

**Title** Shelf-life extension on fillets of Atlantic Salmon (*Salmo salar*) using natural additives, superchilling and modified atmosphere packaging

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#### **Abstract**

The effect of natural additives, superchilling, and modified atmosphere packaging (MAP) on the shelf-life of Atlantic Salmon (*Salmo salar*) fillets was investigated. The variables analyzed were: gas concentration (CO<sub>2</sub>:N<sub>2</sub>), gas-to-product volume (g/p) ratio and type of natural additive. Experiments were monitored by sensory, chemical, and microbiological analyses. Natural additives did not improve salmon shelf-life. The greatest extension of shelf life was reached by a combination of superchilling and MAP. The samples with the highest CO<sub>2</sub> concentration (90%) and g/p ratio of 2.5 showed the highest shelf-life: 22 days vs. 11 days (control sample). Microbial analysis determined the ultimate shelf-life.