

## **Kadar Pati, Kadar Pati Resisten, Dan Daya Cerna Pati In-Vitro Pada Biskuit Kacang Merah Dan Mocaf**

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### **ABSTRAK :**

**Latar Belakang:** Pasien diabetes melitus disarankan untuk mengonsumsi makanan yang mengandung indeks glikemik rendah. Biskuit tepung kacang merah dan mocaf mengandung pati, amilosa, amilopektin, pati resisten dan daya cerna pati yang dapat berpengaruh terhadap indeks glikemik suatu pangan sehingga dapat diharapkan biskuit ini sebagai alternatif makanan selingan pasien diabetes melitus.

**Tujuan:** Mengetahui nilai kadar pati, amilosa, amilopektin, pati resisten, dan daya cerna pati pada biskuit tepung kacang merah dan mocaf.

**Metode:** Penelitian ini termasuk ke dalam penelitian eksperimental. Terdapat 4 formulasi dalam penelitian ini dengan perbandingan komposisi tepung kacang merah dan mocaf masing-masing 44%:0% (F1), 31%:13% (F2), 22%:22% (F3), dan 13%:31% (F4). Hasil uji pati, amilosa, amilopektin, pati resisten dan daya cerna pati dianalisis menggunakan *Two Way Anova* dan dilanjutkan dengan uji *Post Hoc*.

**Hasil:** Penambahan tepung mocaf dalam biskuit tersebut meningkatkan kadar pati, amilosa, dan daya cerna pati dan menurunkan kadar pati resisten. Selain itu, terdapat peningkatan yang tidak signifikan pada kadar amilopektin. Hasil analisis menunjukkan terdapat perbedaan yang bermakna pada semua uji yang dilakukan terhadap keempat formulasi biskuit tersebut.

**Kesimpulan:** Formulasi F1 memiliki kadar pati resisten tertinggi dan daya cerna pati terendah sehingga berpotensi untuk dijadikan alternatif selingan bagi pasien diabetes melitus.

**Kata Kunci:** tepung kacang merah, mocaf, pati, pati resisten, daya cerna pati.

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## ***Starch Content, Resistant Starch Content, and In-Vitro Starch Digestibility in Kidney Bean and Mocaf Biscuit***

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### ***ABSTRACT :***

***Background:*** Diabetes mellitus patients were advised to eat foods with a low glycemic index. Kidney bean flour and mocaf biscuits contain starch, amylose, amylopectin, resistant starch and starch digestibility that can affect food's glycemic index. It was expected that these biscuits would become an alternative snack for diabetes mellitus patients.

***Objective:*** To analyse of starch, amylose, amylopectin, resistant starch, and starch digestibility in kidney bean flour biscuits and mocaf.

***Methods:*** This research was included in experimental research. There were 4 formulations in this research with a comparison of composition in kidney bean flour and mocaf respectively 44%:0% (F1), 31%:13% (F2), 22%:22% (F3), and 13%:31% (F4). The results of starch, amylose, amylopectin, resistant starch and starch digestibility levels were analyzed using Two Way Anova and Post Hoc test.

***Results:*** The addition of mocaf flour in these biscuits increased the levels of starch, amylose, and starch digestibility and reduced resistant starch levels. Moreover, there were a non-significant increase in amylopectin levels. The results showed that there were significant differences in all the tests carried out on the four formulations of biscuits.

***Conclusion:*** F1 Formulation have the highest starch resistant and lowest starch digestibility so it have potentially become snack for diabetes mellitus patient.

***Keywords:*** kidney bean flour, mocaf, starch, resistant starch, starch digestibility.

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