

Title Comparison of different analytical methods in the monitoring of the quality of modified atmosphere packaged broiler chicken cuts using principal component analysis

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Citation Journal of Food Engineering Volume 65, Issue 2, November 2004, Pages 273-280

Keyword Principal component analysis; Poultry; Quality determination; Time–temperature indicators

Abstract

The quality changes of modified atmosphere packaged broiler chicken cuts during cold storage were monitored using four different method groups: time–temperature indicators (TTIs), microbiological analyses, quality indicating metabolites and sensory evaluation. The comparison of the sensitivities of the quality indicating method groups was performed using principal component analysis (PCA). According to PCA, the microbiological analyses and the TTIs give the same result and are more critical than either the quality indicating metabolites or sensory evaluations. The group consisting of a wide variety of quality indicating metabolites was least critical.