

***Analisis of The Physicochemical Properties of Local Edamame Flour (Glycine max L.)  
as a Raw Material for Functional Food***

**Fitriana Aulia Rahma**  
Clinical Nutrition Program  
Health Department

***ABSTRACT***

*Edamame is a legume commodity that contains high nutritional value and has potential to be developed as a functional food ingredient. Processing edamame into flour can extend its shelf life and broaden its utilization in various food products. This study aimed to determine the chemical and physical characteristics of local edamame flour from different varieties. This research used a descriptive method with a comparative quantitative approach. The samples used were edamame flour from Biomax 1 and Biomax 2 varieties. The chemical analyses included moisture content, ash content, protein, fat, carbohydrate, fiber, amylose, amylopectin, and phytic acid. Physical analyses included gelatinization viscosity, bulk density, color, and syneresis. The data obtained were analyzed descriptively to compare the characteristics of each edamame flour variety. The results showed that edamame flour from Biomax 1 and Biomax 2 varieties had relatively good chemical and physical characteristics. Both varieties contained relatively high macronutrients. In addition, edamame flour contains amylose and amylopectin which play important roles in determining starch functional properties. Physical characteristics such as gelatinization temperature, bulk density, color, and syneresis indicate that edamame flour has good potential to be utilized as a raw material for processed food products. In conclusion, edamame flour from Biomax 1 and Biomax 2 varieties has good physicochemical characteristics and potential to be used as a functional food ingredient.*

***Keywords:*** *edamame flour, physicochemical properties, functional food, edamame varieties.*