

ABSTRAK

ELLA PITALOKA. **Pengaruh Penambahan Tepung Tempe Kedelai Hitam Terhadap Kadar Protein, Aktivitas Antioksidan, dan Sifat Sensori Cookies.** Dibimbing oleh NURRAHMAN dan AGUS SUYANTO.

Cookies adalah kue kering yang rasanya manis dan bentuknya kecil-kecil tergolong makanan yang dipanggang. Tempe mengandung komponen antioksidan seperti isoflavon, vitamin E dan β -karoten. Pada dasarnya pembuatan *cookies* menggunakan tepung terigu rendah protein sehingga dapat diperkaya dengan tepung tempe kedelai hitam yang tinggi protein dibandingkan tepung terigu namun penambahan dapat mempengaruhi sifat sensoris. Penelitian ini bertujuan untuk mendapatkan produk *cookies* tempe kedelai hitam yang mengandung antioksidan dan tinggi protein dengan daya terima optimum dari formulasi tempe kedelai hitam. Penelitian ini menggunakan Rancangan Acak Lengkap satu faktor, dengan enam perlakuan rasio tepung terigu : tepung tempe kedelai hitam 0%, 10%, 20%, 30%, 40%, 50% selanjutnya dianalisa kadar protein, aktivitas antioksidan dan sifat sensoris *cookies*. Hasil penelitian menunjukkan ada pengaruh yang signifikan terhadap kadar protein dan aktivitas antioksidan. Hasil kadar protein tertinggi pada formulasi 50 % yaitu 18,328 % dan hasil aktivitas antioksidan tertinggi juga pada formulasi 50% yaitu 8,4 %RSA. Uji sensoris menghasilkan *cookies* dengan warna, rasa, tekstur dan aroma yang berbeda nyata. *Cookies* dengan formulasi 50 % masih bisa diterima oleh panelis. Formulasi 50 % mengandung kadar protein 18,328 % dan aktivitas antioksidan 8,4 % RSA.

Kata kunci : *cookies*, tempe kedelai hitam, kadar protein, aktivitas antioksidan, dan sifat sensoris



ABSTRACT

ELLA PITALOKA. *Effect of Addition of Black Soybean Flour to Protein Levels, Antioxidant Activity, and Properties of Sensory Cookies. Supervised by NURRAHMAN and AGUS SUYANTO.*

Cookies are pastries that taste sweet and are small in shape and are classified as baked foods. Tempe contains antioxidant components such as isoflavones, vitamin E and β -carotene. Basically making cookies using low protein flour can be enriched with black soybean tempeh flour which is high in protein compared to wheat flour but can affect sensory properties. This study aims to obtain black soybean tempe products containing antioxidants and high protein with optimal power from the formulation of black soybean tempeh. This study uses a completely randomized design of one factor, with a ratio of six times flour: black soybean tempeh flour 0%, 10%, 20%, 30%, 40%, 50% then analyzed the protein content, antioxidant activity and sensory properties of cookies. The results showed that there was a significant effect on protein content and antioxidant activity. The highest protein content in 50 % formulation was 18,328% and the highest antioxidant activity was also in 50 % formulation were 8,4% RSA. Sensory testing produces cookies with color, taste, texture and aroma that are significantly different. Cookies with 50 % formulations can still be accepted by panelists. The 50 % formulation contains protein content of 18,328 % and antioxidant activity 8,4% RSA.

Keywords: cookies, black soybean, protein content, antioxidant activity, and sensory properties.

