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The Relationship of Nutritional Intake and BPA and BPS Exposure to Muscle Power in College Students.

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PURPOSE- Levels of bisphenol -A and -S (BPA and BPS) have been positively associated with the incidence of disease, such as atherosclerotic cardiovascular disease and type 2 diabetes; therefore, the aim of the study was to identify if the amount of processed food could estimate exposure of BPA and BPS, and to verify if levels of BPA and BPS impact muscle strength. **METHODS-** Subjects (n=8, BMI 23.2 ± 2.2 , Body fat 19.1 ± 4.6) completed a 3-day nutritional log. Caloric intake was quantified using a fitness app. Subjects then performed a 1-Rep Max (RM) lower body (Squat) and 1-Rep Max (RM) upper body (Bench Press). Urine samples were collected after 3 hours of fasting for BPA, BPS. Levels of BPA and BPS were normalized with creatinine. **RESULTS:** There are significant correlations between processed foods consumed and LDL, BPA, and BPS. There was a moderately strong, negative correlation between LDL and processed foods consumed. A moderately strong, positive correlation was seen between processed foods consumed and BPA and BPS. **CONCLUSION:** The results demonstrate that levels of BPA and BPS can be estimated using a 3-day nutritional log and the percentage of processed food. Additionally, BPA seems to have an effect on lower body strength. Nutritional interventions minimizing consumption of processed foods can be effective in decreasing BPA and BPS exposure and potential decrease in muscle strength.