HUBUNGAN FREKUENSI KONSUMSI MAKANAN TINGGI ZAT BESI DENGAN BIOMARKA *SOLUBLE TRANSFERRIN RECEPTORS* (sTfR) PADA KANKER KOLOREKTAL DI YOGYAKARTA

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ABSTRAK

Latar Belakang : Pada pasien kanker kolorektal, perubahan metabolisme zat besi dapat terjadi dan salah satu biomarker yang digunakan untuk menilai status zat besi adalah *soluble transferrin receptor* (sTfR). Konsumsi makanan yang mengandung zat besi diduga dapat memengaruhi status zat besi tubuh, tetapi hubungan antara frekuensi konsumsi makanan tinggi zat besi dengan kadar sTfR pada pasien kanker kolorektal masih belum banyak diteliti.
Tujuan: Mengetahui hubungan antara frekuensi konsumsi makanan tinggi zat besi dengan kadar *soluble transferrin receptor* (sTfR).
Metode: Penelitian ini merupakan studi observasional analitik dengan desain cross-sectional. Data dikumpulkan menggunakan kuesioner berbasis *Food Frequency Questionnaire* (FFQ) yang telah dimodifikasi serta data rekam medis. Analisis bivariat dilakukan menggunakan uji korelasi Spearman untuk menilai hubungan antara frekuensi konsumsi makanan tinggi zat besi dan kadar sTfR, serta uji Mann-Whitney untuk membandingkan kadar sTfR berdasarkan variabel kategorik.
Hasil: Hasil frekuensi konsumsi makanan tinggi zat besi menujukkan 51,25% pasien termasuk dalam kategori jarang, dan 48,75% termasuk kategori sering. Hasil kadar sTfR pada pasien memiliki nilai median 0,200 mg/dL dengan rentang 0,092 mg/dL hingga 3,103 mg/dL. Hasil uji bivariat menunjukkan tidak ditemukan hubungan yang signifikan (ρ = -0,1197; p = 0,290) antara frekuensi konsumsi makanan tinggi zat besi dengan kadar *soluble transferrin receptors* (sTfR).
Kesimpulan: Tidak terdapat hubungan antara frekuensi asupan makanan tinggi zat besi dengan biomarka *soluble transferrin receptors* (sTfR) pada pasien Kanker Kolorektal di Yogyakarta. Status zat besi pada pasien KKR kemungkinan besar dipengaruhi oleh faktor klinis lain di luar asupan makanan.

Kata Kunci: Frekuensi Konsumsi Makanan Tinggi Zat Besi; Kadar sTfR; Kanker Kolorektal

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THE ASSOCIATION BETWEEN THE FREQUENCY OF IRON-RICH FOOD CONSUMPTION AND SOLUBLE TRANSFERRIN RECEPTORS (sTfR) BIOMARKER IN COLORECTAL CANCER (CRC) IN YOGYAKARTA

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ABSTRACT

Background: *In patients with colorectal cancer, alterations in iron metabolism may occur, and one biomarker used to assess iron status is soluble transferrin receptor (sTfR). The consumption of iron-containing foods is suspected to influence body iron status; however, the relationship between the frequency of iron-rich food consumption and sTfR levels in colorectal cancer patients has not been widely studied.*
Objective*: To determine the association between the frequency of iron-rich food consumption and soluble transferrin receptor (sTfR) levels.*
Methods*: This study was an analytical observational study with a cross-sectional design. Data were collected using a modified Food Frequency Questionnaire (FFQ)-based questionnaire and medical record data. Bivariate analysis was performed using Spearman's correlation test to assess the relationship between the frequency of consumption of iron-rich foods and sTfR levels, as well as the Mann-Whitney test to compare sTfR levels based on categorical variables.*
Results: *The results showed that 51.25% of patients were categorized as having a low frequency of iron-rich food consumption, while 48.75% were categorized as having a high frequency. The sTfR levels in patients had a median value of 0.200 mg/dL with a range from 0.092 mg/dL to 3.103 mg/dL Bivariate test results indicated no significant association (ρ = -0,1197; p = 0,290) between the frequency of consuming foods high in iron and levels of soluble transferrin receptors (sTfR).*
Conclusion: *There is no significant association between the frequency of iron-rich food intake and soluble transferrin receptors (sTfR) biomarker among colorectal cancer patients in Yogyakarta. These findings suggest that iron status in Colorectal Cancer patients may be driven by clinical or pathophysiological factors rather than dietary frequency alone.*

Keywords: *Frequency of Iron-Rich Food Consumption; sTfR Levels; Colorectal Cancer*

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