SENSORY AND PHYSICOCHEMICAL ANALYSIS OF PRODUCTS MADE FROM FLOUR YAM (Dioscorea sp.)

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The yam (Dioscorea sp.) is a tubercle rich in carbohydrates and complex B vitamins. The preparation of food products yam based to substitute the wheat is of fundamental importance for a population that suffers from celiac disease. The objective of this study was to evaluate the acceptance and intention of consumption of breads and biscuits with different concentrations of yam flour and perform physicochemical analyzes on samples of cookies and breads free of wheat flour. The yams were sliced, dried and milled to obtain the flour. Three formulations were prepared for biscuits and breads with different concentrations of yam flour. In sensory analysis, there were applied questionnaires using acceptance and purchase scale of 37 untrained provers. The results of the biscuit and bread physicochemical were, respectively: lipids, 34 and 27%, protein: 6 and 5% carbohydrates, 60 and 65%, moisture: 0.5 and 2.3%, ash: 2.3 and 3% and fiber: 2.3 and 1.9%. The biscuit that showed the highest acceptance was the preparation with 50% of yam flour, which also showed the highest rate in the test of intent of consumption (89%) and the bread the highest average was achieved with the formulation with 25% yam flour. The intent of consumption for the bread that used only yam flour was low (35%), but the other two formulations of bread reached levels above 85%. It can be seen that the partial inclusion of yam in preparations such as cookies and breads is feasible for replacement the wheat flour.