

# Beware the ice cream brain freeze



If you've ever experienced a brain freeze, you know how incredibly painful it is. If you haven't, then you're in for a big surprise.

For some people, eating ice cream or drinking a very cold drink quickly causes a "brain freeze." This happens as something very cold hits the upper roof of the mouth and feels like an excruciating pain traveling right into your brain. This gives the short-term sensation of your brain instantaneously freezing.

## **The Headache Connection**

Actually, your brain doesn't freeze up. According to sinus surgeon, Stacy Gray, from Massachusetts Eye and Ear Infirmary in Boston, you

are more likely having an ice cream headache. Possible explanations include:

1. Blood vessels in the nasal cavity contract and their closeness to the forehead triggers a pain similar to a migraine.
2. When tissue at the top of the mouth experiences a sudden change in temperature, nerves respond by dilating blood vessels as a means to bring warmth to the area. This rapid response causes the blood vessels to enlarge and trigger pain receptors which in turn release prostaglandins, which in turn increase pain sensitivity and inflammation.
3. Pain signals in the forehead are picked up by the trigeminal nerve (a facial nerve) causing intense facial pain linked to headaches or migraines. (see video below for more details)
4. Blood flow pressure increases within the brain. In a research study, when iced water was sipped from a straw reached the roof of the mouth, it caused an increase in blood flow. This effect expands the anterior cerebral artery, which in turn creates pressure to build up within the brain.
  - It's thought the increase change in blood flow pressure is responsible for the "brain freeze" headache-like sensation.
  - Some researchers suggest that rapid blood flow change plays a role in headaches and migraines, and studying the brain freeze effect may lead to finding better treatment options.

### **How to treat a brain freeze**

If you're getting ready to indulge in your favorite summer ice cream treats or super cold beverages, beware the brain freeze. Best not to lick your ice cream too fast or slurp your drink too quickly.

If you do feel a brain freeze coming on, move your tongue to the roof of your mouth and hold it there until you feel it pass (at least 10 seconds) or drink something warm but make sure it reaches the roof of your mouth.

How about you? Have you ever experienced a brain freeze?

Sources:

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