

Headaches

- Many scientists are abandoning the traditional notions that migraine headaches stem mainly from disturbed blood flow to the brain, and that tension headaches stem from tense muscles.
- Migraines, tension-type headaches and possibly cluster headaches may stem from neurologic and chemical disturbances within the brain-- involving some of the same neurotransmitters, that cause depression and other mood disorders.

According to the new view, migraines (and possibly cluster headaches) start when certain environmental, hormonal, or behavioral events cause nerve cells in the back of the brain to fire uncontrollably. That chaotic discharge spreads across the brain, depressing brain function and sparking the neurologic problems associated with some migraines. Moreover, that electrical flood tends to change the levels of certain brain chemicals--including the key neurotransmitter serotonin---that can dilate and painfully inflame the blood vessels in the skull; they also make the nerves extra sensitive to that pain as well as light and sound. While scientists had long assumed “tension” headaches, (the most common kind) were caused by contraction of muscles in the neck and head, a number of studies that actually recorded muscle activity during headaches found no convincing link between the two. As a result, headache specialists have now switched to the term “tension-type” headache. Many experts now look to migraines for at least part of the explanation, citing several similarities. The same events often trigger them; they can often be treated or prevented by the same drugs; both types are more common in females; and frequent sufferers from either type are more likely to experience other problems linked with serotonin abnormalities, including depression and bipolar disorder (formerly called manic-depression). Those experts suspect that the same basic neurochemical mechanism may cause both types of headache, but in susceptible individuals, that mechanism may be more likely to spark the potentially disabling symptoms usually associated with migraines: neurological disturbances, nausea, and extreme pain. (Migraines also differ from tension-type headache in a few subtler ways: They’re more likely to throb, to affect just one side of the head, and to worsen during physical activity.) In contrast, the primary symptom of tension-type headache is usually milder pain, without throbbing, on both sides of the head. But even symptoms sometimes fail to separate the two types. There’s a gray zone where the different headache types overlap or even become indistinguishable. For example, some headaches throb but have no neurological symptoms; others are only mildly painful but do produce neurologic symptoms; still others may be nauseating or throbbing but affect both sides of the head.

Danger Signs

In rare cases, headaches can indicate a serious underlying problem in the brain, for example:

- hemorrhagic stroke, caused by a ruptured blood vessel;
- cerebral aneurysm, or bulging blood vessel;
- severely inflamed artery (temporal arteritis);
- infection (meningitis).

Although headaches can also mean a brain tumor, other signs, such as seizures or partial paralysis, are usually apparent long before the headache starts. Seek prompt medical attention if you experience headaches that:

- Are sudden and severe or last longer than 24 hours.
- A headache that is getting worse over the course of days or weeks.
- Get worse whenever you bend over, strain during bowel movements, or have sex.
- Are accompanied by weakness of a limb, loss of balance, or changes in vision or speech.
- Are accompanied by nausea or vomiting, fever or disorientation.
- Are unlike any headaches you've ever had before.

Treatment

The improved understanding of the physiologic mechanism behind migraine has led to the development of drugs that target the chemicals implicated in those attacks. And the growing realization that all headaches have real neurological mechanisms has prompted headache experts to urge that patients and doctors alike take the condition more seriously and treat it more aggressively. Unfortunately, many people who suffer frequent, debilitating headaches still fail to tell their doctor, while many doctors still fail to prescribe the new treatments-- and in many cases, any effective treatment at all.

The new notion that tension-type headaches, migraines, and possibly cluster headaches are different manifestations of the same basic cause--and that many headaches are hard to classify even based on symptoms--has encouraged doctors to choose treatments based more on severity than on the supposed type. It has also encouraged them to take a more pragmatic, "whatever works" approach than they did before. Many of the same basic treatment options are appropriate for all headache sufferers, however, the overuse of any of those medications can cause dependency, in which chronic headaches persist despite the drugs and worsen when the drugs wear off.

- Massaging the neck and lower rear of the skull can sometimes help relieve mild-to-moderate headaches, perhaps by blocking the transmission of pain signals through the nerves. Ice packs applied there or to the scalp may further ease the pain, by reducing inflammation. Heat packs may also help, perhaps by soothing the overly sensitive nerves. Sitting or lying down and possibly avoiding light and noise.
- Drug choices range from over-the-counter analgesics to the powerful, relatively new "triptans" like Imitrex and Maxalt that target the nerve chemicals that cause inflammation and sensitivity. The body sometimes adapts to headache drugs, making them less effective, particularly when taken too often. To compensate, people often take more pills more often, particularly likely when people can get the drug without a prescription.. But researchers now believe that excessive pill popping can change the brain's chemistry, interfering with its own pain-fighting mechanisms and, worse yet, causing an ongoing headache on top of the original one. Moreover, over-users can become physically addicted; when the drug wears off they suffer particularly severe headaches, a symptom of withdrawal. Such "rebound" headaches--a term for both the ongoing and the withdrawal headaches--are especially likely to stem from the overuse of triptans, barbiturates, narcotics, and medications containing caffeine. To help avoid such dependency, don't take headache-treatment drugs more than two or three times per week.
- Individuals who consume lots of coffee, tea, or certain soft drinks can also become addicted to the caffeine and develop withdrawal headaches when they miss their habitual dose. (That's why heavy coffee drinkers often have a headache until their first cup of the day or on the weekend if they sleep late)
- Over-the-counter products such as *Motrin Migraine Pain*, *Advil Migraine*, and *Excedrin Migraine* are actually identical to the corresponding regular versions that don't mention headaches. The new boxes were required by the U.S. Food and Drug Administration, which wanted special boxes with special warnings that people should not take such over-the-counter pain relievers to treat migraine without consulting their physician first. While the migraine and regular products generally cost the same, you can save money by buying generic versions.
- The multitude of alternative therapies sometimes recommended for headaches, ranges from herbs and homeopathic remedies to acupuncture and massage.

