



Can anything be done for headaches that keep coming back?

Recurring headaches can be upsetting for the person who repeatedly experiences pain and frustrating for the health care professional who is trying to help. There are many causes for headaches. This means that it can take time to determine what may be causing your headaches or making them worse. But take heart. With a careful, organized approach often the cause and therefore relief can be found. This handout will give you information on how you and your health care practitioner can work together to find the cause of your headaches and start you on the road to feeling better.

What should I do first?

Since you have headaches that keep coming back, you have most likely talked with your health care practitioner about the problem. But if you have not, that is the first step. The clinician will ask you questions to help determine if your headaches are from a common cause such as tension or if they could be symptoms of a more serious condition. Headaches caused by serious conditions are rare.

What else can I do with the help of my health care practitioner?

We recommend a three-step plan:

- determine if medication is causing the recurring headaches,
- identify and remove the triggers causing the headaches, and
- start therapy to prevent further headaches.

How can I learn if medication is causing my headaches?

Identify current medication

Ironically the very medication that you started taking to treat headaches may now be causing them to recur. This type of headache is from overuse of medication. The most common medications that can cause overuse headaches are Butalbital, opioids, acetaminophen (Tylenol), caffeine and aspirin. But any medication used to relieve pain can cause the headaches. Combinations of medicine are especially likely to cause them.

Create a plan to stop the medication

It is important to stop your current pain medications before taking steps to prevent future headaches. The longer you have used a pain medication, the longer it will take to come off of it. Some types of pain medications (e.g., opioids, barbiturates and benzodiazepines) should be withdrawn slowly over a 2-4 week period. Other drugs (e.g., non-steroidal antiinflammatories, triptans, ergot alkaloids, and acetaminophen) can usually be stopped more abruptly without causing problems. If you can tolerate going "cold turkey", it is the fastest way to break a cycle of recurring headaches. Allow at least two weeks for the headaches to decrease in number. Stopping the drug can lead to a severe rebound headache. If this happens, your health care practitioner can prescribe bridge therapy to help you through the difficult time.



Bridge therapy

The challenge with bridge therapy is that you can have trouble weaning off it. Some do better going "cold turkey." If bridge therapy is used, it should be continued for 7-14 days. Usually withdrawal symptoms last from two to ten days with an average of 3.5 days.

- Medications. Drugs your health care practitioner might use as bridge therapy include: naproxen sodium, meclofenamate sodium, or prednisone.
- Acupuncture. Consider getting acupuncture treatments during this transition time. An advantage of this approach is that it does not involve drugs, which you would have to wean off again.
- Raskin protocol. Treatment that works best for severe rebound headaches is a combination of metoclopramide (Reglan) and dihydroergotamine (DHE 45, Migranal) known as the Raskin protocol. (Note: this is not the most helpful if the drug you are stopping is a triptan or an alkaloid.)

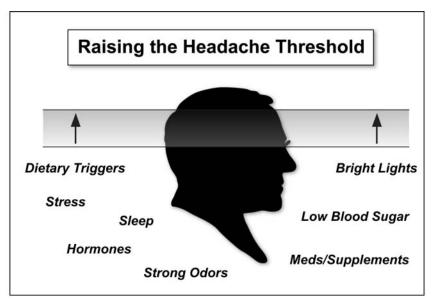
What is involved in the second step, removing the triggers causing the headaches?

Many headaches are caused not by illness but by something affecting your body. The next step is to identify what triggers headaches for you. This involves some detective work on your part. By avoiding your triggers, you raise your headache threshold (the point at which you start feeling a headache), so you won't get headaches as easily as you do now.

Headache diary

Common triggers can involve food or drink, sleep (too much or too little), hormones, stress and how you cope with it, and conditions in your environment (e.g., weather changes, strong odors, bright lights). A headache diary can help you find a pattern. The diary can be a simple chart with spaces to record when you get a headache, how long the pain lasted, where you felt the pain, how the pain felt (e.g., dull, sharp), what may have triggered it (e.g., food you ate, stress level), and how you got relief.

See Handout "Headache Diary"



Many things can affect the body and trigger headaches. A headache diary can help identify the cause/s. By avoiding your triggers, you raise your headache threshold (the point at which you start feeling a headache), so you won't get headaches as easily as you do now.



Headache elimination diet

Some people get headaches every time they eat a certain food. They quickly learn to avoid these foods to prevent headaches. It takes more effort for most people to determine if food is the culprit. Certain chemicals in food can trigger headaches. Some common ones include tyramine, sulfites, glutamine (MSG), and aspartame (nutrasweet). By eating less of the foods that contain these chemicals, you can reduce the "load" of these chemicals in your body. This might lead to fewer headaches, and sometimes headaches may go away completely.

When you follow a headache elimination diet, you avoid foods that are known to trigger headaches for some people. Stay on the diet for 3 months. Then you can slowly start eating these foods again, adding one group at a time to see if the headaches return or get worse.

• For more details see the handout, "Headache Elimination Diet."

