

## ABSTRAK

### Hubungan Asupan Vitamin C, Vitamin E dan Selenium dengan Kadar Gula Darah Puasa Pasien Diabetes Mellitus di Poliklinik Penyakit Dalam RSUD RAA Soewondo Pati

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Diabetes Mellitus (DM) ditandai dengan hiperglikemi menyebabkan ketidakseimbangan antara pro-oksidan dan antioksidan yang disebut stress oksidatif. Vitamin C, Vitamin E dan Selenium sebagai antioksidan berfungsi untuk mengurangi stress oksidatif. Penelitian ini bertujuan untuk mengetahui hubungan asupan vitamin C, vitamin E dan selenium dengan kadar gula darah puasa pasien Diabetes Mellitus di Poliklinik Penyakit Dalam RSUD RAA Soewondo Pati.

Penelitian ini merupakan penelitian *explanatory* di bidang gizi klinik dengan pendekatan cross sectional. Teknik pengambilan sampel dengan metode *Consecutive Sampling* dengan jumlah 68 subyek penelitian. asupan vitamin C, vitamin E dan selenium diperoleh dengan cara wawancara menggunakan Semi Quantitative Food Frequency Questioner (SQ-FFQ), sedangkan kadar gula darah pasien diperoleh dengan pengukuran menggunakan glukometer digital. Uji korelasi yang digunakan adalah Rank Spearman.

Asupan zat gizi yang cukup pada pasien DM didapatkan Vitamin C (86,8%), vitamin E (0%) dan Selenium (52,9%), sedangkan asupan yang kurang didapatkan Vitamin C (13,2%), vitamin E (100%) dan Selenium (47,1%). Kadar gula darah puasa pasien yang terkendali (41,2%) dan tidak terkendali (58,8%).

Ada hubungan antara asupan vitamin C, vitamin E dan Selenium dengan kadar gula darah puasa pasien Diabetes Mellitus di Poliklinik Penyakit Dalam RSUD RAA Soewondo Pati.

**Kata Kunci :** Kadar gula darah puasa, Selenium, Vitamin C, Vitamin E.

## **ABSTRACT**

### **Correlation between Vitamin C, Vitamin E and Selenium Intake with Fasting Blood Glucose Level among Diabetes Mellitus Patients in the Internal Medicine Clinic RSUD RAA Soewondo Pati**

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Diabetes Mellitus (DM) is characterized by hyperglycemia (an imbalance between pro-oxidants and antioxidants called oxidative stress). Vitamin C, Vitamin E and Selenium as antioxidants serve to reduce oxidative stress. This study aims to determine the relationship between vitamin C, vitamin E and selenium intake with fasting blood glucose levels of Diabetes Mellitus patients in the Internal Medicine Clinic of RAA Soewondo Pati Hospital.

This research is an explanatory research in clinical nutrition with cross sectional approach. The sampling technique is consecutive sampling with amount of 68 subjects. Intake of vitamin C, vitamin E and selenium data was collected by interview using Semi Quantitative Food Frequency Questioner (SQ-FFQ), while the patient's fasting blood glucose level by digital glucometer. Spearman rank correlation test is used to know association between the variables.

Adequate nutrition intake in DM patient for Vitamin C (86.8%), vitamin E (0%) and Selenium (52.9%), while low nutrition intake in DM patient for vitamin C (13.2%), vitamin E (100 %) and Selenium (47.1%). Fasting blood glucose levels of controlled patients (41.2%) and uncontrolled (58.8%).

There is a relationship between vitamin C intake, vitamin E and Selenium with fasting blood glucose levels of Diabetes Mellitus Patients in the Internal Medicine Clinic RSUD RAA Soewondo Pati Hospital.

**Keyword :** Fasting blood glucose level, Selenium, Vitamin C, Vitamin E.