Avoiding headache triggers

The electrochemical changes within the brain that cause headaches are usually precipitated by some outside event, or trigger. Each individual is particularly susceptible to certain triggers. Identifying your own culprits and then trying to avoid them can be a particularly safe, effective way to prevent headaches. Even when the triggers can't be avoided, knowing them allows you to take a timely dose of medication to abort or minimize the likely attack. The best way to identify your triggers is to keep a headache diary, when you note the time of the attack and the surrounding circumstances. Analyzing the diary with your

doctor or a headache specialist can help eliminate unlikely candidates and identify the likely ones. To help focus your trigger-spotting efforts, here's a list of the most common factors.

- **Dietary.** Alcoholic beverages, especially dark ones; food additives, such as nitrites and nitrates (common in preserved meats), monosodium glutamate (MSG, common in Chinese and prepared foods), sulfites (found in balsamic vinegar, most wines, and some dried fruit), and artificial sweetener; chocolate; cultured dairy products such as aged cheese, sour cream, pickled herring, and smoked fish; and liver.
- **Lifestyle.** Emotional stress, too much or too little sleep, changing time zones, and skipping meals.
- **Environmental.** Changes in weather; fluorescent lights or glaring or flickering lights; strong odors; polluted air; high altitudes.
- **Changes in estrogen level, due to:** Puberty, menstruation, pregnancy, menopause, estrogen replacement therapy, or birth control pills.

Prevention

In some people, frequent headaches are so unbearable-and so difficult to treat without causing rebound-that these people are better off taking daily drugs to prevent the attacks. Such medications include certain drugs better known for treating heart problems, depression, or convulsions though they're usually taken at lower doses for headaches, with generally less chance of side effects. Last year, a consortium of medical groups led by the American Academy of Neurology issued guidelines that defined who should receive such medicine: Preventive therapy is appropriate for people who say recurring headaches significantly interfere with their daily lives despite treatment of the individual attacks, as well as for people who find the side effects of such treatment unacceptable. But non-drug measures can be even more important. In particular, people should try to identify the factors that trigger the recurring attacks and, if possible, to avoid them. Headache sufferers should also consider certain other preventive steps-though they need to consider such options with care, since the supporting evidence ranges from reasonably solid to practically nonexistent.

- The recent neurology guidelines concluded that the evidence is strongest for certain stress-reduction and relaxation techniques. That makes sense, since emotional stress is a particularly common and strong trigger for headaches. Those techniques include meditation, biofeedback, progressive muscle relaxation (in which you sequentially tense and then relax the muscles in every part of your body), and cognitive-behavioral therapy (in which you learn to think realistically, without unwarranted emotion).
- According to the guidelines, very high doses of magnesium and vitamin B2 (riboflavin) may possibly help prevent headaches:.
- The evidence is weaker still for preventive treatments such as acupuncture, electrical stimulations, hypnosis, and spinal or cervical manipulation. Separate review articles have found similarly tepid support for the herb fever few, and virtually no support for homeopathic therapies.

(more on back)

Headache Diet & Diary

Headache Diet

Most headaches are not caused by food sensitivities. However, the following foods are the most likely ones to cause headaches...

- **Aged hard cheese** – brie, camembert, cheddar, parmesan, stilton vs. cottage or cream cheese
- **Alcohol** – especially wine
- **Artificial sweeteners**
- **Caffeine** – coffee, tea, cola
- **Chicken livers, pâté**
- **Chocolate**
- **Dried fruit** - figs and raisins
- **Herring**
- **MSG** – Chinese foods, and many processed foods
- **Nitrites and Nitrates** – luncheon meats, i.e., ham, and hot dogs
- **Nuts**
- **Pizza**
- **Sour Cream**
- **Sourdough bread**

Headache Diary

On a large desk top calendar, chart the following...

- **anxiety/stress level:** 1 thru 10, especially 1 – several days before onset of headache
- **food:** most recent meal, beverage, or snacks before the onset of headache
- **illness:** yes with diagnosis or leave blank
- **medications:** “out of the ordinary”
- **menses:** number of days, i.e 1-5
- **quality of sleep the night before:** a good or disturbed night’s sleep
- **severity:** 1 thru 10, 10 being most severe
- **time of day headache developed, and duration:** i.e. 8 am, 4 pm
- **weather changes:** yes or leave blank