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PHYSICOCHEMICAL CHARACTERISTICS AND ACCEPTABILITY OF COOKIES MADE WITH MOCAF AND MILLET *(Setaria italica* L*)* FLOUR

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ABSTRACT

Mocaf and millet flour are local ingredients suitable for functional cookies. Therefore, this research aimed to analyze the effect of mocaf and millet flour ratio on the physicochemical properties and acceptance of cookies. The experimental treatments included the ratio of mocaf : millet flour comprising (P1) 100% : 0%, (P2) 75% : 25%, (P3) 50% : 50%, (P4) 25% : 75%, and (P5) 0 % : 100%. Chemical characteristics such as water content, protein, fat, reducing sugar, and dietary fiber were analyzed using the AOAC method. The hardness, brittleness, and cohesiveness values were examined using a texture analyzer, while organoleptic tests were carried out on panelists. The results showed that the highest values for water content (6.25%) and fat content (29.65%) of cookies were found in P3 treatment. Protein and dietary fiber levels increased along with the percentage of millet flour. The highest value for reducing sugar content (16.88%) was discovered in treatment P3. The hardness (212.94N) and brittleness (5.19N) values were the highest in treatment P5, while cohesiveness (0.42) was in treatment P2. The preferred acceptance was cookies with a ratio of mocaf : millet flour of 50% : 50%. However, there was no effect of the ratio of mocaf : millet flour on water content (p= 0.331), fat (p= 0.174), reducing sugar (p= 0.056), and cohesiveness (p= 0.425). A significant correlation was observed between protein (p= 0.002), dietary fiber (p= 0.007), hardness (p= 0.005), brittleness (p= 0.016), and acceptance.