understand how the brain and nervous system work.**

Researchers now believe that migraine involves nerve pathways and brain chemicals. There is a strong genetic component, and environmental factors play an important role, too. As a result, it's a complicated disease to treat.

We still don't fully understand what's happening when you have a migraine attack. For effective treatments to be developed, we need a complete and accurate grasp of the underlying processes. This is why migraine research is critical for real progress in migraine treatment.

Migraine sufferers can hope to achieve better management and control by proper diagnosis and treatment. But even with the correct diagnosis, treating migraine can be frustrating. Several hundred medications, devices, and surgical treatments are used to treat and prevent migraine attacks and symptoms. Only a few have been developed specifically for migraine. Most are prescribed *off label*, as they've been developed and FDA approved for another purpose. Choosing one or a combination that might work is often a time-consuming process of trial and error that requires expert help from doctors specializing in the treatment of migraine. Consult your headache specialist to discuss a personalized treatment plan.

There are three main approaches to migraine treatment: acute, preventive, and complementary.

**Acute treatment** is a therapy used to stop an attack when it begins.

**Preventive treatment** is a therapy used to reduce the number of attacks, lessen the intensity of pain, and prevent the onset of future attacks.

**Complementary treatment** is a non-drug therapy used mostly for prevention. In some sufferers, life-style changes and other complementary treatments can prevent the triggering of attacks.

There are many reasons why people try not to use drugs to treat their migraines: Some people have trouble tolerating them, want to avoid their side effects, are allergic to them, can't remember to take them on schedule, are pregnant or trying to become pregnant, or they have some underlying medical condition that might worsen. Maybe the drugs they've tried don't work. Sometimes sufferers want to explore alternatives to see if they can get relief without taking medication. Non-drug treatments are mostly free or low cost and can also be used to enhance the effect of drug treatments.

## There are 3 main types of non-drug treatments for migraine.

### Lifestyle Advice

- See a doctor for a *proper diagnosis*. Migraine is a diagnosis of exclusion, which means doctors must eliminate other reasons for your symptoms before arriving at a migraine diagnosis. If your symptoms are bad enough for you to be evaluating treatments, you should make sure you actually have migraine and not something else.
- Keep a detailed headache diary so that you can analyze patterns to try to learn your common *headache triggers*.
- Stick to the *same eating and sleeping schedule every day* – even on the weekends. Don't skip meals or change sleep patterns.
- Drink lots of water to *stay hydrated*. Dehydration is a very common migraine trigger.
- *Exercise* regularly.
- Keep your *weight down*. An increase in BMI (body mass index) may result in an increase in the frequency of migraines.

### Therapies

These therapies promote general good health and well-being. They can improve your quality of life. Their success in treating migraine is difficult to measure and may depend on many things, like the therapist, the length of treatment, and your commitment to regular practice.

These therapies can be tried alone or in combination:

- Physical therapy
- Acupuncture
- Yoga
- Tai Chi
- Massage
- Stress management: relaxation techniques, breathing, visualization, meditation
- Biofeedback
- Hypnotherapy
- Cognitive Behavioral Therapy

### Exercise

Exercise programs are frequently recommended to promote health, control weight, and prevent disease. Migraine sufferers typically are less physically active than those who don't suffer. They often avoid exercise, worrying that the exercise itself will aggravate or trigger a migraine.

Sufferers who follow certain common-sense guidelines can improve their quality of life and increase their aerobic endurance and flexibility without aggravating or triggering their migraines. Here are some tips:

- Keep your exercise low-impact. Use equipment like stationary bikes or ellipticals that minimize pounding movements. Try Tai Chi, Yoga, isometric or band exercises.
- When using a treadmill, increase the incline rather than the speed to minimize pounding movements.
- Stretching and weight-bearing exercises are important, but be careful of the neck area. This is a very tender and vulnerable spot that can directly affect migraines.
- Drink water and stay hydrated. Dehydration is a very common migraine trigger.
- Take it slow. Work up to longer and more intense exercise as your body gets stronger.
- Listen to your body – if an exercise aggravates your migraines, don't do it! But don't abandon exercise. Consult a trainer or physical therapist for alternatives.

## Migraine Facts

- Migraine is much more than a bad headache.
- Migraine is the 3<sup>rd</sup> most prevalent illness in the world.
- Nearly 1 in 4 U.S. households includes someone with migraine.
- Amazingly, 12% of the population – including children – suffers from migraine.
- 18% of American women, 6% of men, and 10% of children experience migraines.
- Migraine is most common between the ages of 25 and 55.
- Migraine tends to run in families. About 90% of migraine sufferers have a family history of migraine.
- Migraine is the 6<sup>th</sup> most disabling illness in the world.
- Every 10 seconds, someone in the U.S. goes to the emergency room complaining of head pain, and approximately 1.2 million visits are for acute migraine attacks.
- While most sufferers experience attacks once or twice a month, more than 4 million people have chronic daily migraine, with at least 15 migraine days per month.
- More than 90% of sufferers are unable to work or function normally during their migraine.
- It's typically a severe throbbing recurring pain, usually on one side of the head. But in about 1/3 of attacks, both sides are affected
- In some cases, other disabling symptoms are present without head pain.
- Attacks are often accompanied by one or more of the following disabling symptoms: visual disturbances, nausea, vomiting, dizziness, extreme sensitivity to sound, light, touch and smell, and tingling or numbness in the extremities or face.
- About 25% of migraine sufferers also have a visual disturbance called an aura, which usually lasts less than an hour.
- In 15-20% of attacks, other neurological symptoms occur before the actual head pain.
- Attacks usually last between 4 and 72 hours.
- For many sufferers, migraine is a chronic disease that significantly diminishes their quality of life.

For more information on Migraine go to:

<https://migraineresearchfoundation.org/resources/resources-and-links/>

<https://americanmigrainefoundation.org/>

<https://outofmyheadfilm.com/resources/>

