



UNIVERSITAS ANDALAS

**NILAI INDEKS GLIKEMIK, KANDUNGAN ZAT GIZI, DAN
RASIO AMILOSA-AMILOPEKTIN BERBAGAI JENIS BERAS
PUTIH (*Oryza sativa L.*) SOLOK VARIETAS CISOKAN, ANAK
DARO, DAN CEREDEK**

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FAKULTAS KESEHATAN MASYARAKAT

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**NILAI INDEKS GLIKEMIK, KANDUNGAN ZAT GIZI, DAN RASIO
AMILOSA-AMILOPEKTIN BERBAGAI JENIS BERAS PUTIH (*Oryza sativa*
L.) SOLOK VARIETAS CISOKAN, ANAK DARO, DAN CEREDEK**

xi + 66 halaman, 14 tabel, 7 gambar, 13 lampiran

ABSTRAK

Tujuan

Penelitian ini bertujuan untuk menentukan nilai indeks glikemik serta menganalisis kandungan zat gizi dan kadar amilosa pada berbagai jenis beras putih (*Oryza sativa L.*) Solok varietas Cisokan, Anak Daro, dan Ceredek.

Metode

Jenis penelitian ini adalah *quasi-eksperimental* dengan pendekatan *non equivalent control group* yaitu meliputi pemberian intervensi kepada responden berupa glukosa murni (*glucose anhydrate*) sebagai pangan standar dan berbagai varietas beras sebagai pangan uji, kemudian dilakukan pemeriksaan glukosa darah berkala pada menit ke-0, 15, 30, 45, 60, 90, dan 120. Pemberian pangan standar dan pangan uji (Cisokan, Anak Daro, dan Ceredek) berturut-turut sebanyak 50 g, 155,9 g, 121,5 g, dan 140,3 g. Penentuan nilai indeks glikemik dengan metode IAUC dan rumus perbandingan luas area dibawah kurva pangan uji dan standar. Analisis data hasil proksimat dan amilosa dengan uji ANOVA dilanjutkan uji *Duncan New Multiple Range Test* serta uji *Kruskal Wallis* taraf 5%.

Hasil

Berdasarkan perhitungan IAUC dan rumus indeks glikemik diperoleh nilai indeks glikemik beras Anak Daro, Cisokan, dan Ceredek adalah 40,2%, 64,7%, dan 49,7%. Kadar amilosa tertinggi yaitu pada beras Cisokan 32,26% namun tidak terdapat perbedaan nyata pada kadar amilosa masing-masing varietas ($p > 0,05$).

Kesimpulan

Nilai indeks glikemik beras Anak Daro dan Ceredek tergolong rendah dan beras Cisokan tergolong sedang. Kadar amilosa ketiga varietas beras tergolong tinggi. Kandungan gizi (lemak dan protein) serta kadar amilosa tidak berpengaruh signifikan terhadap nilai indeks glikemik beras.

Daftar Pustaka : 86 (1991 – 2024)

Kata Kunci : Indeks glikemik, glukosa darah, kadar amilosa-amilopektin, beras putih Solok

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**GLYCEMIC INDEX, NUTRITIONAL CONTENT, AND AMYLOSE-
AMYLOPECTIN RATIO OF VARIOUS TYPES OF SOLOK WHITE RICE
(*Oryza sativa L.*) CISOKAN, ANAK DARO, AND CEREDOK VARIETIES**

xi + 66 pages, 14 tables, 7 images, 13 attachments

ABSTRACT

Objective

This study aims to determine the glycemic index and analyze the nutritional and amylose content in various types of Solok white rice (*Oryza sativa L.*) Cisokan, Anak Daro, and Ceredek varieties.

Method

This type of research is *quasy-experimental* with a *non-equivalent control group* approach, which includes providing intervention to respondents in form of pure glucose (glucose anhydrate) as standard food and various varieties of white rice as test food, then periodic blood glucose checks are carried out at minutes 0, 15, 30, 45, 60, 90, and 120. The provision of standard food and test food (Cisokan, Anak Daro, and Ceredek) respectively as much as 50 g, 155.9 g, 121.5 g, and 140.3 g. Determination of the glycemic index using the IAUC method and the formula for comparing the area under the curve of the test and standard food. Analysis of proximate and amylose content data using ANOVA test followed by *Duncan New Multiple Range Test* and *Kruskal Wallis* test at 5% level.

Results

Based on IAUC calculation and glycemic index formula, the glycemic index of Anak Daro, Cisokan, and Ceredek rice were 40.2%, 64.7%, and 49.7%. The highest amylose content was in Cisokan rice 32.26% but there was no significant difference in the amylose content of each variety ($p>0.05$).

Conclusion

The glycemic index of Anak Daro and Ceredek rice is classified as low and Cisokan rice is classified as medium. The amylose content of the three rice varieties is classified as high. Nutritional content (fat and protein) and amylose content do not significantly affect the glycemic index of rice.

References : 86 (1991 – 2024)

Keyword : Glycemic index, blood glucose, amylose-amylopectin ratio, Solok white rice