Stress Reduction

Everyone has stress in her/his life. Stress is both good and bad. You need enough stress to keep you active, interested, and excited about your life. Too much stress, without relief, can be harmful to body, mind, and spirit. Take some time to think about the amount of stress in your life and what you usually do to cope. If you often feel tense and your muscles are taut, consider participating in an activity that can help reduce the way you react to stress. Some activities to consider include different forms of exercise, movement therapies such as yoga or tai chi, practicing a musical instrument, and mind-body approaches (see next section on therapy to prevent headaches). Try something new or do something that you know you enjoy. Even a small amount of time several days a week spent in this way can help improve the way you feel.

Biofeedback

Muscle tension may contribute to your headaches. If you want to learn how to reduce muscle tension and increase feelings of relaxation, consider biofeedback. Biofeedback uses a machine to help a person control body functions. The machine measures muscle tension, skin temperature, heart rate, and other body functions. The device's constant feedback can help teach you to gain control over these measurements. You have more control over your body than you might think. Headaches may be reduced by learning to relax through warming your hands and relaxing your muscles. You must be willing to practice biofeedback for it to be helpful. Over time, you will learn how your body feels when the muscles are relaxed, and you will not need the machine. Your health care practitioner can refer you to a health psychologist for training in biofeedback. Small machines are also available to buy for use at home. There are several on the market. One you might want to consider is the Stress Eraser (~\$299). For more information go to: http://stresseraser.com/.

What can I do to prevent future headaches (step 3 in the plan to eliminate headaches)?

Five different approaches should be done:

- continue helpful methods that you started when you were searching for triggers (e.g., the headache elimination diet and stress reducers)
- learn whether you have myofascial tension in your neck and shoulders
- try supplements known to help headaches
- start medication for other conditions related to headaches
- start one or more mind-body approaches.



Continue helpful methods you started

Allow time to learn what triggers headaches for you. Continue using a headache diary and headache elimination diet (see previous section). Continue or try new stress reducers and relaxation techniques.

Assess myofascial tension in neck and shoulders

Work with your health care practitioner to learn if there is tension in the connective tissue surrounding the muscles (myofascial tension) in your neck and shoulders. If there is, massage or other body work such as sub-occipital release and strain-counterstrain may help prevent headaches. In sub-occipital release, a therapist works on the muscles and other soft tissues at the base of the skull. The goal is to relax this area and get it to "open up." This often results in decreased tension going up into the head. Strain-counterstrain is a type of therapy that focuses on relieving pain in the muscles and surrounding connective tissue. This is done through gentle movement that shortens the involved muscles and places them in comfortable positions.

Supplements to help headaches

Work with your health care practitioner to determine which of the following supplements are most appropriate for you to try.

- Vitamin B₂ (Riboflavin). Vitamin B₂ balances energy production in the cells. Studies have found that it can decrease how often someone gets a migraine. In one study headaches decreased for 59% of the people taking riboflavin and only 15% for those taking a placebo. It has also been found that a betablocker (a type of prescription medication) is more effective for preventing migraines if riboflavin is taken with it. Four hundred mg of riboflavin a day is needed, which is a high dose. Most over-the-counter products have no more than 100 mg of riboflavin. There is little risk if taken at these doses.
- Magnesium. Magnesium helps maintain the tone of blood vessels and prevents nerve cells

from becoming overly excited, which can trigger headaches. It has proved helpful for migraines related to menstruation and for headaches in children. A study found that a high dose (600 mg/day) for 9-12 weeks reduced the frequency of migraine attacks for 41.6% study participants. These patients also reported fewer days with migraines and taking fewer drugs for relief. In contrast, only 15.8% of the people taking a placebo reduced the number of migraine headaches. As with all supplements, it may take 4-8 weeks before you can feel the greatest relief. Magnesium can cause diarrhea. Magnesium glycinate (chelated magnesium), magnesium gluconate or chloride are less likely to cause this side effect. Take 600 mg/day.

- **Feverfew.** Feverfew can reduce the frequency of migraines. When migraines do occur while taking feverfew, symptoms of pain, nausea, vomiting, and sensitivity to light and noise tend to be less severe. We do not completely understand how feverfew prevents migraines. It does not help run-ofthe-mill short-term headaches. Patients report fewer symptoms from feverfew compared to conventional drugs. It has been found to cause rebound headaches when stopped abruptly. So, when you stop taking it, taper off gradually. Feverfew can prolong blood clotting, so you should not take it with blood thinners such as warfarin. Also avoid it if you are allergic to ragweed. Take 25 mg twice/day. Look for a product containing the whole leaf in capsule form.
- ❖ There is a product called MigreLief (www.migrelief.com) that contains the above three supplements (Vitamin B₂ [Riboflavin], Magnesium and Feverfew in the form of Puracol) that can be taken at the dose of one pill twice daily. If after 30 days there is no improvement, you can increase the dose to 2 pills twice daily. Stop if there is no benefit after 6-8 weeks. The cost for 60 pills is about \$20.00.



