

Product development on the basis of cereal and leguminous flours to coeliac disease in children between 6-24 months; I: Formulation and acceptability

Desarrollo de producto sobre la base de harinas de cereales y leguminosa para niños celíacos entre 6 y 24

Mezquita Cerezal, P.

Gatica Urtuvia, V.

Quintanilla Ramírez, V.

Palacios Romero, N.

Zavala Arcos, R.

The revaluation of the Andean cultivations, quinoa (*Chenopodium quinoa* Willd) and lupin (*Lupinus albus* L.), to be used in nutritional mixtures, with traditional cereals like corn (*Zea mays* L.) and rice (*Oryza sativa* L.), originate mixtures without gluten which constitute a good alternative for the nutrition of children under 24 months that suffer from celiac disease, since they improve the quality of the protein, by essential amino acids compensation, and also impacts in the product's diversification strategy. In the present work, the percentage composition of each flour in the mixture was determined by means of Linear Programming by means of the Solver form from the Excel spreadsheet. Prolamines were determined in the quinoa and lupin flours by the ELISA test and the HPLC technique was used in both products obtained called "sweet mix" and "dessert mix", to define the quantity of amino acids with the purpose of providing around the 15% of the proteins required in the day. The flour mix