

PENGARUH VARIASI SUHU AWAL REAGEN TERHADAP HASIL PEMERIKSAAN GLUKOSA METODE GOD-PAP

Rizka Amelia Safitri
P17334118058

ABSTRAK

Glukosa darah merupakan salah satu parameter pemeriksaan kimia klinik di laboratorium untuk pemeriksaan penunjang yang salah satunya menggunakan metode enzimatik. Salah satu faktor yang mempengaruhi aktivitas enzim adalah suhu. Berdasarkan kit reagen GOD-PAP harus disimpan pada suhu refrigerator dan ketika akan digunakan untuk pemeriksaan glukosa darah reagen harus disimpan di suhu ruang. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh variasi suhu awal reagen terhadap kadar glukosa darah metode enzimatik. Jenis penelitian ini adalah eksperimental. Sampel menggunakan serum seorang mahasiswa D III Analisis Kesehatan Poltekkes Kemenkes Bandung kelas 3B Angkatan 2019 yang diperiksa pada suhu awal reagen refrigerator, suhu 25°C dan suhu 37°C. Data yang diperoleh dianalisa secara statistik dengan uji Shapiro Wilk, data berdistribusi normal dilakukan Uji One Way Anova. Hasil penelitian dengan suhu awal reagen Refrigerator nilai rata-rata kadar glukosa sebesar 84 mg/dL, pada suhu awal reagen 25°C nilai rata-rata kadar glukosa sebesar 111,75 mg/dl, sedangkan suhu awal reagen 37°C sebesar 89 mg/dl. Uji One Way Anova didapatkan nilai signifikansi = 0,000 maka H_0 ditolak dan H_a diterima, sehingga dapat disimpulkan terdapat pengaruh bermakna variasi suhu awal reagen terhadap hasil kadar glukosa darah yang diperiksa pada suhu awal reagen 8°C, suhu awal reagen 25°C dan pada suhu awal reagen 37°C.

Kata Kunci : Reagen GOD-PAP, Glukosa Darah, Variasi Suhu

**THE EFFECT OF VARIATIONS OF INITIAL REAGENTS
TEMPERATURES ON THE RESULTS OF THE GOD-PAP METHOD OF
Glucose Examination**

Rizka Amelia Safitri
P17334118058

ABSTRACT

Blood glucose is one of the parameters of clinical chemistry examination in the laboratory for supporting examinations, one of which uses the enzymatic method. One of the factors that affect enzyme activity is temperature. Based on the GOD-PAP reagent kit, it must be stored at refrigerator temperature and when used for blood glucose examination, the reagent must be stored at room temperature. The purpose of this study was to determine the effect of variations in the initial temperature of the reagent on blood glucose levels by the enzymatic method. This type of research is experimental. The sample used the serum of a D III student, Health Analyst, Poltekkes Ministry of Health, Bandung class 3B, Class of 2019 which was examined at the initial temperature of the refrigerator reagent, a temperature of 25°C and a temperature of 37°C. The data obtained were analyzed statistically with the Shapiro Wilk test, the data were normally distributed and the One Way Anova test was performed. The results of the study with the initial temperature of the Refrigerator reagent the average value of glucose levels is 84 mg/dL, at the initial temperature of the reagent 25°C the average value of glucose levels is 111.75 mg/dl, while the initial temperature of the reagent 37C is 89 mg /dl. One Way Anova test obtained a significance value = 0.000 then Ho is rejected and Ha is accepted, so it can be concluded that there is a significant effect of variations in the initial temperature of the reagents on the results of blood glucose levels examined at the initial temperature of the reagent 8 °C , the initial temperature of the reagent 25°C and at the initial temperature of the reagent. 37°C.

Keywords: GOD-PAP Reagent, Blood Glucose, Temperature Variations