

## ABSTRAK

Ketergantungan masyarakat terhadap konsumsi gandum masih sangat tinggi. Padahal, negara Indonesia mempunyai kekayaan alam yang melimpah terutama pada jenis tanaman pangan lokal umbi-umbian. Konsumsi umbi-umbian tidak hanya dapat mengatasi permasalahan impor terigu, tetapi juga dapat memenuhi kebutuhan zat gizi masyarakat dan memiliki nilai fungsional yang bermanfaat untuk menjaga kesehatan. Khususnya serat pangan dan antioksidan. Tingkat pemanfaatan modifikasi *Autoclaving-Cooling Cycle* pun sangat rendah, padahal modifikasi ini memberikan keuntungan dapat meningkatkan kadar pati resisten dan menurunkan daya cerna pati. Tujuan dari penelitian ini adalah untuk mempelajari pengaruh jenis dan konsentrasi tepung dimodifikasi *Autoclaving-Cooling Cycle* terhadap brownies ubi jalar ungu.

Penelitian yang dilakukan meliputi dua tahap yaitu penelitian pendahuluan yang bertujuan untuk preparasi dan analisis bahan baku. Selanjutnya, tahap kedua mempelajari adanya pengaruh jenis dan konsentrasi tepung dimodifikasi terhadap brownies ubi jalar ungu.

Berdasarkan hasil analisis, menggunakan analisis ragam ANOVA (*Analysis Of Variance*) didapatkan bahwa jenis dan konsentrasi tepung dimodifikasi tidak berpengaruh nyata terhadap warna, *overall*, kadar air, kekerasan, kelengketan dan kohesivitas brownies ubi jalar ungu. Sedangkan untuk aroma, rasa, dan kadar pati berpengaruh nyata. Penentuan sampel terbaik dilakukan menggunakan metode skoring. Hasil menunjukkan bahwa sampel a2b2 yaitu penambahan tepung ubi jalar dimodifikasi sebanyak 6% memberikan skor tertinggi diantara sampel lainnya. Sampel terbaik memiliki kadar air sebesar 16.21%, kadar abu sebesar 1,28%, kadar protein sebesar 3,53%, kadar lemak sebesar 29.42%, dan kadar karbohidrat sebesar 49.56%.

## **ABSTRACT**

*The community's dependence on wheat consumption is still very high. however, the country of Indonesia has abundant natural wealth, especially on local food crops tubers. Tuber consumption not only can overcome the problem of wheat imports, but also can meet the nutritional needs of the community and have functional value that is beneficial to maintain health. Especially dietary fiber and antioxidants. Utilization rate of Autoclaving-Cooling Cycle modification is very low, whereas this modification gives the advantage to increase the level of resistant starch and decrease starch digestibility. The purpose of this experiment was to study the effect of type and concentration of modified flour Autoclaving-Cooling Cycle against purple sweet potato brownies.*

*This research consist two steps, there was preliminary research for preparation and analysis of raw materials. Then, main research would determined to study the effect of type and concentration of modified flour Autoclaving-Cooling Cycle against purple sweet potato brownies.*

*Based on the analysis, using ANOVA (Analysis Of Variant) analysis, it was found that the type and concentration of modified flour did not significantly affect the color, overalls, moisture content, hardness, stickiness and cohesiveness of purple sweet potato brownies. As for the aroma, taste, and starch content have real effect. The best sample determination was done using the scoring method. The results show that the a2b2 sample of modified sweetpot starch adds as much as 6% gives the highest sample among other samples. The best score have a favorable panelist 4.34 preference value, water content of 16.21%. ash content of 1.28%, protein content 3.53% sebesaar, fat content of 29.42%, and carbohydrate content of 49.56%.*

*Keyword : antioxidant, dietary fiber, resistant starch, modified flour of Autoclaving-Cooling Cycle, consumption of purple sweet potato brownies*