PHYSICO-CHEMICAL AND SENSORY ANALYSIS OF BANANA FLOUR

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The work includes the characterization of Musa species bananas. They were found to be the 2nd most consumed fruit in the world. Green bananas were specifically chosen because they are more effective in increasing the metabolic rate and burning fat. Compared to ripe bananas, green bananas contain less sugar. They can be eaten raw, cooked or in the form of flour, as a food alternative for people suffering from gluten intolerance. The flour was obtained by drying green bananas in a dehydrator at a temperature of 60 ºC for 6-10 hours. Then it was analyzed physico-chemically by determining the content of polyphenols (80,16 g/100 g), titratable acidity (0,18 °), moisture (9,5%), ash (3,4 %) and pH- flour flour (4,9). Green banana flour was found to have a significant carbohydrate content (70,84 g/100g); dietary fiber (8,5 g/100 g); proteins (4,3 g/100 g) and lipids (0,33 g/100 g). The energy value of 100 g of flour was calculated, which is 333 kcal. It has been established that green banana flour is rich in vitamins: vitamin C (22 mg/100 g), vitamin B3 (1,8 mg/100 g), vitamin B6 (0,9 g/100 g), vitamin E (0,3 mg/100 g), vitamin B2 (0,21 mg/100 g), vitamin B1 (0,1 mg/100 g), vitamin B9 (70 μg/100 g) and vitamin A (9 μg/100 g). The content of mineral elements in banana flour is very important and is represented by: K (927 mg/100 g), Mg (70 mg/100 g), P (66 mg/100 g), Ca (15 mg /100 g), Na (3 mg/100 g), Fe (0,74 mg/100 g), Zn (0,21 mg/100 g), Cu (0,22 mg/100 g), Mn (0,33 mg/100 g). All determinations obtained had very favorable results, which were included in the universal standards for green banana flour. The banana flour was also analyzed organoleptically, it had a very fine texture, a pleasant smell and did not have any impurities, it was pleasant both sensory, gustatory and olfactory.

Keywords: nutritional and energy value, carbohidrates, dietary fiber, polyphenols, vitamins