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Analysis of the Effect of Food Veils on the Preservation of Button and Oyster Mushrooms, Case Study: Zein Corn Coating

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Abstract: The inclination toward using food coatings is increasing daily, due to containing natural elements and not producing environmental pollution. Food coatings are uniform and thin layers of natural substances that cover the food product and act as a barrier against moisture, oxygen, and substances dissolved in food. Using food coatings on fruits and vegetables can delay water dissipation, losing aroma, decolorization, and improve the appearance of the product, and in general, preserve and protect the quality of fresh produce. When fruits and vegetables grow, they are equipped with a natural shield, called cuticle- a layer of wax. Washing the products, after harvest, the cuticle - this protective coating - is removed. In order to replace the cuticle, we can use an edible protective coating. This coating delays dehydration and deterioration and hence increases the life of the product while keeping its moisture. In this study, it was concluded that using food coatings, such as corn zein, carrageenan, and starch can have a substantial effect on the quantitative and qualitative preservation of food products, such as fruits, vegetables, and mushrooms.

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