

Chapter 5 Conclusion

Some conclusions from the results of this research were as followed;

1. The best fermented milk type to made soft yogurt candy was stirred yogurt. The soft yogurt candy formula was composed of

- glucose syrup	34.8% (w/w)
- sweetened condensed milk	26.2% (w/w)
- sucrose	25.0% (w/w)
- stirred yogurt	8.8% (w/w)
- shortening	5.0% (w/w)
- lecithin	0.1% (w/w)
- salt	0.1% (w/w)

2. The application of sorbitol in the production of soft yogurt candy was not suitable. The candy was not solidified and burnt during a prolong heating.

3. Maltitol was suitable sugar alcohol to replace sucrose in the production of soft yogurt candy. The maltitol candy had desirable properties, such as it would not participate in Maillard reaction. The candy with maltitol significantly had lower sugar contents ($P \leq 0.05$), particularly reducing sugar, than the candy added with sucrose. Therefore, the candy supplemented with maltitol was significantly whiter and less saturated with red and yellow color compared to those of the candy added with sucrose.

4. The presence of honey in soft yogurt candy significantly affected the physical and chemical qualities of the final product. Even though the candy with 100% honey had the lowest a_w , the candy was significantly darker and had the highest content of reducing sugar before inversion ($P \leq 0.05$), which could be contributed to Maillard reaction. A partial substitution of sucrose with honey was considered better in reducing undesirable properties of the candy with 100% honey.

5. Different packaging materials, including aluminium foil, laminated plastic and oriented polypropylene bags, and storage temperatures of 30 and 45°C significantly affected the physical quality of soft yogurt candy, which was a_w and color property, during 3 months storage. The effects of packaging materials and storage temperatures on the chemical quality of the candy was less pronounced.

6. Storage temperatures had a higher effect on the sensory property of soft yogurt candy compared to packaging materials. After 12 weeks of storage, the candy samples stored at 30°C were valued to have higher scores in all of the sensory attributes compared to those that kept at 45°C. Changing in the sensory properties was faster during storage at 45°C.

Suggestion

1. In order to improve the sensory properties of soft yogurt candy, an investigation to reduce the amount of glucose syrup should be carried out. This syrup affected the stickiness and hardness (toughness) of the soft yogurt candy.
2. To have a better understanding about the physical and chemical quality of soft yogurt candy, a candy production using a controllable stirrer is needed to be done. The stirring process is important in affecting the water evaporation during the candy production.



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