Paleonutrition of the rural Italian population from the Middle Ages to the Contemporary Age: isotopic analysis of some Tuscan skeletal samples

A. FORNACIARI^{1,2}, C. LUBRITTO³

¹Division of Paleopathology, Department of Translational Research on New Technologies in Medicine and Surgery, University of Pisa, Italy; ²Center of Anthropological, Paleopathological and Historical Studies of Sardinian and Mediterranean Populations, Department of Biomedical Sciences, University of Sassari, Italy; ³Department of Environmental Science, Isotope Research Center for Cultural and Environmental Heritage (CIRCE), Second University of Naples, Italy

The studies on paleodiet through stable isotope evidence of carbon (δ13C) and nitrogen (δ15N) content in bone collagen represent a line of investigation widely practiced in archaeology and anthropology. The application of this method in prehistoric American and European skeletal series, as well as in historical age groups, has provided new investigative tools to reconstruct environment, food economies, access to resources and social characterization of human groups in the past. This method was recently applied by the Division of Paleopathology of University of Pisa, in collaboration with the second University of Naples, in several samples from rural Tuscan cemeteries. These skeletal series are different in chronology, related to contexts of the Medieval (11th-14th century) and Post Medieval Ages (19th century), from the inner Apennine and the hilly Tuscany. The comparison of sites with different settling characteristics (Parish cemeteries, graveyards of Castle), as well as within a site with individuals occupying different spatial hierarchical positions (in proximity or away from the church), provides useful data to interpret the diet as social indicator. Our analysis also offers some insights to interpret correctly the meaning of results in relation to the material characteristics of burials, settlements and of the written sources. Finally isotope models allow us to advance some hypotheses on food and diet in different human groups.

References

Fornaciari G, "Tu sei quello che mangi": le economie alimentari nelle analisi isotopiche di campioni medievali e post-medievali della Toscana. Atti della LXIII settimana di studio del CISAM (Spoleto, 9-14 aprile 2015), in press.

Sutton MQ, Sobolik KD, Gardner JK. Paleonutrition. Tucson:. University of Arizona Press 2010.

Reitsema LJ, Vercellotti G. Stable Isotope evidence for sex- and statusbased variations in diet and life history at Medieval Trino Vercellese, Italy. Am J Phys Anthropol 2012;148:589-600.