G13. Modified Atmosphere Packaging of Mixed Prepared Vegetable Dish

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This study aims to design modified atmosphere packaging for mixed vegetable salad. As a mixed vegetable dish, salad consisting of 75 g of cut carrot, 55g of cut cucumber, 20g of sliced garlic and 50g of whole green pepper, was investigated for the packaging. Respiration data of all the produces and film permeability data were combined for predicting package atmosphere and designing package. Designed optimal package was experimentally tested in improving the keeping qualities of produces. It was possible to find an optimal package for the mixed prepared vegetables avoiding minimum O₂ and maximum CO₂ tolerance limits of any produce above chilling injury temperature. Pouch form package made of 27 m low density polyethylene could attain modified atmosphere of 2.0-2.1% O₂ and 5.5-5.7% CO₂, which was beneficial for all the constituent produces. The package could provide better quality retention compared with other test packages.