
Revealing Neolithic dietary patterns in Northeastern Italy: Insights from stable isotope analysis of Arco and Riva del Garda (Trento)

*Reconstruction des habitudes alimentaires néolithiques dans le nord-est de
l'Italie : nouvelles perspectives de l'analyse des isotopes stables d'Arco et Riva del
Garda (Trente)*

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Édition électronique

URL : <https://journals.openedition.org/bmsap/14852>

DOI : 10.4000/133od

ISSN : 1777-5469

Éditeur

Société d'Anthropologie de Paris

Référence électronique

Stella Erriu, Irene Dori, Vitale Sparacello, Alessandro Riga, Elisabetta Mottes, Alex Fontana, Giorgio Manzi, Guy André et Alessandra Varalli, « Revealing Neolithic dietary patterns in Northeastern Italy: Insights from stable isotope analysis of Arco and Riva del Garda (Trento) », *Bulletins et mémoires de la Société d'Anthropologie de Paris* [En ligne], 37(S) | 2025, mis en ligne le 16 janvier 2025, consulté le 04 février 2025. URL : <http://journals.openedition.org/bmsap/14852> ; DOI : <https://doi.org/10.4000/133od>

Ce document a été généré automatiquement le 4 février 2025.



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Revealing Neolithic dietary patterns in Northeastern Italy: Insights from stable isotope analysis of Arco and Riva del Garda (Trento)

Reconstruction des habitudes alimentaires néolithiques dans le nord-est de l'Italie : nouvelles perspectives de l'analyse des isotopes stables d'Arco et Riva del Garda (Trente)

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- 1 The Square Mouthed Pottery Culture (SMP) spread during the 5th millennium BCE, replacing the earliest Neolithic in northern Italy, from Liguria in the west to Friuli in the northeast. These Neolithic groups apparently adapted to a variety of environments, but although the diet of SMP communities has been investigated in Liguria and the Po plain, little is known about their subsistence and mobility in the eastern Alpine region. This study aims to fill this gap by combining isotopic evidence with anthropological and archaeological data. Recent excavations in the Trentino area have uncovered new SMP funerary contexts in northern Italy, with 10 burials found at Riva del Garda (via Brione) and 14 at Arco (via Degasperi). Similar to other SMP sites in Liguria, individuals were buried on their left side, facing east, in stone cist graves with flexed upper and lower limbs. The graves were predominantly oriented west-east. Some burials contained rich grave goods including ornaments made of Spondylus shells, flint arrowheads, stone axes and chisels. We analysed carbon, nitrogen and sulphur isotope values of 24 humans and 10 domesticated animals and compared them with published data from other SMP sites in northern Italy. Results confirm that human diet primarily relied on C₃ foodstuffs, as in the rest of the SMP world. However, a greater contribution of freshwater fish to the diet, based on significantly higher nitrogen values, can be hypothesized at Riva del Garda, on the shores of the Garda Lake, compared to the nearby but more inland Arco settlement. Regional patterns can be discerned also when

comparing Trentino with other contemporary sites in northern Italy. This study offers new insights into the ability of SMP Neolithic group to adapt to different environments at the macro- and micro-regional level.

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