

Abstract of Presentation

Note: This paper should be typed in “Times New Roman” of 12pt.

Name (Underline the family name)

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Presentation Title(Should be no more than 20 words):

Bioactive peptides from vegetable proteins

Abstract :

During enzymatic hydrolysis *in vivo* or *in vitro* dietary protein peptides are released from encrypted sequences, which have biological activity. These bioactive peptides, after crossing the intestinal epithelium and enter the circulatory system, can exert a wide range of activities such as antimicrobial, antioxidant, antithrombotic, antihypertensive and immunomodulatory, etc.

At the presente the most important source of bioactive peptides coming from milk protein. However, there is abundant information about the presence of bioactive peptides from plant proteins such as soy, wheat, corn, rice, barley, wheat forage and sunflower, etc.

Amaranth is a pseudocereal which has several advantages both from the agronomic point of view and from the nutritional point of view, when compared with other plants such as cereals. Several authors have described the presence in the amaranth grain of phytochemicals that can have beneficial physiological effects in humans, such as lecithin, polyphenols, saponins, trypsin inhibitors and phytates. There is also evidence that proteins from the grain show a hypocholesterolemic effect when fed to rats and rabbits.

In our laboratory we have found by *in vitro* and *in vivo* determinations that amaranth protein isolates present antiproliferative, antioxidant and anti-hypertensive activities and hydrolysates obtained by enzymatic treatment show an increase in such activities. During the presentation will discuss the progress made in each case. Also will present a summary of the research underway in Argentina in the area of functional foods as well as possible areas of cooperation.