The use of functional components, in particular fructooligosaccharides (FOS) contained in yacon can contribute both to the promotion of health as the prevention of chronic diseases. The use of fresh yacon is due to the fact that preparations with this tuber can be prepared in a simple level, no requiring special equipment for such activity. The aim of this study was to evaluate physical characteristics of biscuits made with fresh yacon in order to obtain an easy preparation recipe. Two formulations were prepared: light biscuits (with sweetener) and regular biscuits (with sugar), besides their respectively control formulations. Other ingredients were used: margarine, maize starch, rice cream, milk powder and milk 2 % fat. The physical analyses were: yield, diameter, thickness and expansion factor (AACC, 1995). It was observed that both biscuits have had a weight reduction (0.6 g) and an increase of the diameter (1.0 mm) after baking. The light biscuits have had an increase of the diameter of 0.5 mm and the regular biscuits of 2.4 mm. The physical characteristics as weight, diameter and thickness, after baking, have had a decrease in their values, for the control formulations. The expansion factor was higher to the light biscuits when compared with the regular one (1.4 % and 0.5 %, respectively), however the control formulations presented higher values. Therefore, with no damage to the physical characteristics, the using of fresh yacon to make biscuits is feasible and recommended as an alternative source of enriched and healthy food.

Keywords: Yacon, fructooligosaccharides, biscuits.