

**2019 Research Week Abstract Instructions and Template**  
**Posters and Presentations**

**Abstract**

**Title** - Risk Factors Associated with Weight Change in Undergraduate, Graduate, and Medical Students

**Program of Study** – Public and Community Health

**Presentation Type** – Oral Presentation

**Subtype** – Applied

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**Abstract:** While the national obesity rate is 37.7%, the age bracket with the highest incidence rates of obesity is between 18 and 29. Undergraduate students have been well-researched; however, lifestyle risk factors have not been studied throughout graduate education. This study was conducted utilizing a cross-sectional study design to determine risk factors associated with weight change patterns among second year undergraduate, graduate, and College of Osteopathic Medicine students. It was hypothesized that lifestyles of students in graduate or medical education is associated with greater weight gain than in undergraduate studies. A survey was administered to determine demographics, education level, weight change, and weight change risk factors throughout the first year of study. Exercise and eating habits, self-identified stress level, and hours of sleep were also assessed. Data were collected for 148 students then analyzed using descriptive statistics and the chi-square test of independence. The majority of medical students were male (54%), unemployed (89%), gained weight (42%), exercised regularly (55%), and indicated their stress level as high (48%). Among graduate students, the majority were female (65%), employed (74%), exercised sporadically (49%), indicated stress as medium high (46%), and ate 3 meals per day (54%). Most undergraduate students were female (64%), employed (36%), gained weight (61%), exercised sporadically (44%), and indicated stress as

medium high (78%). Education level was determined to be independent from weight gain quantities ( $\chi^2=4.203$ ;  $p=0.65$ ;  $df=6$ ), weight change ( $\chi^2=6.118$ ;  $p=0.19$ ;  $df=4$ ), self-reported stress level ( $\chi^2=10.0299$ ;  $p=0.1234$ ;  $df=6$ ), and meals per day ( $\chi^2=3.315$ ;  $p=0.77$ ;  $df=6$ ). Education level was not independent from exercise habits ( $\chi^2=9.476$ ;  $p=0.05$ ;  $df=4$ ). This research determined that although lifestyle factors vary among programs, education level may be not correlated with weight change and with additional education, healthy lifestyle habits may improve. In the future, more research is needed to determine lifestyle habits and weight change post-graduation.