IS TANK CLEANER SUITABLE TO DEVELOP A FOOD PRODUCT?

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Tank cleaner (*Pterygoplichthys* sp.) plays a supportive role in aquaria as a purifying fish. However, it has become one of the invasive species in fresh water bodies in Sri Lanka. Currently, there is no any identified measure to control this species in inland water bodies. Therefore, this study was carried out to develop a food product for human, using tank cleaner. Fish samples were obtained from *Huruluwewa* tank, *Galenbindunuwewa*, Anuradhapura. Three different processing techniques were used to prepare the fish samples *i.e.* T_1–Fish samples were cooked in boiling water and minced; T_2–*Surimi* technique (minced fish samples were washed with ice water and dehydrated); T_3–Fish samples were minced without any treatment. All other ingredients were equally added to the prepared fish samples and fish balls were prepared. The fish balls were stored under frozen condition (-18°C) for further analysis. Proximate analyses for fat, protein, fiber, moisture and ash were carried out, using the developed products. pH, Total Plate Count (TPC) and presence of *E-coli* were tested at 0, 7, 14 21 and 28 days of storage. Sensory evaluation was conducted at intervals of 0, 7, and 14 days with fried fish balls. Results revealed that, three treatments showed a significantly different sensory attributes ($p<0.05$) at day 0 and thereafter the difference was insignificant ($p>0.05$). However, the highest estimated rank sum was observed in T_2 at day 0. pH did not show any significant difference ($p>0.05$) among the treatments throughout the storage. Results of proximate analyses showed that fat, ash and fiber contents were significantly different ($p<0.05$) among treatments. Protein content was significantly lower ($p<0.05$) in T_2 and moisture content was significantly higher ($p<0.05$) in T_3, compared to others. All the developed products were negative for TPC and *E-coli* during the storage period. Therefore, tank cleaner could be effectively utilized to produce an edible food product.

Keywords: Fish ball, Sensory evaluation, *Surimi* technique, Tank cleaner