

ABSTRACT

Incorporating milk into day-to-day meals may be a suitable nutrient-dense diet choice as it contains protein, calcium, vitamin D, and vitamin B12. However, milk consumption in Indonesian adults is relatively low compared to other Southeast Asian countries. This project developed instant powdered milk with three local Indonesian dessert flavors (*Es Pisang Ijo*, *Es Cendol*, and *Es Brenebon*) as an innovative way to improve that consumption. CATA, 9-point hedonic, and preference ranking tests were carried out to evaluate each sample's characteristics, evaluate the sensory attributes (aroma, taste, mouthfeel, and flavor intensity), as well as rank them based on the overall sensory preference and concept acceptance in the Indonesian market. All related sample characteristics were detected in each prototype, with the *Es Pisang Ijo* and *Es Cendol* prototypes received significantly higher sensory scores compared to the *Es Brenebon* prototype. From a total of 60 panelists, the *Es Pisang Ijo* prototype achieved first rank overall. Expanding milk powder flavor variants into local Indonesian desserts resulted in pleasant products, which may aid in satisfying consumer demand for sweet and more traditional flavors in dairy products. Still, more well-designed research is needed to reach accurate and unbiased results.

Keywords: *Es Brenebon, Es Cendol, Es Pisang Ijo, Instant powdered milk, Sensory analysis*