

Life on Earth's roof: Ancient interspecies mating with Denisovans helps Tibetans thrive at high altitudes

[A]fter looking more closely at the EPAS1 gene from the Tibetan genomes, [Rasmus Nielsen from University of California in Berkeley] not only found it was a steep change, but it was a unique one too. It was as if Tibetans had inherited the gene from another species. And, in fact, that's exactly what had happened. [P]opulations from Papua New Guinea, Australia, and a few regions of southeast Asia had inherited between 1-6% of their genomes from Denisovans.

Between 50,000 and 30,000 years ago, some Denisovans and the ancient ancestors of Tibetan and Han Chinese people had sex, merged their genomes, shuffled the genes like a deck of cards, and produced children who would grow up to have offspring of their own.

Over the next tens of thousands of years, this gene seems to have conferred little benefit to Han Chinese people and is only found in roughly 1% of the population today. But for all those intrepid groups that moved up onto the Tibetan Plateau...it helped make every breath easier, every heartbeat less dangerous. On the Tibetan Plateau, 78% of the population has this version of EPAS1, a gene that separates them from those far below, but connects them to the past.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [How Tibetans survive life on the 'roof of the world'](#)