

**Title** Consumer preferences for 'Elstar' apples at different ripeness stages treated with 1-MCP  
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### **Abstract**

1-methylcyclopropene (1-MCP) is a potentially valuable tool to improve the postharvest quality of apples during commercialisation. The sensory (organoleptic) quality of 1-MCP treated apples is strongly influenced by the at-treatment ripeness stage, storage conditions, and storage duration. This investigation evaluates the consumer preferences for riper and less-ripe 1-MCP treated 'Elstar' apples after two storage periods. The apples were commercially stored for 4 months in CA plus 8 d shelf life at 20°C (January 2007 consumer test) and 8 months CA plus 8 d shelf life (May 2007 consumer test). In January, shoppers preferred the less-ripe untreated and ripe 1-MCP treated 'Elstar' apples while less ripe 1-MCP treated and ripe untreated fruit were clearly non-preferred. But in May after 4 further storage months, the consumer preference pattern had changed and less ripe 1-MCP treated fruit were now clearly preferred while ripe untreated fruit showed very low preference scores. These consumer preference test results show that 1-MCP treated 'Elstar' can under some circumstances (e.g., short term CA storage with less ripe fruit) be non-preferred. Optimal post-harvest management after the introduction of 1-MCP now requires producers and postharvest operators to be even more diligent to match fruit ripening with storage conditions and consumer marketing windows.