

## **Sourdough bread obtained from a dough fortified with anthocyanin-rich flour from the purple potato cv. Vitelotte as nutraceutical sources: Its quality attributes**

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When used in optimized proportions, sourdough can improve volume, texture, flavor, nutritional value of bread and may increase the shelf life by retarding the staling process and protecting bread from mould and bacterial spoilage. In this context, to satisfy the increasing demand for products with higher nutritional value, sourdough bread was fortified with purple potatoes, an ancient cv. Vitelotte with purple pulp. Changes in nutraceutical properties were estimated analyzing anthocyanin contents, phenolic composition as well as antioxidant power. The nutritional and chemical composition, together with the sensory profile were also described, following the methods reported in literature. The preliminary results indicate that

chemical composition of sourdough bread, as well as sensorial expression might be greatly influenced by the addition of purple potato flour. Bread also retained high levels of phenols, explaining its higher antioxidant activity compared to the traditional sourdough bread and suggests that Vitelotte can represent a good source of phenols for the fortification of bread.

### **Biography**

Angela Zinnai, graduated at Liceo Scientifico Ulisse Dini in public school in Italy and she obtained her Bachelor's Degree in Agrarian Sciences at the Faculty of Agriculture in Italy, discussing an experimental thesis titled "Conservation of products fruit and vegetables in controlled atmosphere: breathing in golden delicious apples ". She obtained her Master's Degree in Food Technology at Sant'Anna School of Advanced Studies in Italy discussing a thesis titled "Bacterial heterogenization technology in malolactic fermentation". In 1992 she was the winner of a C.N.R. scholarship and has carried out activities of research into the operating unit "Innovation of products, ingredients and semi-finished products: new products of extraction, separation, fractionation and purification", which has been renewed for the year as well next. She then earned the title of Research Doctor in Agronomy and Herbaceous Cultivation discussing a thesis titled "The kinetics of oxidative degradation of oils". She also served as a Researcher at the Faculty of Agriculture of the University of Pisa, Italy.

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