

Assessing strontium isotope mixing model to reveal human diet and migration of the Jomon period

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Strontium isotopes are a useful tool to reveal past human migration directly from the skeletal tissues of human. Although strontium isotope ratios of skeletal remains from Yoshigo and Inariyama shell mound of the Jomon period were revealed, the concentrations of strontium and its relationship with the isotope ratios were still unclear. This study investigated the concentrations of Sr against Ca of teeth and bones from the Yoshigo and Inariyama shell mound. The concentration of Sr were highly varied in enamels and bones, and the relationship between the concentrations and Sr isotope ratios in enamels suggested several sources of Sr. The concentrations of Sr were high and showed small variation of Sr isotope ratios, suggesting significant diagenetic alteration. The results of this study indicated that the utility of measuring strontium concentrations in addition to strontium isotope ratios is important to reveal past human diet and identify migrants in human population.

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