

Development of White Dragon Fruit Yogurt

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ABSTRACT

Incorporation of white dragon fruit into yogurt, which is high dietary fiber, may produce yogurt with added nutritional benefits. A research on the development of yogurt with white dragon fruit addition was therefore conducted. Five yogurt samples were developed with varying concentrations of white dragon fruit at 0% w/w (control), 10% w/w (samples F10 and F10H), and 15% w/w (samples F15 and F15H), either with sugar addition only or with the addition of both sugar and honey. The sensory, chemical, and microbiological assessments of yogurt samples were performed after 1 day of refrigeration. The pH, titratable acidity, total solids and some of the sensory scores were greatly affected by the sweeteners used. Chemical analyses revealed a decreased titratable acidity and increased pH with the increase of white dragon fruit, especially in the yogurts with honey addition. However, the effect of white dragon fruit and honey on the viability of yogurt starters was inconsistent. Among the yogurt samples, the white dragon fruit yogurt with 15% fruit and 8% sugar additions had the highest rank preference score of 2.26 and purchase intent of 76%. Its mean appearance and colour score was 6.22; aroma, 6.42; texture, 6.36; fruit flavour, 7.36; sweetness, 6.44; and overall acceptability, 6.56. It had pH value of pH4.29; titratable acidity, 1.04g/100g; total solids, 21.21%; *S. thermophilus* count, 8.62 log CFU/ml; and *L. bulgaricus* count, 7.96 log CFU/ml. In conclusion, the incorporation of white dragon fruit was acceptable and also has market potential.