

Description

Inuk is the name given to a 4,000-year-old man from the Saqqaq culture, a people who were the first humans to inhabit the New World Arctic. His genome was decoded in 2010 from a tuft of hair preserved in the Greenlandic permafrost, making him the first individual from an extinct population to have his complete genome sequenced. Physical trait analysis revealed dark skin, brown eyes, and thick dark hair, along with a genetic predisposition for baldness. He had shovel-shaped front teeth and dry earwax — characteristic biological markers of East Asian and Siberian populations — and specific genetic adaptations to the extreme cold of the Arctic environment.

The Saqqaq people inhabited Greenland from roughly 2500 B.C.E. until 800 B.C.E., subsisting on a high-protein diet of seal and seabird meat, obtained through sophisticated harpoon technology. They were perfectly adapted to one of the most unforgiving environments on Earth, occupying the western Greenland coast for nearly two millennia before vanishing entirely. Inuk's hair, preserved for 4,000 years in frozen ground, contained enough intact DNA to reconstruct both his individual biology and the population history of his people.

Genetically, Inuk was not an ancestor of the modern Inuit of Greenland. His paternal haplogroup Q-Z36017 and mitochondrial haplogroup D2a1 identify him as most closely related to the Chukchi and Koryak peoples of Siberia, indicating that the Saqqaq were part of a distinct and isolated migration wave that crossed from Siberia into the Americas approximately 5,400 years ago. They thrived in the Arctic for thousands of years and then disappeared, leaving no living descendants. Inuk's genome is the only biological record of this population.

Modern population	Distance
Itelmen	2.876
Koryak	3.335
Yukaghir (Tundra)	7.028
Tozhu Tuvan	7.541
Chukchi	7.773
Dolgan	9.074
Yukaghir	9.484

Modern population	Distance
Tuvan	9.837
Yakut	10.488
Evenk (Far East)	10.511

Source

Date: 789–546 BCE

Y-DNA: Q-Z36017

mtDNA: D2a1

Location: Greenland

Research: Ancient human genome sequence of an extinct Palaeo-Eskimo

Sample(s): Inuk.SG