

**HUBUNGAN ANTARA IMT DENGAN KEKUATAN OTOT
PADA MAHASISWA FAKULTAS KEDOKTERAN
UNIVERSITAS KATOLIK SOEGIJAPRANATA**

SKRIPSI



BAYU HARI PURWANTO

20.P1.0008

**PROGRAM STUDI PENDIDIKAN DOKTER FAKULTAS KEDOKTERAN
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SEMARANG
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Diajukan guna memenuhi salah satu syarat untuk memperoleh gelar Sarjana pada
Program Studi Pendidikan Dokter



Diajukan oleh :

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ABSTRACT

Background : *Students of medical study programs take education with a busy learning time. Busy activities make medical students rarely exercise, eat fast food more often and have insufficient rest hours. This lifestyle can lead to malnutrition, which is a condition where a person experiences a disturbance in nutritional balance. Assessment of malnutrition status can use IMT measurements which are described as overweight and underweight.*

Objective: *To determine the relationship between body mass index and muscle strength in medical students of Soegijapranata Catholic University.*

Methods : *This study used analytic observational research with a cross sectional research design. The samples in this study were students of the Faculty of Medicine of Soegijapranata Catholic University Class of 2020, 2021, and 2022 who met the inclusion criteria. Sampling in this study using simple random sampling technique obtained 116 respondents. Data analysis using univariate and bivariate using the spearman test.*

Results : *The 116 respondents, the highest frequency was in the group with normal BMI and normal muscle strength with 45 respondents. Underweight BMI with weak muscle strength was owned by 31 respondents, while normal BMI with weak muscle strength was owned by 13 respondents. This study also showed that there were 11 respondents with overweight BMI and normal muscle strength, and only 1 respondent with obese BMI and strong muscle strength. The Spearman test results obtained a p -value = 0.000 (<0.05), so these results indicate that there is a significant relationship between BMI and muscle strength. Since $r = 0.633$, this result shows that there's a significant relationship between BMI and muscle strength, and it's positively correlated, which means that the higher the BMI, the higher the muscle strength.*

Conclusion : *There is a significant relationship between BMI and muscle strength. With the results of the Spearman test obtained p -value = 0.000 (<0.05). So it means that the relationship between BMI and muscle strength is strong. $r = 0.633$. Thus, there is a strong positive correlation between BMI and muscle strength.*

Keywords : *BMI, Muscle Strength, College Students*