

Analisis Kadar Pati Resisten, Daya Cerna Pati, dan *Cooking Quality* pada Mi Kering Substitusi Tepung Talas dan Tepung Gembus
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ABSTRAK

Latar Belakang: Tepung talas mengandung pati resisten dan indeks glikemik yang rendah, sedangkan tepung gembus mengandung serat dan protein yang tinggi sehingga kedua bahan ini dapat disubstitusikan pada mi kering sebagai makanan alternatif yang aman bagi orang dengan diabetes melitus.

Tujuan: Menganalisis pengaruh substitusi tepung talas dan tepung gembus pada mi kering terhadap kadar pati resisten, daya cerna pati, dan *cooking quality*.

Metode: Rancangan acak lengkap satu faktor dengan lima formulasi yang didasarkan pada persentase tepung talas dan tepung gembus yaitu F0 (0%:0%), F1 (35%:5%), F2 (30%:10%), F3 (25%:15%), F4(20%:20%). Analisis kadar pati resisten menggunakan metode AOAC 2007, analisis daya cerna pati menggunakan metode AOAC 2005, analisis *cooking quality* menggunakan metode AACC 66-50, dan penentuan formula terbaik menggunakan metode *Multiattribute Decision Using a Compensatory Model and Additive Weighting*.

Hasil: Kadar pati resisten dan *cooking loss* meningkat seiring dengan peningkatan substitusi tepung gembus, sedangkan daya cerna pati dan daya serap air meningkat seiring dengan peningkatan substitusi tepung talas. Formula terbaik terdapat pada mi kering F4.

Simpulan: Substitusi tepung talas meningkatkan daya cerna pati dan daya serap air, sedangkan substitusi tepung gembus meningkatkan kadar pati resisten dan *cooking loss* mi kering.

Kata Kunci: Talas, gembus, pati resisten, daya cerna pati, *cooking quality*

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Analysis of Resistant Starch Content, Starch Digestibility, and Cooking Quality of Dried Noodles Substituted with Taro Flour and Gembus Flour
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Anjani¹ ABSTRACT

Background: Taro flour contains resistant starch and a low glycemic index, while *gembus* flour contains high fiber and protein. Therefore, these two ingredients can be substituted for dry noodles as a safe food alternative for people with diabetes mellitus.

Objective: Analyzing the effect of taro flour and *gembus* flour substitution in dry noodles on resistant starch content, starch digestibility and cooking quality.

Methods: One factor completely randomized design with five formulations based on the percentage of taro flour and *gembus* flour, namely F0 (0%: 0%), F1 (35%: 5%), F2 (30%:10%), F3 (25%: 15%), F4(20%:20%). Analysis of resistant starch content using the AOAC 2007 method, analysis of starch digestibility using the AOAC 2005 method, analysis of cooking quality using the AACC 66-50 method, and determining the best formula using the Multiattribute Decision Using a Compensatory Model and Additive Weighting method.

Results: Resistant starch content and cooking loss increased with increasing *gembus* flour substitution, while starch digestibility and water absorption increased with increasing taro flour substitution. The best formula is found in F4 dry noodles.

Conclusion: Substitution of taro flour increases starch digestibility and water absorption capacity, while substitution of *gembus* flour increases levels of resistant starch and cooking loss of dry noodles.

Keywords: Taro, *gembus*, resistant starch, starch digestibility, cooking quality

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