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Stable isotopes in Lithuanian bioarcheological material

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Investigation of bioarcheological material of ancient human populations allows us to understand the subsistence behavior associated with various adaptations to the environment. Feeding habits are essential to the survival and growth of ancient populations. Stable isotope analysis is accepted tool in paleodiet (Schutkowski et al, 1999) and paleoenvironmental (Zernitskaya et al, 2014) studies. However, stable isotopes can be useful not only in investigating human feeding habits but also in describing social and cultural structure of the past populations (Le Huray and Schutkowski, 2005).
Only few stable isotope investigations have been performed before in Lithuanian region suggesting a quite uniform diet between males and females and protein intake from freshwater fish and animal protein. Previously, stable isotope analysis has only been used to study a Stone Age population however, more recently studies have been conducted on Iron Age and Late medieval samples (Jacobs et al, 2009). Anyway, there was a need for more precise examination.
Stable isotope analysis were performed on human bone collagen and apatite samples in this study. Data represented various ages (from 5-7th cent. to 18th cent.). Stable carbon and nitrogen isotope analysis on medieval populations indicated that individuals in studied sites in Lithuania were almost exclusively consuming C3 plants, C3 fed terrestrial animals, and some freshwater resources. Current investigation demonstrated social differences between elites and country people and is promising in paleodietary and daily life reconstruction.

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