Dietary reconstruction on human skeletal remains from Honshu of the Jomon period using stable isotope analysis

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The carbon and nitrogen stable isotope analysis on human skeletal remains can be a measure of diet of prehistoric populations. It is important to reconstruct dietary habits of the Jomon period in Japan for clarifying an adaptation on the environment. The purpose of this study is to evaluate dietary variation between several regions in the Honshu. The carbon and nitrogen isotope analysis was performed on human skeletal remains from eight sites of the Jomon period. The bone collagens were extracted from human skeletal samples, and these isotope ratios were measured using an elemental analyzer and mass spectrometer (EA-IRMS). The skeletal samples from Sanyo region showed higher nitrogen values, indicating much incorporation of marine resources. The samples from Kinki region showed lower carbon and nitrogen values, indicating less incorporation of marine resources and more dependence on terrestrial and freshwater resources. These data also shows dietary variation between several regions in Honshu. In order to investigate detailed change of human diet, the radiocarbon dating on these skeletal samples are needed.

Keywords: Human skeletal remains, Stable isotopes, Diet

