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 yolk was carried out. Samples made with normal

shell eggs and with 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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