

Development and quality evaluation of coconut milk-based whipping cream

Chethana R P Kavindi^a, Fathima M B Jemziya^{*, b} and G Suneth^b ^aDepartment of Biosystems Technology, South Eastern University of Sri Lanka, Oluvil, Sri Lanka ^bDepartment of Research and Development, Pelwatte Dairy Industries Ltd, Sri Lanka

*Correspondence: jemziya@seu.ac.lk



This study was carried out to develop coconut milk-based whipping cream and to determine the quality of composites. Coconut (*Cocos nucifera* L.) is an important commercial plant that gives various products. Because of the fashionable western diet, the high and exorbitant expense of animal milk, the replacement of coconut milk reduces the expense of whipping cream. The whipping cream was prepared using coconut cream and fresh cow cream with different proportions as 100% coconut cream, 100% fresh cow cream (control), 30% coconut cream + 70% fresh cow cream, 10% coconut cream + 90% fresh cow cream. Sensory evaluation was conducted for developed different formulas with commercially available whipping cream using the nine-point hedonic scale to determine color, flavor, texture, taste, odor, and overall acceptability. The whipping properties and physicochemical properties were determined, and the data were analyzed at 0.05 significant level. There was a significant difference observed among treatments. All the results of the treatments were compared with the results of the control sample, and 30% coconut cream + 70% fresh cow cream sample was selected as the best formation and had 96s whipping time, 1.43% overrun, 47% moisture, 52% total solids, and 45% fat. Eventually, the blending of coconut milk and cow milk improves the whipping properties, physicochemical properties, and sensory properties.

Keywords: coconut cream, physicochemical properties, sensory properties, whipping cream, whipping properties