

**Title** Inhibition effect of benzalkonium chloride treatment on growth of common food contaminating fungal species

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#### **Abstract**

The improvement of disinfection applications for hard contact surfaces in food processing is critical for the control and prevention of disease-causing and food spoilage microorganisms. The objective in this study was to determine the efficiency of the antifungal agent benzalkonium chloride on growth and/or spore germination of postharvest fruit pathogenic fungi (*Aspergillus* spp., *Penicillium* spp., and *Alternaria alternata*) in vitro. The benzalkonium chloride was found to be active against all fungal species but to a different extent. Addition of ethylenediamine-tetraacetic acid and its sodium salt increased the sensitivity of fungi to benzalkonium chloride. Thus, integrated washing and sanitizing with benzalkonium chloride or homologous surface active compounds combined with ethylenediamine-tetraacetic acid and its sodium salt is promising fungicide candidates for reducing fungal contamination of storage.

<http://www.springerlink.com/content/6306121677rkn101/fulltext.pdf>