

## RINGKASAN

### Hubungan Asupan Karbohidrat, Lemak dan Protein dengan Kadar Gula Darah pada Pasien Diabetes Mellitus Rawat Jalan RSUD Dr. M. Ashari Kabupaten Pemalang.

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**Pendahuluan:** Hiperglikemia merupakan salah satu tanda khas penyakit Diabetes Mellitus (DM). Terapi gizi medis merupakan salah satu dari empat pilar penatalaksanaan DM. Pada diabetesi perlu ditekankan pentingnya keteraturan dalam hal jadwal makan, jenis bahan makanan dan jumlah makanan. Seorang diabetesi harus mengkonsumsi karbohidrat, lemak dan protein sesuai kebutuhan agar kadar gula darahnya senantiasa normal. Penelitian ini bertujuan mengetahui hubungan asupan karbohidrat, lemak dan protein dengan kadar gula darah pasien DM rawat jalan RSUD Dr. M. Ashari.

**Metode penelitian:** Penelitian ini merupakan penelitian analitik korelasi, pendekatan yang digunakan adalah *Cross Sectional*. Populasi penelitian pasien DM rawat jalan Klinik Penyakit Dalam sebanyak 7576. Sampel penelitian diambil dengan teknik konsekutif sampling yang memenuhi kriteria inklusi dan eksklusi sebanyak 34 orang. Variabel asupan karbohidrat, lemak dan protein diperoleh dengan *food record* 24 jam 3 hari tidak berurutan, kadar gula darah dari lembar hasil pemeriksaan laboratorium.

**Hasil penelitian:** Karakteristik sebagian besar responden umur >45 tahun 30 orang (88,2%), perempuan 26 Orang (76,5%), IMT lebih dan obesitas 23 orang (67,6%), pendidikan rendah 20 orang (58,8%), tidak bekerja 19 orang (55,9%). Asupan karbohidrat baik 8 orang (23,5%), defisit ringan 24 orang (70,6%), defisit sedang 2 orang (5,9%). Asupan lemak baik 19 orang (59,9%), defisit ringan 12 orang (35,3%), defisit sedang 3 orang (8,8%). Asupan protein baik 9 orang (26,5%), defisit ringan 15 (44,1%), defisit sedang 7 orang (20,6%), defisit berat 3 orang (8,8%). Kadar gula darah normal 17 orang (50%), tinggi 17 orang (50%). Dengan analisis korelasi Pearson Product Moment ada hubungan asupan karbohidrat dan lemak dengan kadar gula darah ( $p = 0,017$  dan  $p = 0,008$ ), tidak ada hubungan asupan protein dengan kadar gula darah ( $p = 0,121$ ).

**Kesimpulan:** Ada hubungan asupan karbohidrat dan lemak dengan kadar gula darah, tidak ada hubungan asupan protein dengan kadar gula darah.

**Kata kunci:** DM, asupan karbohidrat, lemak dan protein, kadar gula darah.

## ABSTRACT

### **The correlation of carbohydrate, fats and protein consumptions with blood sugar levels in RSUD Dr. M. Ashari's Diabetes Mellitus outpatients Kabupaten Pemalang.**

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**Research's background:** Hyperglycemia is one of the hallmarks of Diabetes Mellitus (DM) disease. Medical nutrition therapy is one of the empirical four pillars of DM management. In diabetes it is necessary to instill regularity in terms of meal times, type of food and amount of food. A person with diabetes should consume carbohydrates, fats and proteins as needed so that their blood sugar levels are always normal. The study to determine the correlation of carbohydrate, fat and protein consumptions with blood sugar levels DM patient outpatient RSUD Dr. M. Ashari.

**Research's method:** This study is an analytic correlation study, the approach used is Cross Sectional. The study population of DM patients in outpatient clinic in the year of 2017 was 7576. The samples were taken by consecutive sampling technique which fulfilled the inclusion and exclusion criteria of 34 people. Variables consumption of carbohydrate, fat and protein are founded by food record 24 hours 3 days not sequence, blood sugar level from laboratory examination result sheet.

**Results:** Most of the respondents were age > 45 years 30 people (88.2%), women are 26 people (76.5%), BMI more than obese are 23 people (67.6%), low education are 20 people (58, 8%), not working are 19 people (55,9%). Good carbohydrate consumption are 8 people (23.5%), light deficit are 24 people (70.6%), moderate deficit are 2 people (5.9%). Good fat consumption are 19 people (59.9%), light deficit are 12 people (35.3%), moderate deficit are 3 people (8.8%). Protein consumption of either 9 people (26.5%), mild deficit are 15 (44.1%), moderate deficit are 7 people (20.6%), heavy deficit are 3 people (8.8%). Normal blood sugar levels are 17 people (50%), high are 17 people (50%). With Pearson Product Moment correlation analysis, there was a correlation between carbohydrate and fat intake with blood sugar level ( $p = 0,017$  and  $p = 0,008$ ), there was no correlation of protein intake with blood sugar level ( $p = 0,121$ ).

**Conclusion:** There was a correlation of carbohydrate and fat consumption with blood sugar level and there was no correlation of protein consumption with blood sugar level.

**Key words:** DM, the consumption of carbohydrate, fats and protein, blood level sugar