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**Waist Circumference as The Strongest Factor Related to Blood Glucose Level**

**Lingkar Perut Mempunyai Hubungan Paling Kuat dengan Kadar Gula Darah**

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**Abstract**

**ABSTRACT**

The increasing prevalence of overweight and obesity is associated with the increasing incident of type 2 diabetes mellitus. Obesity, especially abdominal obesity is an important risk factor for the onset of diabetes. The objective of this study was to determine the relationship between body mass index, waist circumference and waist hip ratio with blood glucose level. The study design was cross-sectional. The study population was elderly posyandu member aged 45 to 70 years in Menur clinic work area who were registered in elderly posyandu activities in May 2013. The numbers of sample were 60 respondents who drawn by simple random sampling method. The variables of this study were the characteristics of respondent, body mass index, waist circumference, waist hip ratio and fasting blood glucose level. The study showed that respondents classified as overweight (38%), obesity (33, 3%), abdominal obesity based on waist circumference (77,8%), abdominal obesity based on waist hip ratio (81,7 %) and blood glucose level more than 125 mg/dl (8.3%). Pearson correlation test showed that there was relationship between body mass index with blood sugar levels (p=0.007; r=0.345), between waist circumference with blood sugar levels (p=0.001; r=0.424) and between waist hip ratio with blood sugar levels (p =0.002; r=0.392). Waist circumference as the strongest factor related to blood glucose level. Waist circumference measurement should be done in elderly posyandu activities to detect high-risk individuals with diabetes.

**Keywords**: Diabetes, body mass index, waist circumference, waist hip ratio, blood glucose level

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**Daftar Pustaka**: