

IN VITRO DIGESTIBILITY AND DETECTION OF ANTINUTRITIONAL FACTORS
IN PROTEINS FROM LINSEED (*LINUM USITATISSIMUM*)

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Linseed is an important oilseed consumed raw as nutritional supplement due its functional properties. Although seeds represent rich sources of proteins, their nutritional value is not only determined by amino acid composition but also by their digestibility and presence of antinutritional factors. Protein fractions from linseed were isolated and quantified, and the albumins were assayed for the presence of enzyme inhibitors. Globulins, major protein fraction, were used in *in vitro* digestibility assays by mammalian digestive proteinases to determine its nutritional value. Native globulins showed, by SDS-PAGE, low susceptibility to trypsin and chymotrypsin in different incubation times (5',10',15' and 30'), however native globulins were more susceptible to pancreatin since the first incubation time. Cooking treatment of globulins for 5 and 15 minutes under 100°C improved considerably its digestibility by trypsin and pancreatin with gradual disappearance of digest bands with the incubation time. The trypsin inhibition assay with albumins presented 5.250UI/g of seed flour; inhibition tests for chymotrypsin, elastase and salivary α -amylase were less expressive, with 1.800UI, 960UI and 2.190UI/g of seed flour, respectively. Since proteins from linseed are consumed by population in raw conditions is important to indicate processing methods to improve its utilization as an alternative food.

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