Changes in the flesh of cooked farmed salmon (Oncorhynchus kisutch) with previous storage in slurry ice (-1.5 °C)

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Whole, farmed Coho salmon (Oncorhynchus kisutch) were sacrificed in slurry ice (-1.5 °C) then stored in this medium for further processing after 0, 5 and 9 days. They were cooked whole and the flesh was evaluated by sensory, physical and chemical techniques to establish if significant changes had occurred as a result of the storage period. Initial samples from harvest were also evaluated for comparison. There was evidence of increases in trimethylamine, lipid hydrolysis, lipid oxidation (anisidine and thiobarbituric acid values) and interaction compound formation (fluorescence and browning measurements). The fish structure became more breakable with longer storage but there were no changes in sensory assessments for rancid and putrid odours, so that scores were less than 0.5 on a 11-point scale. From the present results, primary and secondary lipid oxidation development and further interaction compound formation appear to be the main measurable indicators of quality changes in cooked C