

HUBUNGAN ASUPAN LEMAK JENUH, LEMAK TIDAK JENUH, DAN SERAT DENGAN SYSTEMIC IMMUNE INFLAMMATION INDEX (SII) PADA PASIEN KANKER RAWAT JALAN DI RSUP DR. SARDJITO

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ABSTRAK

Latar Belakang: Kanker merupakan masalah kesehatan global yang sering disertai inflamasi kronis yang berperan dalam progresi penyakit dan memperburuk prognosis. *Systemic Immune-Inflammation Index* (SII) merupakan biomarker komprehensif yang digunakan untuk menggambarkan status inflamasi sistemik. Faktor diet, khususnya asupan lemak dan serat, diketahui memiliki potensi memodulasi respons inflamasi.

Metode: Penelitian ini menggunakan desain observasional analitik dengan pendekatan *cross-sectional* pada 70 pasien kanker rawat jalan di RSUP Dr. Sardjito Yogyakarta yang dipilih melalui teknik *purposive sampling*. Data asupan gizi selama tiga bulan terakhir diperoleh menggunakan *Semi-Quantitative Food Frequency Questionnaire* (SQ-FFQ), sedangkan data komponen SII (neutrofil, trombosit, dan limfosit) diperoleh dari rekam medis. Analisis data dilakukan menggunakan uji korelasi *Spearman Rank*.

Hasil: Median asupan lemak jenuh sebesar 8,65% energi, lemak tidak jenuh 14,37% energi, dan serat 17,6 g/hari, dengan median nilai SII sebesar 565,83. Hasil uji statistik menunjukkan tidak terdapat hubungan yang bermakna antara asupan lemak jenuh ($r=0,051$; $p=0,673$), lemak tidak jenuh ($r=0,086$; $p=0,479$), maupun serat ($r=-0,103$; $p=0,397$) dengan nilai SII.

Kesimpulan: Tidak terdapat hubungan antara asupan lemak dan serat dengan nilai SII pada pasien kanker rawat jalan. Variasi inflamasi sistemik kemungkinan lebih dipengaruhi oleh faktor lain, dengan stadium penyakit sebagai potensial pembaur yang teridentifikasi dalam penelitian ini. Penelitian selanjutnya disarankan menggunakan biomarker inflamasi yang lebih spesifik serta metode penilaian konsumsi yang lebih presisi untuk menggambarkan hubungan diet dan inflamasi secara lebih komprehensif.

Kata kunci: asupan lemak; asupan serat; kanker; *systemic immune-inflammation index*.

**THE ASSOCIATION BETWEEN SATURATED FAT, UNSATURATED FAT,
AND FIBER INTAKE WITH THE SYSTEMIC IMMUNE-INFLAMMATION
INDEX (SII) AMONG CANCER OUTPATIENTS AT RSUP DR. SARDJITO**
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ABSTRACT

Background: Cancer is a global health problem often accompanied by chronic inflammation, which contributes to disease progression and poor prognosis. The *Systemic Immune-Inflammation Index* (SII) is a comprehensive biomarker used to reflect systemic inflammatory status. Dietary factors, particularly fat and fiber intake, are known to have the potential to modulate inflammatory responses.

Methods: This study employed an observational analytic design with a cross-sectional approach involving 70 cancer outpatients at RSUP Dr. Sardjito Yogyakarta, selected through purposive sampling. Dietary intake over the past three months was assessed using a Semi-Quantitative Food Frequency Questionnaire (SQ-FFQ), while SII components (neutrophils, platelets, and lymphocytes) were obtained from medical records. Data were analyzed using the Spearman Rank correlation test.

Results: The results showed median intakes of saturated fat at 8.65% of total energy, unsaturated fat at 14.37% of total energy, and fiber at 17.6 g/day, with a median SII value of 565.83. Statistical analysis revealed no significant association between saturated fat ($r=0.051$; $p=0.673$), unsaturated fat ($r=0.086$; $p=0.479$), or fiber intake ($r=-0.103$; $p=0.397$) and SII.

Conclusion: There was no association between dietary fat and fiber intake and SII among cancer outpatients. These findings suggest that systemic inflammation variability may be influenced by other factors, with disease stage identified as a potential confounding variable in this study. Future studies are recommended to incorporate more specific inflammatory biomarkers and more precise dietary assessment methods to better capture the relationship between diet and inflammation.

Keywords: cancer; fat intake; fiber intake; systemic immune-inflammation index.