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Formulation of blackcurrant powders - The effect of the drying method on selected quality parameters

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Currently, powdered form of fruits has received a special attention as reducing water content in powders increases shelf life and extends the availability of fruits throughout the year, being a valuable source of bioactive compounds, including antioxidants. Processing involved in the production of blackcurrant powders is a multi-step and time-consuming procedure that may influence the functional properties of the products obtained. In the present study, the possible ways of formulation of blackcurrant powders were presented. A comparison of blackcurrant powders gained by selected drying methods was shown in relation to changes in the content of nutritional bioactive compounds and antioxidant capacity against the quality of dehydrated products. The application of high-temperature drying methods was performed in comparison to the freeze-drying process. The properties of powders were characterized by physical parameters providing data on their handling and storage properties. The data obtained showed the ways of retention of major bioactive compounds by modulating the processes applied for blackcurrant powders production that may be used as nutraceuticals with a broad range of applications.

Biography

Anna Michalska has completed her PhD at the age of 29 years from Institute of Animal Reproduction and Food Research of the Polish Academy of Sciences in Olsztyn (Poland) and postdoctoral studies from HESSO Valais-Wallis University of Applied Sciences and Art in Sion (Switzerland). Meanwhile, she attended 'TOP500 Innovators – science, management, commercialization' at Stanford University (CA, USA). Currently, she is working at Wroclaw University of Environmental and Life Sciences as an assistant professor. She has published more than 20 papers in journals with IF and has been serving as an associate editor of International Journal of Food Engineering (De Gruyter).

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