

## **Effects of different final cooking methods on physico-chemical properties of breaded fish fillets.**

### **ABSTRACT**

Breaded black pomfret (*Parastromateus niager*) fillets were pre-fried for 30 sec in sunflower oil and palm olein and stored at -20°C for one week prior to the final cooking. They were finally cooked by microwave, oven and deep-fat frying. Moisture loss, fat uptake, fatty acid, texture and color of the pre-fried and all completely cooked samples were evaluated. Final cooking methods resulted in the change in the fat and fatty acid composition of the pre-fried fillets. The least changes were observed in the oven cooked samples. Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) in oven cooked samples were significantly ( $p < 0.05$ ) higher than the other cooked samples. They also had lower ratio of n-6/n-3 and lower thermal oxidation. The hardness was found highest in the final fried and lowest in the microwaved samples. Significant differences on the color of the final cooked samples were obtained among the different cooking methods.

**Keyword:** Cooking methods; Sunflower oil; Palm oil; Breaded fish fillets; Texture; Color.