

The Relationship Between High-Fat Food Consumption Behavior and Sedentary Lifestyle with Uric Acid Levels Among Students of the Information Technology Department at Politeknik Negeri Jember

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ABSTRACT

High-fat food consumption behavior and sedentary lifestyle have the potential to elevate uric acid levels, particularly among Information Technology students whose academic activities are predominantly computer-based. This analytical observational study with a cross-sectional approach involved 95 male students of the Information Technology Department at Politeknik Negeri Jember, selected using proportionate stratified random sampling. Data on high-fat food consumption behavior were collected using the SQ-FFQ, sedentary lifestyle was measured using the IPAQ, and uric acid levels were measured using the Easy Touch GCU device. The results showed that 83 respondents (87.4%) had excessive fat intake with a mean of 364.3 grams per day, while 49 respondents (51.6%) were classified as sedentary with a mean sitting duration of 9.5 hours per day. A total of 79 respondents (83.2%) had normal uric acid levels and 16 respondents (16.8%) had elevated uric acid levels. There was no significant relationship between high-fat food consumption behavior and uric acid levels ($p = 0.419$), whereas sedentary lifestyle was significantly associated with uric acid levels ($p = 0.040$). Students are advised to increase physical activity, reduce sitting duration, and undergo periodic uric acid level examinations as a preventive measure against hyperuricemia.

Keywords: *High-fat Food, Hyperuricemia, Sedentary Lifestyle, University Students, Uric Acid*