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**The cuccia: A traditional soup prepared with an innovative method**Rosaria Bognanni<sup>1,2</sup>, Antonella Pagliaro<sup>1,2</sup>, Giulia Gallo Director<sup>3</sup> and Maria Grazia Melilli<sup>1</sup><sup>1</sup>CNR – ISAFOM, Italy<sup>2</sup>University of Foggia, Italy<sup>3</sup>Stazione Consorziale Sperimentale di Granicoltura per la Sicilia, Italy

**Statement of the Problem:** The cereal-based foods are a good source of energy, protein, B vitamins, and minerals. The whole grain, used for the preparation of cuccia, a typical Sicilian soup, is considered rich in vit. E and B complex but they are destroyed by cooking. A method was rated to prepare the cuccia, to preserve the vitamin content and give to the soup the adjective “functional”.

**Methodology & Theoretical Orientation:** For the preparation of cuccia, 4 varieties of durum wheat (Simeto, Arcangelo, Timilia and Russello) were used comparing the traditional cooking method (TR - boiling for 5/6 hours), and an innovative one (IN - grains scarification, germination, and cooking at 50°C for 2 hours). On soups obtained the content of biotin, niacin and  $\alpha$ -amylase activity were determined.

**Findings:** ANOVA between the raw material, the cuccia TR and cuccia IN, showed that the cooking method influences biotin and niacin content having, in the average of 4 accessions, values from 0.56 ng ml<sup>-1</sup> and 1.72 ng ml<sup>-1</sup> (raw grain) and values close to 0 (soups TR), while only a 10% decrease (soups IN) respectively for both vitamins. On the contrary, the  $\alpha$ -amylase activity was reduced with IN method. The highest vitamin content was found in soups IN made with ancient grains (Timilia and Russello).

**Conclusion & Significance:** The IN method placing the cuccia as a traditional functional food, especially if you are using ancient grains, produces soups with a high content of vitamin B complex.

**Biography**

Rosaria Bognanni is a Food Technologist with a PhD in Science and Technology (formerly Food Biotechnology) with title of dissertation: "Durum wheat: compositional, nutritional and technologic aspects for innovative food production". Since 2004, she has been working as Researcher at the Stazione Consorziale Sperimentale di Granicoltura per la Sicilia, a Governmental Institute of Agronomic Research, mainly working with modern and ancient grains. Currently, she is working at the CNR-ISAFOM to research an innovative method to produce fortified bread made with antioxidant and lowering-cholesterol activities, using typical plants of the Mediterranean basin, known for its beneficial effects on human health.

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