Table of Contents

Editorial Board

For Authors

- Authors Declaration
- Instruction to Authors
- Guide for Authors
- Copyright Statement
- Submission

For Reviewers

- Guide for Reviewers
- Reviewers Login

Subscription

Czech J. Food Sci.

Mihulová M.,
Vejlupková M.,

Hanušová J., Štětina J., Panovská Z.:

Effect of modified whey proteins on texture and sensory quality of processed cheese

Czech J. Food Sci., 31 (2013): 553-558

One of the possibilities to enhance nutritional benefits of processed cheese is the incorporation of whey proteins. However, it is necessary to characterise the effect of their addition on its texture, rheology, and sensory quality. Processed cheese was manufactured from Edam cheese, low-fat fresh cheese, emulsifying salts, and water phase (drinking water, non-modified and modified reconstituted whey). Modification of whey was performed by enzymatic protein hydrolysis and additional removal of hydrophobic peptides. The texture of products was characterised by texture profile analysis, rheology by dynamic

by descriptive quantitative analysis. The effect of whey protein addition on the texture and rheology of cheese was dependent on protein concentration and modification. Native whey concentration in comparison with water decreased hardness and chewiness and enhanced adhesiveness of samples. Higher concentration increased hardness and chewiness and lowered adhesiveness. Modified whey compared to the native one produced softer and better chewable products. However, the sensory analysis of products did not demonstrate any differences in their hedonic quality.

Keywords:

cheesemaking; flavour; rheology; TPA; whey protein hydrolysate

[fulltext]