



# Guide to Managing Migraines

## Migraine Overview

More than 28 million Americans suffer from migraines. Migraine headaches typically occur between the ages of 15 to 55, and 70-80% of migraine sufferers have a family member with migraines. Migraine headaches are three to four times more common in women than in men. The higher incidence of migraines in women may be related to

hormonal changes, including ovulation, menstruation, oral contraceptives, pregnancy, and menopause.

Migraines can lead to both physical pain and emotional suffering. When migraines are unpredictable, frequent, or chronic, a sufferer may become frustrated, sad, angry, or depressed. When severe, migraines can affect one's quality of life and lessen productivity in school and in the workplace.

Migraines, however, are treatable and preventable. Caring, supportive friends, family, co-workers and health care providers can help lessen the pain of migraine sufferers. People with migraines can also help themselves by learning about their headaches, building a good working relationship with their health care provider, and practicing personal self-care.

Typical migraine characteristics include:

- ❖ Pain on one side of the head
- ❖ Pain with a pulsating or throbbing quality
- ❖ Moderate to intense pain affecting daily activity
- ❖ Nausea or vomiting
- ❖ Sensitivity to light and sound
- ❖ Attacks lasting 4 to 72 hours, sometimes longer
- ❖ Increased pain with exertion (e.g. climbing stairs)

Approximately one-fifth of migraine sufferers experience auras. An aura is characterized by the appearance of warning signs 30-60 minutes before the onset of headache symptoms. Aura symptoms are usually neurologic in nature and may include visual disturbances (e.g. seeing wavy lines, dots, flashing lights, blind spots) and disruptions in smell, taste, or touch.

According to the American Medical Association: "The exact cause of migraine is uncertain, although various theories are being studied. One theory favored by many researchers is that migraine is due to a vulnerability of the nervous system to sudden changes in either your body or the environment around you. Many researchers believe that migraine sufferers have inherited a more sensitive nervous system response than those without migraine. During a migraine attack, changes in brain activity produce inflamed blood vessels around the brain. Migraine medication may produce relief by quieting sensitive nerve pathways and reducing the inflammation process."

Check our website: [www.uhs.berkeley.edu](http://www.uhs.berkeley.edu) to learn more about this medical concern or others.  
For an appointment: [www.uhs.berkeley.edu](http://www.uhs.berkeley.edu) or call **510-642-2000** Clinic Nurse **643-7197** for advice

# Migraine treatment and prevention



Migraine treatments are often categorized as pharmacological (treatment with drug therapy) and non-pharmacological (treatment without medications).

## **Drug therapy**

Many migraine medications are available. Some medications are used to stop a migraine attack (abortive therapy). These drugs work best if taken as soon as the attack begins. Other drugs are taken daily to reduce the frequency and duration of migraines (prophylactic therapy). Your clinician can provide information on your medication options and help you determine if prophylactic medication would be helpful in your situation.

If headaches occur at or around your menses or become more frequent and intense with oral contraceptives, talk with your clinician. It is sometimes helpful to try the following over-the-counter medicine 2-3 days before the anticipated headache and continue through your menstrual cycle:

- Aleve (naproxen): 1-2 tablets (220-440 mg) every 12 hours
- Motrin (ibuprofen): 400-800 mg every 8 hours

## **Non-pharmacological strategies**

Non-pharmacological options include strategies we can employ for ourselves as well as treatments used by trained practitioners. Your clinician may be able to provide referrals; some resources are also listed on the back page of this handout. These strategies can be helpful for preventing attacks as well as managing chronic migraines.

## **Lifestyle changes**

Understanding how lifestyle impacts the severity and frequency of migraine attacks can be a large part of successful migraine prevention. The key is to develop consistent patterns for all days of the week. Lifestyle changes should be undertaken gradually and over time. Below is a list of proven strategies:

- Sleep: Maintain consistent sleep patterns, including on weekends and holidays. Learn how much sleep you need and try not to get too much or too little. Not getting enough sleep during the week and trying to get extra sleep on the weekend may trigger an attack.
- Exercise: A routine of 20-40 minutes of aerobic exercise 3 or more times per week can relieve stress and balance internal physiology.
- Eating: Eat regular meals, and do not skip meals. Eat a good, healthy breakfast
- Reduce stress: See chart on next page for common stress management techniques.
- Improve posture: Pay special attention to how you hold your neck and shoulders. For example, when

working at a computer, adjust your seat and table so that you don't have to bend your neck for long periods

## **Behavioral treatments**

Examples of behavioral treatments include:

- Biofeedback therapy: A technique where people learn to sense changes in the body's activity and to use relaxation and other methods to control the body's responses
- Coping skills: Headache sufferers generally find cognitive restructuring (identifying negative self-talk and changing the disparaging remarks to positive ones), assertiveness training, and goal identification helpful.

