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Abstract This BriefTrends examines the prevalence (%) of no muscle strengthening exercise in U.S. high school students in 2019 both overall and across different weight status categories.

Keywords: muscle strengthening exercise, YRBS, public health, adolescent health


1. Purpose

Briefly present the prevalence of no muscle strengthening exercise reported by U.S. high school students by weight status and by sex for 2019.

2. Data Source

The 2019 High School Youth Risk Behavior Survey (YRBS).

3. Population

All U.S. public and private high school students grades 9 thru 12.

4. Variables

1) Muscle strengthening exercise status (Status of ‘No’ for those reporting 0 days to the question: During the past 7 days, on how many days did you do exercises to strengthen or tone your muscles, such as pushups, sit-ups, or weight lifting?, otherwise ‘Yes’), 2) Weight status (‘Normal weight’: < 85th BMI percentile for age and sex, ‘Overweight’: ≥ 85th BMI percentile for age and sex and < 95th BMI percentile for age and sex, ‘Obese’: ≥ 95th BMI percentile for age and sex), and 3) sex.

5. Analysis

Prevalence (%) estimates of no muscle strengthening exercise, overall and by weight status and by sex, 95% confidence intervals (CIs) for prevalence estimates, and linear contrasts for trend in log odds across weight status groups. SAS Survey Procedures were used for estimates, CIs, and tests, version 9.4.

6. Findings
The prevalence of no muscle strengthening activity reported by high school students in 2019 overall was 29.7% (95% CI: 27.6-31.9). Significant sex differences were seen overall with female (35.8% 95% CI: 32.9-38.8) prevalence of no muscle strengthening exercise greater than the male prevalence (23.7% 95% CI: 21.9-25.5).

Sex differences remained within each weight status group. Finally, significant linear trend tests ($p < .0001$) indicate greater prevalence of no muscle strengthening exercise for overweight and obese students, overall and within each sex group.

References

