

Development of Tomato powder based instant soup mixture and evaluation of the acceptability of the product.

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Tomato is one of the most popular and widely grown vegetable crops in Sri Lanka. However the perishable nature of tomato limits its keeping quality for few days and leading to 54% postharvest loss. This could be minimized by developing shelf-stable food products from tomato. This study was conducted to develop a tomato powder based soup mixture in dry form. Nine treatment combination of soup were prepared incorporating tomato as a major ingredient (40, 50, 60 and 70%) with other vegetables and rice. Based on sensory evaluation test the most accepted recipe was selected and formula was developed in dry form after calculating the moisture contents of ingredients before and after drying. Acceptability of the product was tested by evaluating physico-chemical, organoleptic and microbiological properties and shelflife of the product was determined after packaging at different packaging materials under ambient conditions (34 °C ±3°C and 65 ±5% RH). Results revealed that, addition of 50% tomato, 5% pumpkin and 5% red rice with other vegetables were effective to develop tomato powder based soup mixture with good organoleptic properties. The product could be stored under ambient condition for 3 month period without quality deterioration by packaging with triple laminated aluminum foil bags.

The research findings will be benefitted for farmers who suffer from marketing problems during the glut season. Hence fresh tomato can be dehydrated and dehydrated powder could be used to prepare instant soup mixture and will be immensely benefit to value addition of fresh tomatoes. The technology will be disseminated through the training and extension activities of the institute.