

Nutritional assessment of fresh, salted and soaked European catfish

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Portugal is one of the countries with the highest *per capita* seafood consumption in the world, and the higher *per capita* seafood consumption in Europe (59.9 kg/year) (1). One of the most consumed seafood products by the Portuguese population is soaked cod purchased this way 54% of the time and chilled in 38% of the cases (2). Salted and soaked cod is part of the country's tradition partly because it was accessible and cheap in the past. The European catfish (*Silurus glanis* Linnaeus, 1758) is an invasive fish species in Portugal and it is the largest-bodied European freshwater fish. Tagus River fisherman's report that more and more big fish of this species are currently being caught and the risks to native species are disease and parasite transmission, competition for benthic habitats and predation. Recent studies show that the European catfish caught in the Tagus River has high nutritional interest with low level of fat and very low levels of heavy metals (3), even though it is a lentic systems apex predator. As in the interior of Portugal is traditional the consumption of wild freshwater fish, a freshwater fish processing company (Conserveira do Interior Lda. - Bem Amanhado) is interested in knowing more about the salting processes of European catfish to produce salted catfish similar to those made with cod. The aim of this study was to evaluate the nutritional composition of fresh European catfish from the Tagus River (n=9 samples), some chemical parameters of salted catfish (n=9 samples) and the nutritional composition of soaked catfish (n=9 samples). As expected, we concluded that the catfish salting process reduces moisture (p<0.05) and increases salt and Na concentration (p<0.05). When we compare the nutritional composition of fresh European catfish with soaked catfish we verify soaked catfish has more energy, ash, protein, fat, saturated fatty acids and monounsaturated fatty acids (p<0.05) but lower polyunsaturated, n-3 and n-6 fatty acids (p<0.05).

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