The likelihood of behavioral techniques working as preventative treatment for migraine depends upon appropriate training and discipline for the person using the technique.

## **Complementary treatments**

- Acupuncture/Acupressure: Using fine metal needles or mechanical pressure, the acupuncturist manipulates energy called Chi (also spelled Qi) to help the individual return to a balanced state. Individuals can also practice Tai Chi or Qi Gong to balance Chi.
- Manipulative procedures: A skilled practitioner manipulates joints or muscles in an effort to reduce abnormal peripheral input to the Central Nervous System and restore kinesthetic balance. Examples include chiropractic treatment and craniosacral therapy.
- Massage: A massage relaxes the body, releases stress buildup in muscle tissue, and teaches body awareness.

## **Other treatments**

Vitamins, Minerals and Herbs: The Primary Care Network reports the following may help with migraines:

- Riboflavin: 400 mg per day
- Feverfew: 1 capsule 3-4 times per day for one month. If effective, the dosage may be slowly decreased if desired. Avoid during pregnancy and when taking NSAIDs such as ibuprofen and Aleve (naproxen).
- Magnesium: 400-600 mg per day
- Vitamin B Complex: 1 tablet per day

# Migraine Triggers

“Triggers” are specific factors that may increase your risk of having a migraine attack. The migraine sufferer has inherited a sensitive nervous system that under certain circumstances can lead to migraine.

Triggers do not ‘cause’ migraine. Instead, they are thought to activate processes that cause migraine in people who are prone to the condition. A certain trigger will not induce a migraine in every person; and, in a single migraine sufferer, a trigger may not cause a migraine every time. By keeping a headache diary, you will be able to identify some triggers for your particular headaches.

Once you have identified triggers, it will be easier for you to avoid them and reduce your chances of having a migraine attack.”

—American Council for Headache Education

Categories	Triggers	Examples
Dietary	Skipping meals/fasting  Specific foods  Medications	<i>See reverse</i>  Overuse of over-the-counter medications can cause rebound headaches (e.g. using ibuprofen, Excedrin Migraine more than 2 days per week). Also, missed medication doses and certain medications (e.g. nitroglycerine, indomethacin) may cause headaches.
Sleep	Changes in sleep patterns	Napping, oversleeping, too little sleep
Hormonal	Estrogen level changes and fluctuations	Menstrual cycles, birth control pills, hormone replacement therapies, peri-menopause, menopause, ovulation
Environmental	Weather  Bright lights  Odors/pollution  Other	Weather and temperature changes, extreme heat or cold, humidity, barometric pressure changes  Bright or glaring lights, fluorescent lighting, flashing lights or screens  Smog, smoke, perfumes, chemical odors  High altitude, airplane travel
Stress	<ul style="list-style-type: none"> <li>• Periods of high stress, including life changes</li> <li>• Accumulated stress</li> <li>• Reacting quickly and easily to stress</li> <li>• Repressed emotions</li> </ul>	Factors related to stress include anxiety, worry, shock, depression, excitement, mental fatigue, loss and grief. Both “bad stress” and “good stress” can be triggers. How we perceive and react to situations can trigger (or prevent) migraines. Other triggers can include unrealistic timelines or expectations of oneself.
Stress letdown		Weekends, vacations, ending a project or stressful task (including presentations, papers, or exams)
Physical	Overexertion Injuries  Visual triggers  Becoming tired or fatigued	Over-exercising when out of shape, exercising in heat, marathon running  Eyestrain (if you wear glasses, make sure your prescription is current), bright or glaring lights, fluorescent lighting, flashing lights or computer screens

# Dietary Triggers

Food triggers do not necessarily contribute to migraines in all individuals, and particular foods may trigger attacks in certain people only on occasion. Be your own expert by keeping a journal of foods you have eaten before a migraine attack and see whether the removal or reduction of certain foods from your diet improves your headaches.

