

DEVELOPMENT OF CHINESE HERBAL JAM
(RED JUJUBES, LONGAN FRUITS AND LILY
BULBS) ENRICHED WITH CHRYSANTHEMUM
FLOWERS

CHRISTY PHANG MING LYE

B. Sc. (HONS.) FOOD SCIENCE AND NUTRITION
FACULTY OF APPLIED SCIENCES
UNIVERSITY COLLEGE SEDAYA INTERNATIONAL

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ABSTRACT

Chinese herbal jams which used jujubes, longan fruits and lily bulbs as the main ingredients, added with varying amount of chrysanthemum flowers (0g, 5g, 15g and 25g) was developed in the present study. The physicochemical and microbiological tests of the formulated jams were analyzed through the total soluble solids, pH, water activity and total plate count tests. The soluble solids of the jams ranged between 65-66°Brix while the pH value was from pH 3.4 to 3.5. Water activity of the jams developed was from 0.76 to 0.78. Besides, the moisture, ash and vitamin C content of the formulated jams were also determined. The addition of chrysanthemum flowers increased the ash and vitamin C content but decreases the moisture content of the jam. 11 trained assessors were used following the descriptive analysis methodology. Results from the analysis revealed that higher percentage of chrysanthemum flowers increased the firmness, adhesiveness and spreadability of the jam. In the consumer affective test, 50 untrained consumer panelists were recruited and tested on the acceptance level of two selected developed jams (i.e. jam formulation 1 and 4) against a commercial marmalade jam. Results obtained showed that the two tested formulations were much preferred by the consumers than the commercial jam. The overall acceptability of the jams was positively correlated with appearance, sourness, texture and spreadability. In conclusion, the newly developed Chinese herbal jams not only stable in shelf-life and nutritious (i.e. vitamin C), but they were also proven acceptable and have high market potential in the future.

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