CHEMICAL COMPOSITION, MINERAL AND VITAMIN CONTENT FROM THE CASSAVA LEAF POWDER

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The cassava has been considered as a food that is the main source of calories and carbohydrates but with a low content of vitamins. Many authors emphasizes the importance of using it in human food because it is a good and relevant protein source in the treatment of malnutrition. The aim of the present study was to analyze the chemical composition, mineral and vitamin content from cassava leaf powder. The samples were analyzed in separate batches such as: moisture, ash, lipids, proteins, carbohydrates, tannins, Ca, Cu, K, Mn, Zn, Fe, Mg, Na and P mineral, and vitamins B1, B2, B5, B6 and β-carotene. Statistical analysis was carried out with the EPI-INFO software, and the level of significance was 5%. The cassava leaf powder showed these values for mean: 6.52% (±1.10) of moisture; 6.00% (±0.02) of ash; 11.16% (±2.11) of lipid; 8.47% (±1.00) of protein; and 67.85% of carbohydrates. It was found that the cassava leaf powder got consistent values for moisture and ash, high levels of lipids and carbohydrates, and low values for protein level, when compared with the current literature. Tannin content was the most prominent (4.23mg ±0.01). Levels of minerals and vitamins in 100g were lower for calcium (633.67mg±17.81), iron (13.92mg±0.19), zinc (3.83mg±0.01), thiamine (0.07mg±0.01), riboflavin (0.06mg±0.01) and pyridoxine (0.36mg±0.00) compared to literature values. The raw material showed an insufficient composition as an alternative source of nutrients for human consumption.

Keywords: Chemical composition; minerals and vitamins; tannins; cassava leaf powder.