

THE CONTRIBUTION OF BREAKFAST TO MACRONUTRIENT INTAKE AND MATHEMATICS LEARNING ACHIEVEMENT OF YOUNG WOMEN IN BANGUNCIPTO VILLAGE

Nabilla Adisty Daviola¹, M. Primiaji Rialihanto², Tri Siswati³

^{1,2,3}Jurusan Gizi Poltekkes Kemenkes Yogyakarta,

Jl. Tatabumi No.3 Banyuraden, Gamping, Sleman

email : nabillaadisty27@gmail.com

ABSTRACT

Background: *Skipping breakfast remains an unresolved nutritional issue among Indonesian adolescents. In the Special Region of Yogyakarta, the number of students who skip breakfast is recorded as high as 60%, and nearly half of adolescents (44.6%) consume a breakfast of inadequate nutritional quality. Yet, adequate macronutrient intake from breakfast plays a significant role in supporting cognitive function and academic achievement, particularly in subjects requiring high-level reasoning skills like mathematics.*

Objective: *To determine the contribution of breakfast to macronutrient intake and its relationship with mathematics learning achievement among adolescent girls in Banguncipto Village, Sentolo District, Kulon Progo Regency, Special Region of Yogyakarta.*

Methods: *This quantitative research used a correlational analytic design with a cross-sectional approach. The sample consisted of 30 adolescent girls aged 13-19 years, selected through purposive sampling. Data were collected using a breakfast habit questionnaire, a 3x24-hour food recall, and documentation of the latest semester's mathematics report card scores. Breakfast habits were categorized using the mean score as the cut-off point. Data were analyzed using Spearman's rho correlation test.*

Results: *Respondents' breakfast habits were divided equally between the poor and good categories, each with 50%. The poor category (<25%) was highest in carbohydrates (93.3%), energy (66.7%) and fat (50%), while some of the protein was already in the sufficient category ($\geq 25\%$), namely 63.3%. Mathematics learning achievement was also divided equally between the good and very good categories, each with 50%, and no significant relationship was found between breakfast habits and mathematics learning achievement ($p = 0.072$).*

Conclusion: *Breakfast habits were not significantly associated with mathematics achievement among adolescent girls in Banguncipto Village ($r = -0.333$; $p = 0.072$). This finding indicates that mathematics achievement is influenced by many other factors beyond breakfast habits alone.*

Keywords: *breakfast, macronutrients, mathematics achievement, adolescent girls*

KONTRIBUSI SARAPAN PAGI TERHADAP ASUPAN ZAT GIZI MAKRO
DAN PRESTASI BELAJAR MATEMATIKA REMAJA PUTRI DESA
BANGUNCIPTO

Nabilla Adisty Daviola¹, M. Primiaji Rialihanto², Tri Siswati³

^{1,2,3}Jurusan Gizi Poltekkes Kemenkes Yogyakarta,

Jl. Tatabumi No.3 Banyuraden, Gamping, Sleman

email : nabillaadisty27@gmail.com

ABSTRAK

Latar belakang : Kebiasaan tidak sarapan masih menjadi persoalan gizi yang belum tertangani di kalangan remaja Indonesia. Di Daerah Istimewa Yogyakarta, angka pelajar yang melewatkan sarapan tercatat setinggi 60%, dan hampir setengah dari remaja (44,6%) mengonsumsi sarapan dengan kualitas gizi yang kurang memadai. Padahal, kecukupan zat gizi makro yang diperoleh dari sarapan memiliki peran besar dalam menunjang fungsi kognitif dan capaian belajar, terutama untuk mata pelajaran yang menuntut kemampuan bernalar tinggi seperti matematika.

Tujuan: Mengetahui kontribusi sarapan pagi terhadap asupan zat gizi makro dan hubungannya dengan prestasi belajar matematika remaja putri di Kelurahan Banguncipto, Kapanewon Sentolo, Kabupaten Kulon Progo, Daerah Istimewa Yogyakarta.

Metode: Penelitian kuantitatif dengan desain analitik korelasional cross-sectional. Sampel berjumlah 30 remaja putri usia 13-19 tahun yang dipilih secara purposive sampling. Data dikumpulkan melalui kuesioner kebiasaan sarapan, food recall 3x24 jam, dan studi dokumentasi nilai rapor matematika semester terakhir. Kebiasaan sarapan dikategorikan menggunakan nilai rata-rata (mean) sebagai cut-off point. Analisis data menggunakan uji korelasi Spearman's rho.

Hasil : Kebiasaan sarapan pagi responden terbagi rata antara kategori tidak baik dan baik masing-masing 50%. kategori kurang (<25%) tertinggi pada karbohidrat (93,3%), energi (66,7%) dan lemak (50%), sedangkan protein sebagian sudah berada pada kategori cukup ($\geq 25\%$) yaitu 63,3%. Prestasi belajar matematika juga terbagi rata antara kategori baik dan sangat baik yaitu masing-masing 50%, dan tidak ditemukan hubungan yang signifikan antara kebiasaan sarapan pagi dengan prestasi belajar matematika ($p=0,072$).

Kesimpulan : Kebiasaan sarapan tidak berhubungan secara signifikan dengan prestasi matematika di kalangan remaja putri di Desa Banguncipto ($r=-0,333$; $p=0,072$). Temuan ini menunjukkan bahwa prestasi matematika dipengaruhi oleh banyak faktor lain di luar kebiasaan sarapan saja.

Kata kunci : sarapan pagi, zat gizi makro, prestasi belajar matematika, remaja putri.