PENGARUH METODE PEMASAKAN TERHADAP KANDUNGAN NUTRISI (PROKSIMAT) TEMPE KORO BENGUK DAN TEMPE KECAMBAH KORO BENGUK *(Mucuna Pruriens)*

SKRIPSI

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LEMBAR HAK CIPTA

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Sebuah skripsi yang diajukan untuk memenuhi salah satu syarat memperoleh gelar Sarjana Sains pada Fakultas Pendidikan Matematika dan Ilmu Pengetahuan Alam

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ABSTRAK

Salah satu bahan pangan lokal yang berpotensi sebagai pangan fungsional adalah kacang koro benguk (*Mucuna pruriens*). Kacang koro benguk dapat difermentasi dengan *Rhizopus oligosporus* menjadi tempe koro benguk, atau kombinasi antara fermentasi dan germinasi menjadi tempe kecambah koro benguk. Kandungan gizi tempe dapat meningkat melalui proses fermentasi dan germinasi, namun dengan adanya pemasakan dapat berpengaruh terhadap nilai gizinya. Penelitian ini bertujuan untuk mengetahui pengaruh metode pemasakan terhadap kandungan nutrisi tempe kacang dan kecambah koro benguk. Sampel tempe yang digunakan pada penelitian ini dihasilkan dari proses fermentasi kacang koro benguk selama 48 jam dan juga dari kecambah koro benguk yang digerminasi selama 48 jam sebelum difermentasi selama 48 jam. Tempe yang dihasilkan kemudian dimasak menggunakan empat metode berbeda, yaitu penggorengan, perebusan, pengukusan, dan pemanggangan. Analisis kandungan nutrisi pada tempe koro benguk dan tempe kecambah koro benguk dilakukan melalui uji proksimat yang meliputi kadar karbohidrat, lemak, protein, air, dan abu. Hasil penelitian menunjukkan bahwa metode pemasakan berpengaruh terhadap kandungan nutrisi tempe. Penggorengan meningkatkan kadar lemak secara signifikan sebesar 21,16% dan menurunkan kadar air menjadi 35,61%. Perebusan menghasilkan kadar air tertinggi sebesar 74,41% dan menurunkan kadar protein hingga 8,16%. Pengukusan mempertahankan kadar protein relatif stabil sebesar 13,42%, sedangkan pemanggangan menghasilkan kadar protein tertinggi sebesar 17,96%. Sementara itu, proses germinasi terbukti memberikan pengaruh nyata terhadap kandungan nutrisi (proksimat) tempe koro benguk setelah melalui berbagai metode pemasakan.

Kata Kunci: fermentasi; germinasi; nilai gizi; pangan lokal; stunting

ABSTRACT

One of the local food ingredients that has the potential as a functional food is the jack bean (Mucuna pruriens). Jack bean can be fermented with Rhizopus oligosporus to become jack bean tempeh, or a combination of fermentation and germination to become jack bean sprout tempeh. The nutritional content of tempeh can be increased through the fermentation and germination processes, but cooking can affect its nutritional value. This study aims to determine the effect of cooking methods on the nutritional content of bean and jack bean sprout tempeh. The tempeh samples used in this study were produced from the fermentation process of jack bean for 48 hours and also from jack bean sprouts that were germinated for 48 hours before being fermented for 48 hours. The resulting tempeh was then cooked using four different methods, namely frying, boiling, steaming, and baking. Analysis of the nutritional content of bean sprout tempeh and bean sprout tempeh was conducted through proximate tests covering carbohydrate, fat, protein, air, and ash content. The results showed that cooking methods affected the nutritional content of tempeh. Frying significantly increased the fat content by 21.16% and reduced the water content to 35.61%. Boiling produced the highest air content of 74.41% and reduced the protein content to 8.16%. Steaming maintained a relatively stable protein content of 13.42%, while baking produced the highest protein content of 17.96%. Meanwhile, the germination process was proven to have a significant effect on the nutritional content (proximate) of bean sprout tempeh after going through various cooking methods.

Keywords*: fermentation; germination; nutritional value; local food; stunting*

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