Jariyawaranugoon, U.  
**Combined effect of honey and O2 absorber packaging on storage quality of chocolate sponge cake**  

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**Abstract**  
This study was aimed to investigate the combined effect of honey and O2 absorber on physicochemical and sensory properties of chocolate sponge cakes stored at room temperature (30±2°C) for 12 days. Four sponge cake treatments included sucrose cake packed without O2 absorber (T1), sucrose cake packed with O2 absorber (T2), honey cake packed without O2 absorber (T3) and honey cake packed with O2 absorber (T4) were examined. The pH values of sucrose and honey cakes packed without O2 absorber were significantly decreased (p<0.05) whereas those with O2 absorber were consistent throughout storage period (p>0.05). All cake treatments showed significant decrease (p<0.05) in water activity in parallel with increasing titratable acidity and firmness values (p<0.05). The cakes containing honey were lighter and more yellowish than did the sucrose cakes. As the storage time increased, all cake treatments were darker. Microbiological analysis showed that the sucrose cake packed without O2 absorber (T1) became moldy after the 6th day of storage, while other cakes exhibited negative mold throughout storage time. Also, Coliform bacteria and E. coli counts were not detected in all cakes. Sensory evaluation revealed that sucrose and honey cakes with any packaging did not significantly differ (p>0.05) in all attributes scores. After the 3rd day of storage, the cake containing honey significantly showed (p<0.05) no alteration in all sensory attributes while the decrease in flavor was evident (p<0.05) in the sucrose cake. © Maxwell Scientific Organization, 2013.

**Author Keywords**  
Chocolate sponge cake; Honey; O2 absorber packaging; Shelf life extension

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