

Title            Stability and quality of traditional and innovative chestnut based products  
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#### Abstract

In the present paper the traditional and innovative chestnut based products available in Italian (and European) market are classified according to the technology used for their stabilization. The major issues concerning the stability and safety of these products are analysed and discussed. The major problems about the stabilization of non-traditional low sugar preserves are also discussed and some experimental trials conducted in order to optimise the sterilization process of canned chestnut in isotonic solution are reported. Nuts from three Italian chestnut biotypes (fresh, "cured", dried or roasted) immersed in isotonic syrups were submitted to canning using sterilization processes with different cooking factors. Fresh and cured nuts showed a structure breakdown upon sterilization while dried and roasted nuts retained their wholeness. Technologies aimed to the stabilization of foods and the optimisation of the texture play a key role in order to provide the consumer with safe and high quality low sugar chestnut products.