A better knowledge of the amino acid composition of foods commonly consumed in different regions is essential to calculate their scores and, therefore, to predict their protein quality. This paper presents the amino acid composition, amino acid score and in vitro protein digestibility of fifteen foods that are commonly consumed in Northwest Mexico. The foods were prepared by the traditional methods and were analyzed by reverse-phase HPLC. The chemical score for each food was determined using the recommendations for children of 1-2 years of age, and the digestibility was evaluated using a multienzyme technique. Lysine was the limiting amino acid in cereal-based products (scores 15 to 54), and methionine and cysteine were limiting in legume products (scores 41 to 47), boiled beef (score = 75) and hamburger (score = 82). The method of preparation had an effect on the content of certain amino acids, some of them increased and others decreased their content. Meat products and regional cheese provided a high amino acid score (scores 67 to 91) and digestibility (80.7 to 87.8%). Bologna, a processed meat product, had a lower digestibility (75.4%). Data on the amino acid composition of foods commonly consumed in Mexico can be used to provide valuable information on food analysis and protein quality, and to contribute to nutrition and health research and health programs.

Keywords