Skipping meals, fasting, and low blood sugar can also trigger migraines. If you're unable to follow a normal eating schedule, pack snacks.

Food item	Not known to trigger migraines	Possible triggers
Beverages	Fruit juice, club soda, noncola soda (7-Up, gingerale), decaffeinated coffee, herbal tea, soy milk, rice milk. Limit caffeine sources to 2 cups/day (coffee, tea, cola).	Chocolate and cocoa. Alcoholic beverages (especially red wine, beer, and sherry). Caffeine (even in small amounts) may be a trigger for some people.
Fruits	Any except those to avoid. Limit citrus fruits to ½ cup/day. Limit banana to ½ per day.	Figs, raisins, papayas, avocados (especially if overripe), red plums, overripe bananas.
Vegetables	Any except those to avoid.	Beans such as broad, fava, garbanzo, Italian, lima, navy, pinto, pole. Sauerkraut, string beans, raw garlic, snow peas, olives, pickles, onions (except for flavoring),
Bread & Grains	Most commercial breads, English muffins, melba toast, crackers, RyKrisp, bagel. All hot and dry cereals. Grains such as rice, barley, millet, quinoa, bulgur. Corn meal and	Freshly baked yeast bread. Fresh yeast coffee cake, doughnuts, sourdough bread. Breads and crackers containing cheese, including pizza. Any product containing chocolate or nuts.
Dairy Products	Milk (2% or skim). Cheese: American, cottage, farmer, ricotta, cream, Velveeta. Yogurt: (limit to ½ cup per day).	Cultured dairy products (buttermilk, sour cream). Chocolate milk. Cheese: blue, brick (natural), Gouda, Gruyere, mozzarella, Parmesan, provolone, Romano, Roquefort, cheddar, Swiss (emmentaler), Stilton, Brie types and Camembert types.
Meat, fish, poultry	Fresh or frozen turkey, chicken, fish, beef, lamb, veal, pork. Egg (limit to 3 eggs/week). Tuna or tuna salad.	Aged, canned, cured or processed meat, including ham or game, pickled herring, salted dried fish, sardines, anchovies, chicken livers, sausage, bologna, pepperoni, salami, summer sausage, hot dogs, pâté, caviar. Any food prepared with meat tenderizer, soy sauce or brewer's yeast. Any food containing nitrates, nitrites, or tyramine.
Soups	Soups made from foods allowed in diet, homemade broths.	Canned soup, soup or bouillon cubes, soup base with autolytic yeast or MSG. <i>Read labels.</i>
Desserts	Fruit allowed in diet. Any cake, pudding, cookies, or ice cream without chocolate or nuts. JELL-O.	Chocolate ice cream, pudding, cookies, cakes, or pies. Mincemeat pie. Nuts. Any yeast-containing doughs and pastries.
Sweets	Sugar, jelly, jam, honey, hard candy	
Miscellaneous	Salt in moderation, lemon juice, butter or margarine, cooking oil, whipped cream, and white vinegar. Commercial salad dressings in small amounts as long as they don't have additives to avoid.	Nutrasweet, monosodium glutamate (MSG), yeast/yeast extract, meat tenderizer (Accent), seasoned salt, mixed dishes, pizza, cheese sauce, macaroni and cheese, beef stroganoff, cheese blintzes, lasagna, frozen TV dinners, chocolate. Nuts and nut butters. Pumpkin, sesame and sunflower seeds. Anything fermented, pickled or marinated. Some aspirin medications that contain caffeine. Excessive amounts of Niacin (Niacinamide is fine).

# The Migraine Disability Assessment Test

The MIDAS (Migraine Disability Assessment) questionnaire was put together to help you measure the impact your headaches have on your life. The information on this questionnaire is also helpful for your primary care provider to determine the level of pain and disability caused by your headaches and to find the best treatment for you.

## INSTRUCTIONS

Please answer the following questions about ALL of the headaches you have had over the last 3 months. Select your answer in the box next to each question. Select zero if you did not have the activity in the last 3 months.

