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# Physicochemical, nutritional and sensorial characterizations of six sorts of probiotics yoghurts produced with milk and cereals in Benin

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Fermented drinks are widely consumed in Benin and several other African regions. The main objective of the study is to evaluate the nutritional, physicochemical and sensorial quality of two categories of fermented cereal foods produced with milk and flours of maize, millet and sorghum in Benin. Both types of drinks came from two different technologies and consisted of six types of yogurt (akpan yoghurt, likpan yoghurt, abokpan yoghurt, gowe yoghurt, litin yoghurt and abotin yoghurt). The physicochemical, nutritional and sensory analyses of the various fermented foods were carried out. The results of physicochemical and nutritional analyses showed that all six different beverages (akpan yoghurt, likpan yoghurt, abokpan yoghurt, gowe yoghurt, litin yoghurt and abotin yoghurt) contained iron (3.7 to 22.8 mg/100 g), proteins (14.3 to 19.0%), total sugars (5.5 to 10.9%) and had a pH of between 4.1 and 4.2. All foods manufactured contained vitamins A, B1, B2 and C. Only litin yoghurt had vitamin K1 (30.3 mg/100 g) whereas only akpan and likpan yoghurt contained 3.3 mg/100 g and 7.1 mg/100 g of Vitamin E, respectively. Sprouted cereal (corn, millet or sorghum) foods were richer in vitamins A, B1, B2 and C, than the other types. The statistical analyses revealed the existence of significant difference ($p<0.05$) between the three sorts of yoghurt of each category. Sensory analysis revealed that all manufactured fermented beverages were generally accepted by the tasting panelists. By their nutritional composition, these different products foods could play important role in terms of health and are recommended for people of any ages, including the most vulnerable population who are often undernourished (young children, pregnant women, seniors and poor persons).

## Biography

Tchekessi C K Celestin is working as a Assistant professor at the department of Plant Biology in the University of Abomey-Calavi , Benin his research area if interest includes food microbiology & Food Technology.

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