



Development of Functional High-Protein Organic Bars with the Addition of Whey Protein Concentrate and Bioactive Ingredients

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Abstract:

The study aimed to develop the high-protein bars using organic ingredients such as whey protein concentrate (WPC), prebiotic-inulin, as well as pro-health additives (dried fruits, cereals, and nuts). The physicochemical, microbiological, sensory, and consumer evaluation of ingredients and final products were made. The musli (M), pumpkin (P), and coconut (C) bars were developed including three different flavors for each bar. The novel products were found to be a good source of protein and fiber. The M and P3 bar samples contained >10 g of fiber/100 g of product. The M and C bars contained over 20 g/100 g proteins in total, while P bars contained 17.3–19.1 g/100 g of protein. The antioxidant activity of bars was proportional to the fruit content. The water activity was varied (0.63–0.74), while pH value ranged from 6.3 to 7.0. Microbiological quality of ingredients and bars were good, though in M and P bars, the presence of *Bacillus cereus* was found. The C bars found the highest marks of the overall quality. The newly developed high-protein products can be used in rational nutrition of a wide group of people who are health-conscious.



Biography:

Aleksandra Szydłowska is currently associated with Warsaw University of Life Sciences, Poland

Recent Publications:

1. Agriculture 2020, 10(9), 390; <https://doi.org/10.3390/agriculture10090390>

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