

Showcasing research from Dr. Dai Cheng's laboratory, State Key Laboratory of Food Nutrition and Safety, Tianjin University of Science & Technology, Tianjin, China.

In silico prediction aided preparation of antioxidant soybean peptides by enzymatic hydrolysis for ameliorating lead exposure-induced toxicity

Dr. Dai Cheng's research group focuses on toxic mechanisms and protection strategies of heavy metal exposure. In this research, assisted by *in silico* hydrolysis simulation and activity prediction, a novel strategy for rapid preparation of high-active antioxidant soybean peptides (ASP) was investigated. ASP showed prominent protective effects against Pb toxicity by enhancing antioxidative and Pb<sup>2+-</sup> clearance capacities. The peptides composition of ASP showed some typical structural characteristics of antioxidant peptides. This study provides a reference for the rapid preparation of high active functional peptides from food sources.



