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Antioxidant-rich fruit powders as potential functional ingredients in white chocolates

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Nowadays an increasing demand can be observed for foods containing functional ingredients. The objective of our research was to investigate the effect of fruit powders on the antioxidant parameters and consumer preference of white chocolates. Powders of sea buckthorn (Hippophae rhamnoides), rose hip (Rosa canina), black chokeberry (Aronia melanocarpa), acerola cherry (Malpighia emarginata) and goji berry (Lycii fructus) were involved in the experiment. Samples were created by enriching conventional white chocolates with 10% of fruit powders. Total phenolic content and antioxidant capacity of the samples were determined spectrophotometrically. Consumer preference was evaluated by using a 9-point hedonic scale. Based on our results, acerola powder is by far the most effective to improve the antioxidant potential of white chocolates, followed by rose hip and black chokeberry powders. The control sample showed the highest, while the sea buckthorn powder-enriched product showed the lowest mean overall liking score. The acerola powder-enriched product is characterized by a divisive preference. Based on text responses, a significant proportion of assessors found the fruity and/or sour taste of the product too strong, while an other large group of consumers particularly liked these charactersitics. All results considered, it is recommended to use acerola powder for product development.

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Listeria monocytogenes occurrence in Kosovo cheese samples

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The demand for the highest quality and food safety has increased, in part because food-borne diseases are becoming more and more frequent.
Pathogen contamination is one of the most concerning food safety issues. This study aims to detect the presence of pathogen Listeria monocytogenes, in cheese as a popular ready-to-eat food in Kosovo. The detection procedure is based on PCR, a DNA-based assay using specific primer sets.
A total of 46 cheese samples purchased from street vendors for three consecutive weeks during June 2020 in the open market of Prishtina, Peja and Ferizaj region were analyzed. From each sample 10 grams of cheese were processed both for the evaluation of the total number of bacteria and for the growth of L. monocytogenes using Listeria Enrichment medium. After DNA extraction using mericon Listeria spp Kit, the detection of L. monocytogenes was performed using the commercial mericon Listeria spp Kit and with the specific primer sets targeting the Lm13 gene.
All samples collected in Ferizaj and Prishtina region were negative, but two samples from the Peja region resulted positive, and this was in agreement with the total number of mesophilic bacteria that was higher in the region of Peja. The number of tested samples is relatively small due to the Covid-19 limitation of sales points, therefore, in order to obtain more comprehensive results, the number of cheese samples should be increased.