

ABSTRACT

DIFFERENTIATION BETWEEN FASTING BLOOD SUGAR LEVEL SHIFT AND NON-SHIFT WORKERS IN UNIVERSITY OF LAMPUNG

By

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Shift work is usually applied to better utilize existing resources, increase production, and to extend the duration of the service. Shift work has positive and negative impacts. Long-term problems that arise due to shift work may include metabolic disorders, gastrointestinal function and impaired cardiac function due to disrupted circadian rhythms. Fluctuations of circadian rhythms that affect changes in mental and physical performance. Research shows that most night workers could never adapt to his schedule perfectly because the function of the human body physiology decreased at night.

This study aimed to determine differences in fasting blood sugar levels between shift workers and non-shift at the University of Lampung. This is the type of research analytic study, using cross sectional approach. The population in this study were all employees of the University of Lampung. Number sampel in this study amounted to 52 people consisting of 26 shift workers and 26 non-shift workers with sampling techniques with purposive sampling method. Blood sugar levels are measured in the form of fasting blood sugar levels.

Analysis using unpaired t-test, $p=0.004$. The analysis showed that there are differences in fasting blood sugar levels between shift and non-shift workers ($p < 0.05$).

Key words: Circadian rhythms, fasting blood sugar levels, non-shift, shift.