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POTENTIAL OF *Aloe vera* GEL AS A STABILIZER IN DRINKING YOGHURT AS DETERMINED BY SENSORY EVALUATION

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Gelatin of animal origin is commonly used as a stabilizer in drinking yoghurt. However, those affected by social and religious taboos are reluctant to consume gelatin incorporated products. Aloe gel possesses low methoxy pectin which has the natural ability to form a gel matrix with calcium, contributing to the consistency of milk-based food products. Therefore, the potential of aloe gel for producing a gel matrix with milk calcium was investigated based on preference for consistency of drinking yoghurt.

As protocols for drinking yoghurts are not well established, processing conditions were first developed using gelatin. Dilution with 10% milk, 10% milk and water at 1:1, and 5% water were the three treatments used in establishing the processing conditions. The best processing condition was selected based on preference for consistency of the sample of drinking yoghurt, evaluated by thirty five untrained panelists using a ranking test. The sensory results on preference for consistency revealed that dilution with 5% water was the best treatment. Therefore, the amount of aloe gel needed to compensate for 5% water was determined. Addition of 10% aloe gel, the amount required for compensating for 5% moisture, and two other levels of aloe gel, 5% and 15%, were used as treatments in producing drinking yoghurts without gelatin. Preference for consistency, aroma, sweetness and overall flavor of the products were evaluated by thirty five untrained panelists using a ranking test.

Sensory data revealed that the aloe gel content significantly ($P < 0.05$) affected the preference for all the sensory attributes except sweetness. Though the 5% gel incorporated product was the most preferred based on aroma, the product containing 10% aloe gel was found to be the most preferred based on consistency and overall flavour.

As consistency is one of the key attributes required for drinking using a straw and it is possible to mask the aloe aroma during commercialization of the product by adding additives possessing a pleasing aroma such as vanilla, 10% aloe gel can be recommended as a substitute for gelatin of animal origin in producing drinking yoghurt.

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