

## Neanderthal-human mating reintroduced lost African genes, for better and worse

When Neandertals mated with modern humans, they shared more than an intimate moment and their own DNA. They also gave back thousands of ancient African gene variants that Eurasians had lost when their ancestors swept out of Africa in small bands, perhaps 60,000 to 80,000 years ago. Restored to their lineage, this diversity may have been a genetic gift to Eurasian ancestors as they spread around the world. Today, however, some of these African variants are a burden: They seem to boost the risk of becoming addicted to nicotine and having wider waistlines.

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[The] team found the ancient African variants when they scrutinized the genomes of more than 20,000 people in the 1000 Genomes Project and Vanderbilt's BioVU data bank of electronic health records. They soon noticed a strange pattern: Stretches of chromosomes inherited from Neandertals also carried ancient alleles, or mutations, found in all the Africans they studied, including the Yoruba, Esan, and Mende peoples. The researchers found 47,261 of these single-base changes across the genomes of Europeans and 56,497 in Asians, [lead researcher Tony] Capra says. In Eurasians these alleles are only found next to Neandertal genes, suggesting all this DNA was inherited at the same time, when the ancestors of today's Eurasians mated with Neandertals roughly 50,000 years ago.

**The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post:** [Modern humans lost DNA when they left Africa – but mating with Neandertals brought some back](#)