

**Title** Effect of coating on post-drying of freeze-dried strawberry pieces  
**Author** Lue-lue Huang, Min Zhang, Wei-qiang Yan, Arun S. Mujumdar and Dong-feng Sun  
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### **Abstract**

Although the color, flavor and taste of freeze-dried (FD) strawberries pieces are very good, texture collapse after rehydration limits the application of FD strawberry pieces in liquid carriers. In this work, the effects of coating the freeze-dried pieces and the drying method after coating are investigated. The best formula for the coating solution is found to be: whey protein 10%, glycerol 3%, lactose 10%. Color of strawberry pieces can be protected to some extent by adding  $\text{Na}^+$  and  $\beta$ -Cyclodextrin ( $\beta$ -CD) in the coating solution. The best proportions of  $\text{Na}^+$  and  $\beta$ -CD were 3 mg/ml and 0.5 mg/ml, respectively. Coated freeze-dried pieces of strawberry were dried in a spouted bed. The rehydration characteristics of the coated strawberry pieces were found to be influenced by the coating time as well as the drying conditions used.