

# Variation in cell membrane integrity and enzyme activity of the button mushroom (*Agaricus bisporus*) during storage and transportation

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## Abstract

Button mushrooms (*Agaricus bisporus*) were put under stimulated storage and transportation environments with different amounts of phase-change materials (PCM). Results showed that the addition of PCM effectively maintained a cooler environment and delayed a rise in temperature. And the addition of PCM, especially in a ratio 1:2 PCM:mushroom, had a significant effect on delaying the increase in cell membrane permeability, malondialdehyde and H<sub>2</sub>O<sub>2</sub> levels, and also delayed superoxide dismutase and catalase activity. These results suggest that PCM may be candidate in postharvest mushroom during storage and transportation.