CoEnzyme Q-10. Like vitamin B2, it is thought that CoEnzyme Q-10 works by balancing energy in the cells. In one study this supplement cut the frequency of migraines by half in 61% of the patients. After 3 months of taking 150 mg/day, the average number of days with a headache dropped from seven to three days per month. There are few side effects at doses less than 300 mg/day. Higher doses cause nausea and diarrhea. There is little risk for harm when used at appropriate doses.

CoEnzyme Q-10 may also be helpful for children. One study showed that children who had low blood levels of CoEnzyme Q-10 had fewer migraine headaches and less disability from them if they took CoEnzyme Q-10 supplements. Children in the study were given 1-3 mg/kg/day in liquid gel capsule form.

- Fish oil/olive oil. Fish oil and olive oil can reduce headaches in adolescents. They have been found to reduce how often headaches occur (87% fish oil, 78% olive oil), how long they last (74%, 70%), and how bad they are (83%, 65%). Doses used in the study: fish oil (756 mg/day EPA and 498 mg/day DHA) and olive oil (1,382 mg oleic acid). They seem to work by decreasing inflammation in the body.
 - See handout "The Inflammatory Diet" for additional ways to decrease inflammation through the diet."
- Butterbur (Petasites). A research study found that butterbur reduced the frequency of headaches by 48% when 75 mg was taken twice a day for four months. Butterbur works by preventing inflammation. It also works as an antihistamine (for allergies). A study found it worked as well as Zyrtec (a common prescription antihistamine) without causing sleepiness. Butterbur is marketed as Petadolex. Take 50 mg twice/day.

Medication for other conditions

Other clinical conditions can increase the likelihood that you will get headaches. You may want to talk to your health care provider about possible treatment if you have been diagnosed or think you might have any of the following conditions: anxiety, bipolar disorder, depression, epilepsy, fibromyalgia, insomnia, or hypertension.

Mind body approaches

Peace...

It does not mean to be in a place where there is no noise, trouble or hard work. It means to be in the midst of those things and still be calm in your heart.

-unknown-

Another step in preventing headaches is to practice some mind-body exercises. Mind-body approaches use the close connection between your mind and body to promote health. Over time practicing one or more of these approaches can help you reduce the way you react to the stress in your life.

- Mindfulness-based stress reduction
 (MBSR) programs. MBSR teaches the art
 of living in the moment. It uses meditation, a
 practice to relax and calm the mind and
 body. It has been helpful for many
 conditions. It also can result in a better
 quality of life that can increase your longterm health.
 - The Center for Mindfulness in Medicine, Health Care, and Society at the University of Massachusetts Medical School keeps a list of MBSR programs across the country. You can access it at the following website:

 www.umassmed.edu/cfm/mbsr/.
 - Patients can also call clinics and hospitals in their area for possible classes.
 - Two excellent books by Jon Kabat-Zinn are Full Catastrophe Living and Wherever You Go, There You Are.
- **Breathing exercise.** Practicing breathing from the abdomen is a great way to help



lower the headache threshold. Headaches can fade quickly if this is practiced as soon as pain is felt. Proper breathing provides your body with many benefits. It helps decrease the chance of infection in your lungs by expanding the lung's air pockets. It helps improve the circulation of blood and lymph that helps fight off infection. It helps induce relaxation that helps relieve tension. Breathing exercises such as this one should be done three times a day or whenever you find your mind dwelling on upsetting thoughts.

- See handout "Breathing Exercise."
- Guided imagery. Guided imagery is a process that uses your imagination and all five of your senses. It involves becoming relaxed and imagining a comfortable, safe place. From there you focus on a topic that interests you. Imagery gives you a window to explore your unconscious mind to help you understand an illness or symptom. The understanding you gain through this process can often bring surprising improvement in symptoms. For more information on interactive guided imagery, go to The Academy for Guided Imagery at www.academyforguidedimagery.com/.
- Self-hypnosis. Self-hypnosis is a state in which you focus your attention internally. In this focused state, you are more open to suggestion. Self-hypnosis is not a loss of control, as people often think. Instead it gives you control to change something in your body or your life.
 - <u>To learn more, see the handout "Self-Hypnosis."</u>

 Biofeedback. See the section on biofeedback earlier in this handout. Biofeedback along with training in relaxation has been found to work as well as prescription beta-blockers for headache prevention. The added benefit of biofeedback is that there are no side effects.

Therapy	% Reduction in Headaches
Biofeedback/Relaxation	56.4%
Propranolol (beta-blocker)	55.2%
Placebo	14.3%
Untreated	3.2%

Holroyd KA, Penzien DB. Pharmacological versus non-pharmacological prophylaxis of recurrent migraine headaches: a meta-analytic review of clinical trials. Pain 1990:42:1-13.

Other therapy

 Craniosacral therapy. This is a gentle, hands-on healing approach. It uses light touch on different places in the body to provide release in areas of the skull and spine that are restricted. More research is needed on this therapy. This may give some relief from headaches when nothing else does. It seems especially helpful for people with headaches from traumatic injury.



The information in this handout is for general education. It is not meant to be used by a patient alone. Please work with your health care practitioner to use the information in the best way possible to promote your health.

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