

Analysis of the Presence of Alkylglycerols by Gas Chromatography in Ostrich Oil

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Abstract : Ostrich oil is used as food in Brazil, and it has been the subject of scientific research because it contains essential fatty acids (Omega 3, 6, 7, and 9), which provide benefits to human health. Alkylglycerols are lipid ethers consisted of a saturated or unsaturated hydrocarbon chain joined by ether-type bonding to one of the glycerol hydroxyls. It is known that supplementation with alkylglycerols can act significantly on the functioning of immune system cells, both in pathological situations and in homeostasis. Objective: Analyze the presence of alkylglycerols in ostrich oil. Methods: The ostrich oil was bought from an industry that manufactures the product for sale as food, located in Mirante da Serra, northern Brazil. The samples were sent for analysis to the chemistry department of the Federal University of Paraná, where they were analyzed by the gas chromatography method. Results: The analysis of the ostrich oil presented alkylglycerols in area 514505154. Comparison, it is possible to observe that shark liver oil contains the area 26190196, and the difference between both is highly significant. Conclusion: The importance of alkylglycerol supplementation for the immune system is known. The analysis of the results made it possible to verify the presence of alkylglycerols in the ostrich oil, which is five times higher than in the shark liver oil, that would be the largest source food, but was surpassed by the ostrich oil until the present time. The present study emphasizes that ostrich oil can be considered a food source of alkylglycerols and may play a promising role in the immune system because it contains such substance, but further studies are needed to prove its performance in the body.

Keywords : ostrich oil, nutritional composition, alkylglycerols, food

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