

ABSTRACT

Cakes are sweet baked goods that are characterized by sweet flavor, soft, and dense crumb. Development of cake premix as a diversification product is necessary since it offers longer shelf life and simpler handling especially due to the hectic modern lifestyle, which lacks time for food preparation. Cake premix prepared with addition of emulsifier to create better aeration, high volume, and increasing softening crumbs. This study aims to investigate the effect of adding two different powder emulsifiers with several concentrations in the formulation of sponge and pound cake. Specific gravity of cake batter and cake quality parameters (cake density and specific volume) were evaluated. The samples used emulsifier A and emulsifier B with increasing concentration (1.5, 2, 2.5, and 3%). It was found that both emulsifiers used showed decreased specific gravity compared to the control. There was a significant difference ($p < 0.05$) in the cake density and specific volume of sponge and pound cake occurred by an addition of an emulsifier. Findings showed that sponge cake at 3% (A4) resulted in highest specific volume, while pound cake at 2.5% of emulsifiers (B7) appear to stand out with the highest cake specific volume as well as the lowest density. With results obtained from this experiment, emulsifier A (3%) is recommended to be applied in sponge cake, while emulsifier B with the dosage of 2.5% is suitable for pound cake development.

Keywords: *Cake premix, emulsifiers, specific gravity, cake density, specific volume*