

## PENGARUH LAMA WAKTU PUASA TERHADAP KADAR GLUKOSA

### ABSTRAK

**Latar Belakang:** Pemeriksaan laboratorium klinik merupakan salah satu faktor penunjang yang penting dalam membantu menegakkan diagnosis suatu penyakit, antara lain pemeriksaan kadar glukosa. Pemeriksaan kadar glukosa darah merupakan pemeriksaan yang dilakukan bagi penderita Diabetes Mellitus (DM). Kadar glukosa darah dapat dipengaruhi oleh kondisi fisik, diet, konsumsi obat-obatan dan lama puasa. Pemeriksaan kadar glukosa darah dilakukan dengan mengambil darah dari pembuluh darah vena di lengan bagian bawah dalam untuk menilai kadar glukosa darah setelah berpuasa 8 jam, 10 jam dan 12 jam.

**Tujuan:** Mengetahui pengaruh lama waktu puasa 8 jam, 10 jam dan 12 jam.

**Metode:** Penelitian ini adalah observasi analitik dengan desain penelitian survey *Cross Sectional*. Penelitian ini dilakukan pada bulan Maret 2022. Populasi studi penelitian adalah mahasiswa Jurusan Teknologi Laboratorium Medis Poltekkes Kemenkes Yogyakarta. Sampel dengan jumlah 20 responden. Analisis data menggunakan uji Friedman.

**Hasil:** Hasil penelitian ini menunjukkan rata-rata kadar glukosa darah puasa 8 jam 145,6 mg/dl, rata-rata kadar glukosa darah puasa 10 jam 156,0 mg/dl, rata-rata kadar glukosa darah puasa 12 jam 148,4 mg/dl. Hasil analisis data menggunakan uji Friedman menunjukkan ada perbedaan kadar glukosa darah puasa 8, 10 dan 12 jam dengan nilai signifikansi 0,010 ( $<0,05$ )

**Kesimpulan:** Ada pengaruh hasil kadar glukosa darah puasa 8 jam, 10 jam dan 12 jam.

**Kata Kunci:** kadar glukosa

## EFFECT OF FASTING LENGTH OF TIME ON GLUCOSE

### ABSTRACT

**Background:** Clinical laboratory examination is one of the important supporting factors in helping to diagnose of disease, including checking blood glucose levels. Examination of blood glucose levels is an examination for patient Diabetes Mellitus (DM). Blood glucose levels can be affected by physical conditions, diet, consumption of drugs and length of fasting. Examination of blood glucose levels is done by taking blood from a vein in the forearm in order to asses blood glucose levels after fasting for 8 hours, 10 hours and 12 hours

**Objective:** To determine the effect of the length of fasting time 8 hours, 10 hours and 12 hours.

**Research Method:** This research is an analytical survey with a Cross Sectional survey research design. This study was conducted in March 2022. The research study population is a student of the Department of Technology of the Medical Laboratory of the Ministry of Health Yogyakarta. Sample with 20 respondents. Data analysis uses the Friedman test.

**Results:** The results of this study showed an average fasting blood glucose level of 8 hours 145.6 mg/dl, an average fasting blood glucose level of 10 hours 156.0 mg/dl, the average fasting blood glucose level of 12 hours 148.4 mg/dl. The result of data analysis show that there are differences fasting blood glucose levels 8, 10 and 12 hours with significance value 0,010 ( $<0,05$ ).

**Conclusion:** There is an effect of fasting blood glucose levels for 8 hours, 10 hours and 12 hours.

**Keywords:** Glucose levels.