Nutritional supplement of high protein content for 2-5 year old children. Development of the formulation and acceptability Suplemento alimenticio de alto contenido proteico para niños de 2 - 5 años. Desarrollo de la formulación y aceptabilidad

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Cereal-legume combinations offer proteins of high quality due to the compensation of the existing essential amino acids. Quinua (Chenopodium quinua Willd) and lupin (Lupinus albus L.) were selected with the aim of designing a formulation of high protein content with additives and chicken flavoring in order to obtain a physical powder mixture that, when added to water, resulted in a baby food type cream destined for 2-5 year old children, whose amino acid content would fulfill 35-40% of the daily requirement. Linear programming was applied for the formulation. In the selected formulation, the nutrients were determined through proximal analysis, and some physical and microbiological tests were performed. Sensorial tests by attributes in semi-trained adults were carried out and a 5 points hedonic face scale was applied to preschool children from three day care centers at Antofagasta, Chile. Protein content of the lupin flour (49.77g×100g) surpassed in 4.6 times that of quinua (10.82g×100g