Title Growth of *Listeria monocytogenes* on shredded, ready-to-eat iceberg lettuce

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Abstract

Listeria monocytogenes, when present, could be able to grow on Ready-to-Eat (RTE) iceberg lettuce. This investigation demonstrates that *L. monocytogenes* grows on packaged shredded iceberg lettuce held at 13 or 5 °C (maximum growth rate of 0.019 and 0.013 log cfu/h, respectively), with increments of 4.85 and 2.66 log cfu/g, respectively, after 14 days. No lag time was observed at 13 °C, in contrast with that at 5 °C (5.6 days). Initial atmosphere inside the packages was 4.65–6.2% CO₂, 2.1–4.3% O₂ and a balance of N₂. Five predictive models taken from literature gave conservative predictions at 13 °C, although at 5 °C they were closer. Lactic acid and psychrotrophic bacteria showed similar growth at both temperatures. In general, the MAP system reported here retarded the growth of *L. monocytogenes* in comparison with other works without initial flushing of gases.