- \_\_\_\_\_ 1. On how many days in the last 3 months did you miss work or school because of your headaches?
- \_\_\_\_\_ 2. How many days in the last 3 months was your productivity at work or school reduced by half or more because of your headaches? (Do not include days you counted in question 1 where you missed work or school.)
- \_\_\_\_\_ 3. On how many days in the last 3 months did you not do household work (such as housework, home repairs and maintenance, shopping, caring for children and relatives) because of your headaches?
- \_\_\_\_\_ 4. How many days in the last 3 months was your productivity in household work reduced by half or more because of your headaches? (Do not include days you counted in question 3 where you did not do household work.)
- \_\_\_\_\_ 5. On how many days in the last 3 months did you miss family, social or leisure activities because of your headaches?
- \_\_\_\_\_ Total (Questions 1-5)

- \_\_\_\_\_ A. On how many days in the last 3 months did you have a headache? (If a headache lasted more than 1 day, count each day.)
- \_\_\_\_\_ B. On a scale of 0 - 10, on average how painful were these headaches? (where 0 = no pain at all, and 10 = pain as bad as it can be.)

**Scoring:** After you have filled out this questionnaire, add the total number of days from questions 1-5 (ignore A and B)

MIDAS Grade	Definition	MIDAS Score
I	Little or no disability	0-5
II	Mild disability	6-10
III	Moderate disability	11-20
IV	Severe disability	21+

**Please give the completed form to your clinician.**

This survey was developed by Richard B. Lipton, MD, Professor of Neurology, Albert Einstein College of Medicine, New York, NY, and Walter F. Stewart, MPH, PhD, Associate Professor of Epidemiology, Johns Hopkins University, Baltimore, MD

# Headache Diary

Diaries can be a useful tool to identify triggers, to keep track of your headaches, and to help your health care provider better understand your headaches. The headache diary also helps monitor changes in headache frequency and severity. An on-line headache diary is available at <http://www.achenet.org/your/diary1.php>

<b>Head-ache</b>	Date:	Time Started:	Time Ended:
	Warning Signs:		
<b>Pain</b>	Type of Pain: (e.g. piercing, throbbing, etc.)		
	Intensity of Pain: (circle one)      (Low) 1 2 3 4 5 6 7 8 9 (High)		
	Location: (e.g. between eyes, back of head, etc.)		
<b>Treatment</b>	Treatment or Medication Taken:		
	Effect of Treatment:		
<b>Circumstances</b>	Hours of Sleep:		
	What I ate today:		
	Events prior to headache: (e.g. strenuous activity, elevated stress, etc)		
<b>Comments</b>			

<b>Head-ache</b>	Date:	Time Started:	Time Ended:
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<b>Treatment</b>	Treatment or Medication Taken:		
	Effect of Treatment:		
<b>Circumstances</b>	Hours of Sleep:		
	What I ate today:		
	Events prior to headache: (e.g. strenuous activity, elevated stress, etc)		
<b>Comments</b>			

Stress management	
<i>Emphasis</i>	<i>Examples</i>
Relaxation	Listening to music, spending time in nature, meditation, yoga, Tai Chi, Qi Gong, massage, breathing exercises
Managing emotions	Exercise, journal writing, creative activities, mindfulness
Managing thoughts	Thought-stopping techniques, mindfulness, positive thinking
Managing obligations	Time management, breaking large tasks into small pieces, goal setting, assertiveness
Social support and connections with others	Time with friends, family, community, pets



## Early warning signs

Noticing early warning signs and taking immediate action can potentially prevent or reduce the severity of the migraine. Migraines can often be preceded by symptoms (called prodrome symptoms) that can serve as early warning signs. These symptoms typically occur 6-24 hours prior to headache and may include:

- Mood changes including depression, euphoria, increased irritability
- Increased thirst
- Fluid retention
- Food Cravings or loss of appetite
- Sensitivity to light and sound
- Fatigue
- Restlessness
- Difficulty using or understanding words
- Talkativeness
- Neck stiffness
- Light headedness
- Diarrhea

If you notice early warning signs, you may try to relax (see relaxation strategies on page 2) and try to reduce triggers (e.g. reduce lighting and noise levels). Your mental/emotional reaction to early warning signs is also **critical**. Becoming scared anxious, or convinced you'll have a migraine can make a migraine worse. To help lessen these emotions, try keeping a positive attitude,

remaining, calm and mentally allowing for the possibility of a migraine not to develop.



