

Fat Uptake and Stability of Fatty Acids in Black Pomfret (*parastromateus niager*) Fish Fillet during Deep Frying and Microwave Reheating

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Fat uptake, fatty acids concentration and the stability of long chain n-3 fatty acids in Black pomfret (*parastromateus niager*) fish fillets during deep- fat frying in palm and sunflower oil, and freezing-microwave reheating were studied. After frying, the amount of fat content in increased 8.5 and 9.8 times in sunflower and palm oil fried fillets respectively. All fatty acids in fried samples were significantly changed. Saturated fatty acids, was decreased about 3 times in sunflower fried fillets, however, they did not significantly ($p < 0.05$) change during palm oil frying. Total monounsaturated fatty acids, in both oils fried samples were found to increase. Polyunsaturated fatty acids, PUFA/SFA and n-6/n-3 ratios tended to increase when raw samples fried in sunflower oil. However, they were decreased during frying in palm oil. The level of PUFA n-3 represented EPA and DHA in fried fillets decreased approximately to same amount in both oils fried samples. Among microwave oven reheating, fat contents and MUFAs in all samples slightly increased whereas the SFA, PUFA and n-3 fatty acids decreased.