USE OF CO-PRODUCTS OF NILE TILAPIA (Oreochromis niloticus) IN THE DEVELOPMENT OF NEW PRODUCTS: EVALUATION OF ACCEPTABILITY


The waste from the industrialization of tilapia has increased in recent years because of the raise in world production of this fish. The objective of this study was to evaluate the acceptability of foods prepared with co-products of Nile tilapia fed with different diets, supplemented with omega-3 by adding flaxseed (T1) and control (T2), diet with soybean oil. The carcass and head of the fishes were boiled (120 minutes) with salt and dehydrated seasonings, resulting in the fish broth. Subsequently, the head and the carcass were crushed, dried (180°C/4h) and sieved, obtaining the fish flour. The products (fish broth and fish flour coming from T1 and T2) were evaluated by the acceptance test with 50 panelists using a hedonic scale of 9 points. The products were offered in a sequential and monadic order, and the flour was served with rice. The results were evaluated by analysis of variance (p<0.05). The overall acceptability of broth from T1 and T2 was significantly equal (5.7), ranging from indifferent and liked moderately. In the evaluation of flour, only appearance was equal for both treatments. Flavor, texture, odor and overall acceptability of the control treatment had higher acceptance (p<0.05) than the flour from T1. The overall acceptability of the flour from T1 and T2 was 5.0 and 5.5, respectively. Although the results suggest that the consumption of flour was not well accepted, it can be used as an ingredient for products such as pies and paste, adding the omega-3 fatty acid.