

THE INFLUENCE OF LEAN BODY MASS ON URINE HYDRATION INDICES IN COLLEGIATE FEMALES

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INTRODUCTION

- Hydration is vital to health & influences bodily functions
- Evidence demonstrates that urine hydration status markers can be influenced by sex, race, activity type, and body composition
- **PURPOSE:** Investigate the relationships between body mass metrics, USG, and Urine color in college-aged females

METHODS

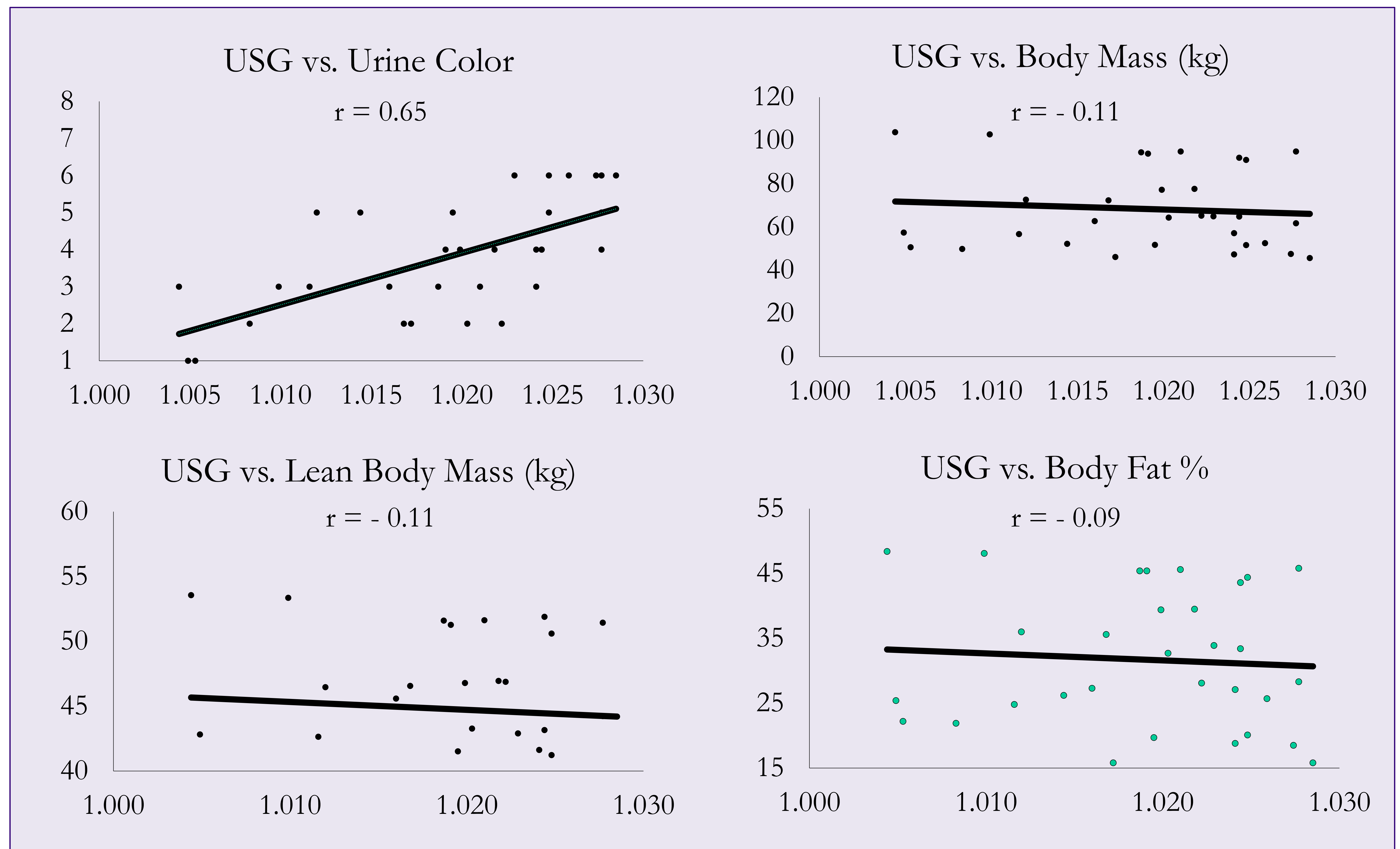
- Collegiate women ages 18-23 were recruited for this study, n = 16
- Urine samples were provided on two separate visits- after overnight fast, total n = 32
- Body composition estimated via standing, BIA, USG measured with digital refractometer, Urine Color via paper chart
- Stats = Correlations (Pearson's or Spearman's)

RESULTS

- **Table 1.** Summary Descriptive Data – measured on two different days (n = 32; age range 18-23 y).

	BF %	Wt (kg)	USG	Lean Mass (kg)	Fat Mass (kg)
Mean	31.6	68.0	1.0193	44.7	23.3
SD	10.4	18.6	0.0072	5.0	13.7

RESULTS



CONCLUSION

- Larger body mass & tissue mass were associated with more-favorable urine hydration indices
- These data support the opposite of our hypothesis

PRACTICAL APPLICATIONS

- Individualized hydration indices could support more-meaningful monitoring & education
- Additional research & critical thinking are needed to further elucidate hydration recommendations