

How common are headaches? What is the impact?

- Very common! 20% of kids from preschool through teenage report frequent or severe headaches in any given year²
- Headaches are more common in children who have family members with headaches
- Headaches can impact quality of life including school attendance, school performance, ability to play or socialize

What causes headaches?

- There are many different causes of headaches. Luckily, most headaches in children are not caused by anything serious. Most commonly, chronic headaches are migraines
- 90% of sporadic (not migraine) headaches are caused by a viral upper respiratory tract infection or sinus infection and will go away with time¹
- Head trauma or concussion
- Medication side-effects (including too frequent use of pain-relieving medication!)
- Very rare possibilities include tumors or nervous system infections (see "When to Worry")

What are the symptoms of Migraine?

- Can affect one or both sides of the head
- Frequently occurring with nausea, vomiting, dizziness, blurred vision, sensitivity to noise or light, can last 1h to more than a day
- Can be accompanied by an "aura" which are temporary symptoms which can precede headache symptoms including spots, lights, lines, or blind Department of Pediatrics

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spots in vision, difficulty moving or with balance, or tingling of a body part.

Stress, mood changes, dehydration, and lack of sufficient sleep may • contribute to headaches

What is different about headaches in children than adults?

- Young children may not be able to tell you where it hurts. They may rock, cry, or hide²
- Migraines can look like other problems in children. Sometimes, vomiting or arm pain may actually be migraines!⁵
- Attacks of dizziness in younger children without head pain can be migraines, called Benign Paroxysmal Vertigo of Childhood
- Changes in perceiving the size of body parts such that they appear bigger or smaller, may be a migraine variant called *Alice in Wonderland* Syndrome

How do I treat my child's headache?

- Try laying down in a dark, quiet room with a cool or warm compress •
- Tylenol® or Motrin® are first-line headache medications
 - If ineffective, talk to your doctor to make sure you are using the right dose
 - Know that narcotic medication (e.g. Norco[®], morphine) is NOT recommended for headaches
- See your doctor if your child frequently requires more than 2 doses per week. Using Tylenol[®] or Motrin[®] too often can cause an "overuse headache."
- Frequent headaches more than 2-3 times per week on average may be helped by a daily preventative prescription medication or supplement.
- Frequent headaches can be prevented by a daily supplement of magnesium oxide and/or riboflavin (vitamin B2). Doses are 200mg total Department of Pediatrics

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per day for children and 400mg per day for adolescents and adults, usually divided into twice-daily dosing. MigreLeif® is a combination supplement available online, which also contains a natural analgesic feverfew

• The supplements are very well-tolerated. The most common side effect of magnesium is diarrhea or stomach upset, and riboflavin can turn urine a bright-yellow color

When should I worry?

- Headaches which are accompanied by other symptoms such as seizures, or symptoms such as weakness, balance difficulties, personality changes, or other problems affecting the nervous system¹
- Headaches which awaken your child in the middle of the night or when your child awakens
- Pain which worsens when lying down, coughing, urinating, or passing a bowel movement
- Headaches which do not improve with pain medication
- Increase beyond expected in the size of your child's head
- New headaches in a young child (< 6 years)
- Neck stiffness, fever which accompany headache may be concerning for meningitis
- Very severe or unusual type of headache
- Rapid increase in frequency of headaches
- Severe headache in a child with other health conditions such as bleeding disorders, immune system problems, cancers, high blood pressure
- Continuing or worsening headache for more than a few days after a head injury or if accompanied by changes with nervous symptoms such as level of consciousness

What should I do at home?

• Headache journal: look for patterns and avoid triggers:

Common neadache myyers			
Sleep	Specific Foods	Dehydration	Caffeine
Stressful Events	Scents	Weather	Motion Sickness
Hormone Changes	Menses	Birth Control Pills	Aged Cheese
Deli Meat	Hot Dogs (Nitrates)	Chocolate	MSG ⁴

Common Headache Triggers

- Take pain medication as soon as a headache develops, as long as appropriately limited. Pain medications are most likely to work when given early in the course of a headache.
- Lay down in a quiet, cool, dark environment until symptoms start to improve
- Migraines usually won't get better with medications alone. Treatment depends on reducing triggers, reducing stress or improving children's coping of stress or pain⁵
- It is important for children not to miss school because of chronic headaches. If needed, they can go to the nurse's office for 15 minutes once daily. They may use earplugs or sunglasses if sensitive to sound or light.
- Encourage daily exercise, drinking plenty of fluids, good nutrition, and a consistent bedtime schedule with a good night's rest⁶
 - Meals: Do not skip meals, including breakfast. Carry snacks
 - Sleep: consistent bed and wake times, even on weekends, aiming for the same amount of sleep each night (goal 9-10 hours in most kids and adolescents), avoid night awakenings, restrict food and fluids a few hours prior to bedtime, read or relax prior to sleep with a set bedtime routine, avoid television in the bedroom
- Relaxation therapy
 - See a psychologist for help with progressive muscle relaxation, breathing exercises, visualization techniques, biofeedback⁵ Department of Pediatrics Headaches in Children

• If depression exists alongside headaches, treatment of depression is important to treat headaches

References

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