

ABSTRAK

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Judul Skripsi : Hubungan Peningkatan Asupan Serat Larut Air dengan Kadar Gula Darah pada Penderita Diabetes Melitus Tipe 2 di Puskesmas Seginim Bengkulu Selatan dan Tinjauannya Menurut Pandangan Islam (Melalui Edukasi Asupan Serat Larut Air).

Pendahuluan: Diabetes Melitus adalah gangguan metabolisme dengan peningkatan kadar gula darah akibat gangguan produksi insulin dan berisiko menimbulkan komplikasi. Asupan serat larut air dapat membantu mengendalikan gula darah dan menjaga kesehatan metabolik. Dalam tinjauan Islam, hal ini sejalan dengan prinsip *hifz al-nafs* melalui konsumsi makanan *halalan thayyiban*.

Metodologi: Penelitian *pre-eksperimental one group pretest-posttest* pada 29 responden penderita Diabetes Melitus Tipe 2 obesitas tipe 1 di Puskesmas Seginim Bengkulu Selatan. Data diperoleh melalui *Semi Quantitative Food Frequency* (SQ-FFQ), *food record*, GDS dan IMT sebelum dan sesudah intervensi edukasi peningkatan asupan serat larut air selama satu bulan. Analisis menggunakan uji *Wilcoxon* dan *korelasi Spearman*.

Hasil: Rata-rata asupan serat larut air 7,86 g/hari dengan 27 responden (80,6% kurang, 19,4% cukup). Rata-rata GDS menurun dari 257,52 menjadi 192,55 mg/dL dan IMT dari 27,41 menjadi 26,84 kg/m². Uji *Wilcoxon* menunjukkan perbedaan signifikan pada kadar GDS ($p < 0,001$) dan IMT ($p = 0,031$) sebelum dan sesudah intervensi, sedangkan uji *Spearman* tidak menemukan hubungan bermakna antara asupan serat larut air dengan GDS maupun IMT ($p > 0,05$).

Simpulan: Edukasi peningkatan asupan serat larut air dapat menurunkan GDS dan IMT pada penderita diabetes melitus tipe 2. meskipun tidak terdapat hubungan langsung yang signifikan dengan tingkat konsumsi serat. Perspektif Islam menekankan pentingnya menjaga kesehatan melalui konsumsi makanan *halalan thayyiban*.

Kata Kunci: Diabetes Melitus, Serat Larut Air, Gula Darah Sewaktu (GDS), Pandangan Islam.

ABSTRACT

Name : Ferna Oktavia

Study Program : Kedokteran Umum

Judul Skripsi : The Correlation Between Increased Soluble Fiber Intake and Blood Glucose Levels in Patients with Type 2 Diabetes Mellitus at Seginim Public Health Center South Bengkulu Based on Islamic Perspective (Through Soluble Fiber Intake Education).

Introduction: *Diabetes Mellitus is a metabolic disorder characterized by elevated blood glucose levels due to impaired insulin production and carries a risk of complications. Soluble fiber intake can help control blood glucose and maintain metabolic health. In the Islamic perspective, this is in line with the principle of *hifz al-nafs* through the consumption of *halalan thayyiban* foods.*

Methodology: *This study used a pre-experimental one-group pretest–posttest design involving 29 respondents with type 2 Diabetes Mellitus and type 1 obesity at Puskesmas Seginim, South Bengkulu. Data were obtained through Semi Quantitative Food Frequency (SQ-FFQ), food records, RBG (Random Blood Glucose), and BMI before and after one month of educational intervention on increasing soluble fiber intake. Data were analyzed using the Wilcoxon test and Spearman correlation.*

Results: *The average intake of soluble fiber was 7.86 g/day, with 27 respondents (80.6%) in the low category and 2 respondents (19.4%) in the adequate category. The average RBG decreased from 257.52 mg/dL to 192.55 mg/dL and BMI from 27.41 kg/m² to 26.84 kg/m². The Wilcoxon test showed significant differences in RBG ($p < 0.001$) and BMI ($p = 0.031$) before and after the intervention, while the Spearman test found no significant correlation between soluble fiber intake and RBG or BMI ($p > 0.05$).*

Conclusion: *Education on increasing soluble fiber intake can reduce RBG and BMI in patients with type 2 Diabetes Mellitus, although there was no direct significant relationship with the level of fiber consumption. The Islamic perspective emphasizes the importance of maintaining health through the consumption of *halalan thayyiban* foods.*

Keywords: *Diabetes Mellitus, Soluble Fiber, Random Blood Glucose (RBG), Islamic Perspective.*