



SCI 2024
Chimica
ELEMENTI
DI FUTURO

Attidel XXVIII Congresso

Allianz MiCo – Milano Convention Centre - Fiera Milano Milano, 26-30 agosto 2024

Volume 2

ISBN:





MILANO, 26 - 30 August 2024



ORG-PO-080

Selenium-containing glycoconjugates as antioxidants

C. González, a G. Cimmino, M. De Nisco, S. Pacifico, S. Pedatella

^a Department of Chemical Sciences, University of Naples Federico II, Via Cintia 4, I–80126, Naples, Italy
 ^b Department of Environmental, Biological and Pharmaceutical Sciences and Technologies, University of Campania "Luigi Vanvitelli", Via Vivaldi 43, 81100, Caserta, Italy

^c Department of Sciences, University of Basilicata, Via dell'Ateneo Lucano 10, I-85100, Potenza, Italy claudia.gonzalezcastro@unina.it

Selenium (Se) is recognized as a trace element essential for human health; low Se levels are actually associated with several diseases.¹ Many natural occurring Se compounds show redox and biologically capacities, thus stimulating synthesis of new molecules with the aim to spread antioxidant effects in biological systems.² Most of these bioactive Se-containing molecules showed a strong therapeutic and biological relevance.³

In the framework aimed at discovering new efficacious antioxidants, the synthesis of new selenoglycoconjugates, consisting of monosaccharaides containing selenium bound to polyphenols, is of our interest with the aim to overcome the poor (poly)phenol bioavailability and to provide a synergistic antioxidant effect at once.

The results herein reported open new and long- term perspectives in the seleno-sugars like antioxidants in biological medium.⁴

References:

- [1] C. A. Collins, F. H. Fry, A. L. Holme, A. Yiakouvaki, A. Al-qenaei, C. Jacob, OBC. 2005, 1541–1546.
- [2] C.W. Nogueira, J.B.T. Rocha, Arch Toxicol. 2011, 1313-1359.
- [3] A. Dominiak, A. Wilkaniec, P. Wroczylski, A. Adamczyk, Curr. Neuropharmacol. 2016, 282–299.
- [4] L. Serpico, M. De Nisco, F. Cermola, M. Manfra, S. Pedatella, Molecules. 2021, 2541.



ISBN: