

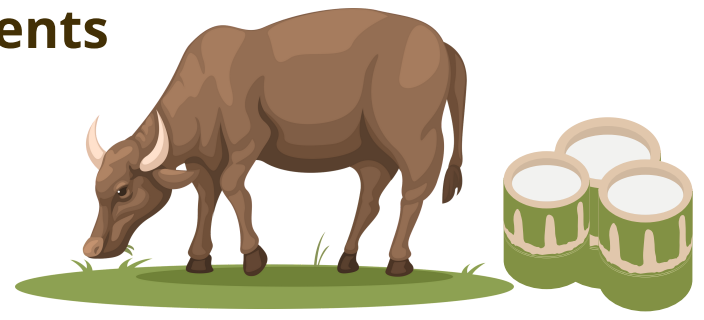


Minangkabau Yogurt, 'Dadiah', a Nutrient-Rich and Promising Probiotic Source from West Sumatra

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OBJECTIVE :

'Dadiah' or Minangkabau yogurt is an Indonesian traditional fermented buffalo milk. It was served at weddings and represents an honorable title 'Datuk' in West Sumatra during ethnic 'tradition Sumatra. This study assess the levels of macro- and micronutrients, and the presence of lactic acid bacteria in dadiah pudding.



METHODOLOGY :



Dadiah pudding was made using the original dadiah from Padang Panjang region, West Sumatra. The quantities of carbohydrates, fats, proteins, calcium, zinc, and iron were analyzed in accordance with Indonesian National Standards. Samples were subjected to inoculation on de Man, Rogosa, and Sharpe agar plates, involving serial dilution. Gram staining was conducted to confirm their morphology.

RESULTS :

The conversion of original dadiah into pudding form was shown to affect the concentration of macro- and micronutrients, total calorie content, and the presence of lactic acid bacteria.

Every 100 g dadiah pudding contained 6.49 g of carbohydrates, 23.31 g of fat, 6.12 g of protein, 6.60 mg of iron, 276.61 mg of calcium, 3.75 mg of zinc, and 6.1×10^9 CFU/ml-1 of lactic acid bacteria.

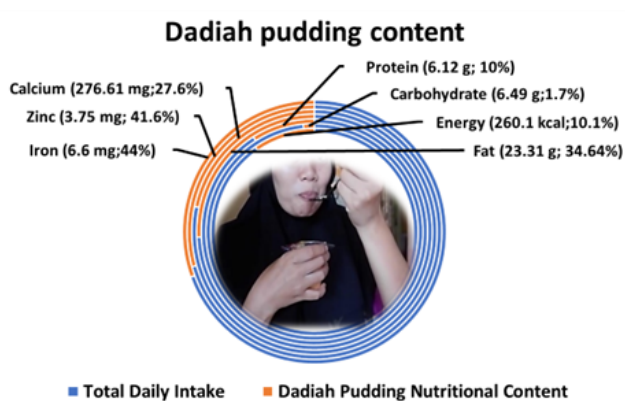


Figure 1. The dadiah pudding nutritional content and its percentage compared to the total daily intake

| Profile | Original Dadiah | Dadiah Pudding |
|--------------------|--|--|
| Macroscopic | White, smooth and creamy in texture, with a sharp sour taste and a milky aroma | A peach colour, is watery and gritty, with a mango flavour and a milk aroma. |
| Morphology | Gram (+), non-motile rod and coccus bacteria. | |
| Total LAB (CFU/ml) | 6.4×10^9 | 6.1×10^9 |

Figure 2. The presence of lactic acid bacteria in dadiah pudding compared to the original dadiah.

CONCLUSION :

Dadiah, local yogurt from West Sumatra can serve as a nutritious local food source and a potential probiotic.

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