

# The cold truth about migraine headaches

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(HealthDay)—Early humans' ability to adapt to cold climates may have been helped by a genetic variant that's common in modern people who live in colder regions—and is linked with migraine headaches,

researchers say.

Within the last 50,000 years, humans left Africa and colonized cold areas in Asia, Europe, and other parts of the world. And this colonization could have triggered genetic adaptations that helped these early travelers respond to cold temperatures, explained study supervisor Aida Andres. She is a geneticist with the UCL Genetics Institute, in London, England.

The researchers focused on a gene called TRPM8, which codes for the only known receptor that enables [people](#) to detect and respond to cool and cold temperatures.

The investigation revealed that a genetic variant that's "upstream" from TRPM8, and may regulate it, became increasingly common in humans living in colder climates over the last 25,000 years.

For example, only 5 percent of people with Nigerian ancestry have the variant, compared to 88 percent of people with Finnish ancestry, the researchers explained.

The higher the latitude and the colder the climate, the greater the percentage of people who have the variant, according to the study published online May 3 in the journal *PLoS Genetics*.

Previous research found a strong association between this variant and migraine headaches. The highest rate of migraines is among people of European descent, who also have the highest rate of the cold-adaptive genetic [variant](#), the study authors said.

Andres and her colleagues suggested that early humans' ability to adapt to [cold temperatures](#) may have contributed, to some degree, to the differences in the prevalence of [migraine headaches](#) that exist among various human populations today.

**More information:** The American Academy of Family Physicians has more on [migraines](#).

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