Physical and sensory properties of spice-cured trout fillet

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ABSTRACT
Based on previous studies, natural additives and spices can improve fillet quality of rainbow trout (oncorhynchus mykiss). For preparing fish marinade, fillet set in curing solution. Iran is the one of big producer of rainbow trout. Hence, it is of vital importance to produce trout products with added value. Spice-cured trout could be the one of favorable product for Iranian consumers. The aim of this study was to evaluate acceptability and some physical properties of spice-cured trout fillet. Four formulations contain one of the marinades lemon juice, vinegar, Balsamic vinegar and verjuice at concentrations of 2 % applied to prepare spice-cured trout fillet. To produce spice-cured trout fillet, other additives such as cinnamon, pepper, garlic powder, turmeric and liquid smoke were equal at the same quantity. Sensory attributes and cooking loss of the spice-cured treatments evaluated after marination. Results showed the samples marinated in vinegar have the highest cooking loss (P<0.05). No significant difference between Balsamic vinegar and verjuice treatments was observed in cook loss (P>0.05). Lemon juice treatment had the lowest cooking loss (P<0.05). Sensorial analysis revealed dark color in Balsamic vinegar treatment. Furthermore from point of appearance lemon juice, vinegar and verjuice lead to bright trout fillet. Different pickle treatment had no significant effect on sensorial texture properties (P>0.05). Trout fillet in lemon juice treatment had the highest point in odor, flavor and overall acceptability in comparison with other treatments (P<0.05). The present study indicates that spice-cured trout that marinated with lemon juice, had lower cook loss and better sensory quality than other pickle treatment.

Keywords: spice-cured, trout fillet, rainbow trout, marinade