## Self-care strategies for immediate relief

- **Use cold.** Wrap a cold pack, can of soda, or bag of ice and place it against the pain site or the back of your neck for up to ten minutes. Wait twenty minutes and then repeat if desired
- **Use cold and hot together.** For example, use a cold pack on your head and neck while warming up your body from the shoulders down.
- **Reduce sensory inputs.** Shield your eyes from direct light. Reduce noise and other stimuli. Lay down in a quiet, dark room, if possible.
- **Drink plenty of liquids.** This helps avoid dehydration. Drinking flat soda may help relieve nausea.
- **Use massage.** Knead the muscles along shoulders, neck and back of the skull. Gently rub your head, forehead, temples, facial muscles, and jaw, Brushing your scalp lightly with a soft hairbrush can provide additional relief.

### Exercise Tips

Because of its stress-relieving benefits, regular exercise has the potential to reduce the frequency of migraines. However, for some people with recurring migraines, exercise can provoke an attack. To avoid or limit the severity of exercise-induced headaches, the National Headache foundation recommends:

- Warm-up adequately before exercise
- Drink plenty of water throughout activity and afterwards
- Be aware of environmental triggers such as high altitudes, humidity or exposure to hot or cold weather which can trigger migraines
- Consult with your healthcare provider about your exercise regimen if you experience problems.

# Four tips for getting the most from your relationship with your health care provider

## Educate yourself

Learn more about headaches, their causes, and prevention and treatment options. Become familiar with your own symptoms, triggers, and patterns.

## Be prepared for your appointment

Being able to provide specific information to your clinician will facilitate your care. Be prepared to share the following information:

- Provide examples to explain the severity of your attacks (e.g., how often you miss school/work, ways migraine interferes with your activities, effects on your quality of life).
- Keep information on each attack, including symptoms, what you think may have caused the attack, and any measures that helped relieve the symptoms.
- List medications you are currently taking for migraine or any other medical condition, including prescription, over-the-counter and natural remedies.
- Share your treatment goals with your provider

Keeping a headache diary is the best way to gather information for your appointment. A sample headache diary is included in this packet. You can also keep an on-line record at [www.achenet.org/resources/headache\\_diaries/](http://www.achenet.org/resources/headache_diaries/). Getting to know your headache pattern can also help you feel more in control of your life.

## Understand your treatment plan

Be sure you understand your treatment plan when you leave. Ask for detailed instructions for your medications, and make sure you understand how long you will need to take the drug before you should begin to notice improvement. You can also ask your provider to review the pros and cons of each medication, including potential negative reactions or other side effects. If a follow-up appointment is needed, make sure you understand when this

should happen. Keeping follow-up appointments is critical to creating a successful treatment plan.

## Be realistic

It is helpful to have reasonable expectations about treatment. While there is no cure for migraine, the condition can be managed with an effective treatment and self-care program. The National Headache Foundation recommends:

- Be patient and give treatment time to work
- Realize that treatment success will ebb and flow.
- Be willing to listen to your clinician and to yourself and be flexible and open-minded and prepared to modify your treatment, as necessary.

## Resources

### University Health Services

- Medical appointment. (call 510.642.2000) or [www.uhs.berkeley.edu](http://www.uhs.berkeley.edu)
- Health education appointment on stress, time and pain management. (call 510.642.2000)
- Counseling for academic, personal and career concerns and assistance with cognitive restructuring. (3rd floor or call 510.642.9494)

### Websites

- [www.uhs.berkeley.edu](http://www.uhs.berkeley.edu)
- American Council for Headache Education: [www.achenet.org](http://www.achenet.org)
- National Headache Foundation: [www.headaches.org](http://www.headaches.org)



### Other

- The American Council for Headache Education provides a listing of on-line and local support groups. Visit [www.achenet.org](http://www.achenet.org)
- Daily, weekly, and monthly on-line headache diaries available at [www.achenet.org/resources/headache\\_diaries/](http://www.achenet.org/resources/headache_diaries/)
- CalFit Program at RSF offers yoga, Tai Chi, Qi Gong, and Acupressure classes and massage services. (510.643.5151)