Regular presentation

EDIBLE COATINGS FOR FRUITS AND VEGETABLES PRESERVATION

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World fruit and vegetable production is constantly increasing in order to meet the demands of the growing global population. However, a large proportion of the fruits and vegetables produced is susceptible to post-harvest losses. This percentage of loss is higher in developing countries, where food security is crucial. These post-harvest losses are due to mechanical, physiological, pathological and environmental factors. To address these losses, researchers are working on the development of new, innovative methods to minimize losses and maintain the nutritional value of food. The technology of edible coatings for food preservation is increasingly being used to preserve fruits and vegetables. It aims to protect food against attacks from post-harvest phytopathogenic microorganisms and environmental damage. Tomatoes, apples, oranges, strawberries, and even cut potatoes; all of these widely consumed products can be treated using edible coating technique in order to minimize losses during storage, transportation, or retail display. This will ensure sustainable local development for farmers, especially in developing countries where the cold chain is difficult to apply and storage at low temperatures for long periods is sometimes inaccessible. Our work focuses on the application of natural biopolymers, derived from by-products from the agri-food industry, for the development of edible coatings for the preservation of fruits and vegetables . The food coatings developed were evaluated for their efficacy and characterized to ensure consumer food safety. The development of these edible coatings for food preservation has a direct socio-economic impact on society, notably in terms of optimizing food availability, reducing costs and creating wealth.