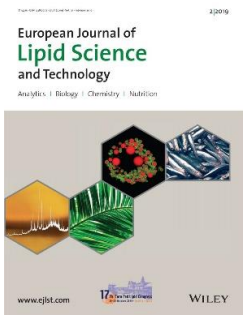

Influence of the Storage Conditions (Frozen vs. Dried) in Health-Related Lipid Indexes and Antioxidants of Bee Pollen

Estevinho M. L., Dias T., Anjos O. 2019. European Journal of lipid Science and Technology. 121, 1800393: 9 pages.

https://www.sciencedirect.com/science/article/pii/S0956713518303852

Abstract

Following harvest, bee pollen must be submitted to processing in order to maintain properties for consumers' health insurance. In this study, the changes on the lipid profile, contents of vitamin C, β-carotene and lycopene of bee pollen samples submitted to two conservation methods (freezing and drying) are evaluated. Eleven fatty acids, eight saturated, one monounsaturated, and two polyunsaturated are quantified. The PUFA/SFA ratio ranges from 1.18 to 3.95 g 100−1 g−1 and is significantly higher in the frozen extracts. On the other hand, the ratio n6:n3 (ranging between 0.36 and 0.86 g 100−1 g−1) did not differ among processing methodologies, for most of the cases. The atherogenicity (AI) and thrombogenecity (TI) indexes are similar among preservation processes and coherent with the found on other health-promoting foods. The contents of vitamin C, β-carotene and lycopene are, for all samples, significantly superior in the frozen bee pollen.

Keywords

Pollen; Frozen vs. Dried; Lipid Indexes