

RINGKASAN

Hubungan Tingkat Kecukupan Chrom (Cr) Dan Magnesium (Mg) Dengan Kadar Glukosa Darah Pada Mahasiswi Universitas Muhammadiyah Semarang

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Glukosa (kadar gula darah), suatu gula monosakarida, karbohidrat terpenting yang digunakan sebagai sumber tenaga utama dalam tubuh. Kadar glukosa darah yang normal pada pagi hari setelah malam sebelumnya berpuasa adalah 70-110 mg/dL darah. Kadar glukosa darah biasanya kurang dari 120-140 mg/dL pada 2 jam setelah makan atau minum cairan yang mengandung glukosa maupun karbohidrat lainnya. Tujuan penelitian adalah mengetahui hubungan tingkat kecukupan kromium (Cr) dan Magnesium (Mg) dengan kadar glukosa darah puasa pada mahasiswi.

Penelitian ini merupakan penelitian *cross sectional* dengan jenis penelitian observatif analitik. Teknik sampling yang digunakan menggunakan metode *random sampling*. Jumlah 33 sampel yang memenuhi kriteria inklusi. Data variabel tingkat kecukupan kromium dan magnesium di peroleh dari *food recall* 3x24 jam dengan cara wawancara, dan data variabel kadar glukosa darah diperoleh dengan tes kadar glukosa darah menggunakan alat glukos meter. Uji hepotesis di analisis menggunakan uji *Rank Spearman*.

Hasil penelitian rata-rata tingkat kecukupan kromium cukup yaitu 81,82%, rata-rata tingkat kecukupan magnesium cukup yaitu 72,73%, rata – rata sampel memiliki kadar glukosa darah puasa normal yaitu 69,70%,. terdapat hubungan tingkat kecukupan kromium dengan kadar glukosa darah puasa ($p = 0,004$), dan terdapat hubungan tingkat kecukupan magnesium dengan glukosa darah puasa ($p = 0,003$).

Kata kunci : Tingkat Kecukupan Kromium (Cr), Tingkat Kecukupan Magnesium (Mg), Kadar Glukosa Darah Puasa.

ABSTRACT

The Relationship Between The Level Of Adequacy Of Chromium (Cr) And Magnesium (Mg) With Fasting Blood Sugar Levels In Students University Of Muhammadiyah Semarang

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Glucose (blood sugar level) a monosaccharide sugar, the most important carbohydrate used as the main energy source in the body. Normal blood glucose levels in the morning after the previous night fasting is 70-110 mg/dl. Blood glucose levels are usually less than 120-140 mg/dl 2 hours after eating or drinking liquids containing glucose or other carbohydrates. The purpose of this study was to determine the relationship between the level of chromium (Cr) and magnesium (Mg) adequacy with fasting blood glucose levels in female students.

The research is a cross sectional study with analytic observational research type and applies a quantitative. The sampling technique used was a random sampling method with 33 samples were obtained that met the inclusion criteria. Variable data between the level of adequacy from chromium and magnesium was obtained from 3x24 hours food recall by interview. And fasting blood sugar level was obtained blood glucose level test using a glucose meter. Hypothesis testing in analysis using Rank Spearman test.

the result of the study the average intake of chromium sufficiently 81,82%, the average magnesium intake was 72,73%, the average sample had a normal fasting blood glucose level, that is 69,70%. There is a correlation between the level of chromium adequacy and fasting blood glucose levels ($p= 0,004$), and there is a correlation between the level of magnesium adequacy and fasting blood glucose levels ($p=0,003$).

Key words : Chromium adequacy level, Magnesium adequacy level, fasting blood glucose level.