

Alzheimer's linked gene may protect brain from parasites

People who carry one copy [of the *ApoE4 gene*] have a three-fold higher risk of Alzheimer's than those with none...Even if *ApoE4* carriers manage to dodge Alzheimer's, they aren't out of the woods. Compared to the general population, they tend to have higher cholesterol levels, a higher risk of heart disease, and a faster pace of mental decline during old age...Despite all these drawbacks, the *ApoE4* variant is surprisingly common.

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"It doesn't make sense," says [Ben Trumble](#), from Arizona State University. "You'd have thought that natural selection would have weeded out *ApoE4* a long time ago."

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Trumble has now found [an answer to this puzzle](#) after studying the [Tsimane](#), a group of indigenous people from the Bolivian Amazon...Among the Tsimane with the heaviest parasite burdens, ApoE4 actually *protects* against mental decline in old age...Among the parasite-infected Tsimane, it's more of a "the remembering gene."

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It's not clear why. The *ApoE* gene affects the movement of cholesterol and fatty acids through the brain. Perhaps the E4 variant keeps these nutrients away from parasites...That might, in turn, protect the brain.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Why Do Humans Still Have a Gene That Increases the Risk of Alzheimer's?](#)