

# Headache

This information is at [http://www.ninds.nih.gov/health\\_and\\_medical/disorders/headache.htm](http://www.ninds.nih.gov/health_and_medical/disorders/headache.htm) and is provided by the National Institute of Neurological Disorders and Stroke of the National Institutes of Health of the US Government.

To answer a free questionnaire that may help to identify the cause of your headache, go to <https://www.masterdocs.com/headache/start.php>.

## What is Headache?

When a person has a headache, several areas of the head can hurt, including a network of nerves that extends over the scalp and certain nerves in the face, mouth, and throat. The muscles of the head and the blood vessels found along the surface and at the base of the brain are also sensitive to pain because they contain delicate nerve fibers. The bones of the skull and tissues of the brain itself never hurt because they lack pain-sensitive nerve fibers. The ends of these pain-sensitive nerves, called nociceptors, can be stimulated by stress, muscular tension, dilated blood vessels, and others triggers of headache. Vascular headaches (migraines are a kind of vascular headache) are thought to involve abnormal function of the brain's blood vessels or vascular system; muscle contraction headaches appear to involve the tightening or tensing of facial and neck muscles; and traction and inflammatory headaches are symptoms of other disorders, ranging from brain tumor to stroke to sinus infection.

Some types of headache are signals of more serious disorders: sudden, severe headache; headache associated with convulsions; headache accompanied by confusion or loss of consciousness; headache following a blow on the head; headache associated with pain in the eye or ear; persistent headache in a person who was previously headache free; recurring headache in children; headache associated with fever; headache that interferes with normal life. Physicians will obtain a full medical history and may order a blood test to screen for thyroid disease, anemia, or infections or x-rays to rule out a brain tumor or blood clots. CTs, MRIs, and EEGs may be recommended. An eye exam is usually performed to check for weakness in the eye muscle or unequal pupil size. Some scientists believe that fatigue, glaring or flickering lights, the weather, and certain foods may trigger migraine headaches.

## Is there any treatment?

Not all headaches require medical attention. Some result from missed meals or occasional muscle tension and are easily remedied. If the problem is not relieved by standard treatments, a headache sufferer may be referred to an internist, a neurologist, or a psychologist. Drug therapy, biofeedback training, stress reduction, and elimination of certain foods from the diet are the most common methods of preventing and controlling

migraine and other vascular headaches. Regular exercise can also reduce the frequency and severity of migraine headaches. Temporary relief can sometimes be obtained by using cold pack or by pressing on the bulging artery found in front of the ear on the painful side of the head.

## **What is the prognosis?**

About 90 percent of chronic headache patients can be helped.

## **What research is being done?**

One theory of headaches is that people who suffer from severe headache and other types of chronic pain have lower levels of endorphins than people who are generally pain free. Thermography is an experimental technique for diagnosing headache. In thermography, an infrared camera converts skin temperature into a color picture, or thermogram, with different degrees of heat appearing as different colors. Researchers have found that thermograms of headache patients show strikingly different heat patterns from those of people who never or rarely get headaches.

## **Organizations**

American Council for Headache Education

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<http://www.achenet.org>

Tel: 856-423-0258 800-255-ACHE (255-2243)

Fax: 856-423-0082

National Headache Foundation

820 N. Orleans

Suite 217

Chicago, IL 60610-3132

[info@headaches.org](mailto:info@headaches.org)

<http://www.headaches.org>

Tel: 773-388-6399 888-NHF-5552 (643-5552)

Fax: 773-525-7357

## **Related NINDS Publications and Information**

### **21st Century Prevention and Management of Migraine Headaches**

Summary of a workshop on 21st Century Prevention and Management of Migraine Headaches, held June 8-9, 2000

## **Headache: Hope Through Research**

Information booklet about headaches, including migraines.

## **Chronic Pain**

Chronic pain information page compiled by the National Institute of Neurological Disorders and Stroke (NINDS).

## **Pain: Hope Through Research**

Information booklet on pain compiled by the National Institute of Neurological Disorders and Stroke (NINDS).

## **Migraine Update**

Migraine information sheet compiled by the National Institute of Neurological Disorders and Stroke (NINDS).

## **Pseudotumor Cerebri**

Pseudotumor Cerebri (Benign Intracranial Hypertension) information sheet compiled by the National Institute of Neurological Disorders and Stroke (NINDS).

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