

ANTIOXIDANT ACTIVITY AND SOLUBILITY OF GREEN MUSSEL (*Perna viridis*) HYDROLYSATE AS INFLUENCED BY DEGREE OF HYDROLYSIS

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ABSTRACT

ANTIOXIDANT ACTIVITY AND SOLUBILITY OF GREEN MUSSEL (*Perna viridis*) HYDROLYSATES AS INFLUENCED BY DEGREE OF HYDROLYSIS.

Antioxidative activity and functional properties of protein hydrolysates from green mussel (*Perna viridis*), hydrolyzed by Alcalase 2.4L with different hydrolysis conditions (pH7, ES 5% and pH 9, ES 3%) were investigated. As the degree of hydrolysis (DH) increased, DPPH radicals scavenging activity of Alcalase decreased ($p < 0.05$). Reducing power was increased with increased of DH. Hydrolysis by different conditions showed increased solubility at different concentration of NaCl (0 to 6M) with increased DH. The functionalities of protein hydrolysate depended on the condition and the enzyme used. The results revealed that antioxidative and solubility of protein hydrolysates from green mussel (*Perna viridis*), were determined by the DH and by the type of enzyme employed. Hydrolysates from green mussel (*Perna viridis*), have a wide range of potential applications, as nitrogen fortification agents in beverages, as predigested ingredients enteral/parental nutrition for general/specific population segments It can also be used in food systems as natural additive possessing antioxidant.