CARPATHIAN JOURNAL OF FOOD SCIENCE AND TECHNOLOGY

journal homepage: **http://chimie-biologie.ubm.ro/carpathian_journal/index.html**

IMPACT OF USING SOME FOOD INDUSTRY WASTES ON COMPOSITION AND QUALITY OF PROCESSED CHEESE SPREAD

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https://doi.org/10.34302/crpjfst/2024.16.2.3

Article history:
Received: January 10th, 2024
Accepted: March 12th, 2024

Keywords:
Food wastes;
Processed cheese spread;
Composition;
Quality properties.

ABSTRACT

This study investigated the effect of using some food industry wastes such as broken rice (BR), broken pasta (BP), and broken faba bean (BFB) on the physicochemical, textural, microstructure, and sensory properties of processed cheese spread (PCS). The BR, BP, and BFB were converted into flour (BRF, BPF, and BFBF, respectively) and added to processed cheese formulas at levels of 5, 10 and 15%. The results showed an increase in the values of total solids, fat, protein, ash, carbohydrates, fiber, and acidity in the processed cheese by adding the obtained flours, and these values were increased with increasing the addition level. The PCS containing BFBF had the highest values of protein, ash, and fiber compared to all the other treatments. The texture parameters (hardness, adhesiveness, cohesiveness, gumminess and chewiness) were increased by increasing the rate of addition of BRF, BPF, and BFBF compared to the control treatment. Also, it was found that the BRF and BPF improved the microstructure properties of the PCS samples. The sensory evaluation results showed that the highest degree of acceptance was with samples made using BPF at levels of 10% and 15%., while with BRF and BFBF the most acceptable values were observed with an addition level of 10% compared to the control.