ABSTRACT

Michael Adhimulia (01034170088)

PHYSICOCHEMICAL AND SENSORY PROPERTIES OF JELLY CANDY PREPARED WITH DIFFERENT HYDROCOLLOIDS AND PLANT EXTRACTS

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Jelly candy is a confectionary product in the candy gel group with soft and sticky properties that utilizes hydrocolloid as texture enhancer to produce chewy product. Combination of different type of gelling agent is possible to manipulate the interactions between particles or gel network in hydrocolloids that enhances overall properties of gelling properties. Addition of plant extract in jelly candies are needed to produce healthier food for disease prevention. Plant extracts may also interact with other ingredients which influence other properties of jelly candy. Thus, the effect of addition of plant extract should be observed. The general objective in this project was to describe physicochemical and sensory properties of jelly candy using different types of hydrocolloids and jelly candy added with different plant extract using different type of hydrocolloid in a critical review. Addition of plant extracts increases the total polyphenols and antioxidant activity. Some plant extracts may significantly impact hardness, gel strength, and elasticity of jelly candy while other plant extract does not significantly impact physical properties of jelly candy. Chemical properties of jelly candy with addition of plant extracts experience minor changes. Sensory acceptability of jelly candy added with plant extracts are quite well accepted by panelists. Meanwhile the addition of Nigella sativa did not give synergistic interactions with jelly candy's ingredient. Combination of hydrocolloids showed good performances by being able to exhibit some of gelatine's properties that can potentially replace gelatine as source of hydrocolloid.

Keywords : Jelly candy, plant extracts, hydrocolloids References : 82 (2004-2021)