Innovating Portuguese Traditional Pastry – on the use of pasteurized egg yolk in "ovos moles"

Ovos moles are a renowned traditional Portuguese sweet that are confectioned with egg yolk, sugar and water.

In this work a safer and easier to manipulate raw material - pasteurized liquid egg yolk - is proposed to substitute the intact raw shell eggs used in traditional *ovos moles* production. Due to previous heat treatment, pasteurized liquid egg yolk presents different sensorial, nutritional and physical properties. These changes may alter the final product's characteristics. In order to develop a safer formulation, using pasteurised raw products, with minimized differences from the traditional product, a study on adding pasteurized egg white (as bulking agent) to the pasteurized liquid eggs were compared in terms of rheological parameters, colour measurements, water activity and microstructure observation. Results allow characterizing the physical properties of traditional *ovos moles* and of alternative formulations, using pasteurized egg yolk and white. A new formula, with properties identical to the traditional one, was developed.

Keywords: *ovos moles*, safety, pasteurized egg yolk, rheological properties, colour, microstructure.

Theme: Technological Innovation in the Productive Processes.

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