

Outline

Abstract

Keywords

1. Introduction

2. Materials and methods

3. Results and discussion

4. Conclusion

Acknowledgements

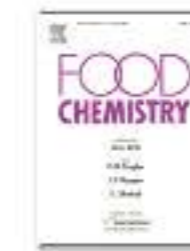
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Food Chemistry

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Fatty acid profile and stability of oil from the belly flaps of Nile perch (*Lates niloticus*)

P. Ogwok^{a, b}, J.H. Muyonga^b, M.L. Sserunjogi^b

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evaluated for fatty acid composition, contents of vitamin A, β -carotene and α -tocopherol, and oxidative stability. The oil was found to contain substantial amount of palmitic, palmitoleic, stearic, oleic, docosapentaenoic and docosahexaenoic fatty acids (FAs) and had high vitamin A content (3.94 ± 0.02 to 5.90 ± 0.02 mg/100 g of oil). Docosahexaenoic acid ($10.45 \pm 0.38\%$), docosapentaenoic acid ($5.30 \pm 0.60\%$) and eicosapentaenoic acid ($3.63 \pm 0.05\%$) were the most dominant polyunsaturated fatty acids (PUFAs). Ratios of PUFAs to saturated FAs were in the range 0.68 ± 0.02 to 0.74 ± 0.03 , while the ratio of total ω -3 FAs to total ω -6 FAs was 0.85 ± 0.02 to 0.95 ± 0.08 . The oils showed exceptional resistance to accelerated oxidation at 65°C probably because of its high content of β -carotene (2.93 ± 0.03 to 4.69 ± 0.01 mg/100 g of oil) and α -tocopherol (2.11 ± 0.03 to 11.4 ± 0.92 mg/100 g of oil). From the results, it can be concluded that Nile perch oil is a rich source of essential fatty acids and vitamin A.



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Keywords

Nile perch; Lake Victoria; Belly oil; Fatty acid profile; Oxidative stability