

Title            Application of an electronic nose for quality assessment of modified atmosphere packaged poultry meat  
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### **Abstract**

The applicability of an electronic nose for the quality control of modified atmosphere (MA) packaged broiler chicken cuts was evaluated in different temperature regimes. The electronic nose results were compared with those obtained by microbiological, sensory and headspace GC analyses. The electronic nose could clearly distinguish broiler chicken packages with deteriorated quality from fresh packages either earlier than or at the same time as the sensory quality deteriorated. Concerning the microbiological quality, the counts of *Enterobacteriaceae* and hydrogen sulphide-producing bacteria were most consistent with the electronic nose results. The results indicated that the electronic nose was capable of detecting even early signals of spoilage in MA packed poultry meat.