

# Dietary Intake Patterns and Eating Competence in Male and Female Collegiate Swimmers

Saint John's

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### Introduction

- Tight fitting clothing & an emphasis on lean body weight contributes to:
  - 6.7% of Division I female swimmers classified as eating disordered and another 20.9% as subclinical (1)
  - Practicing at an energy deficit
  - · Body dissatisfaction
- ↓ calories and nutrients can put athletes at an ↑ risk for injury and poor performance
- Attitudes concerning weight can largely affect lifestyle & health outcomes
- Eating competency measures a person's positive eating attitudes and acceptance of food which correlates with a healthy BMI

## **Purpose**

How nutritionally adequate are swimmers' diets?

Are they eating competent?

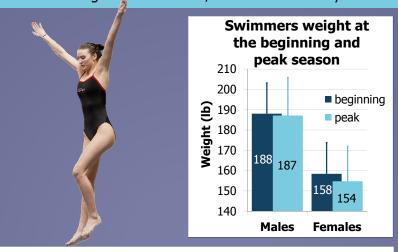


### **Methods**

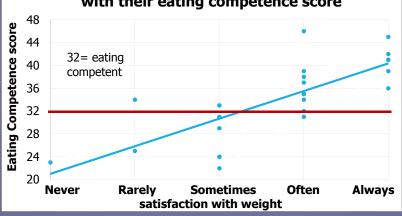
Obtained approval from IRB and to use the ecSatter inventory

Recruited CSB/SJU swimmers and asked to complete at the beginning and peak season

- 3-day diet records
- height & weight measurements
- the Eating Competency Inventory
- · Analyzed data using paired T-tests



# Swimmers weight satisfaction correlates with their eating competence score



Nutrient inadequacy	# of Males	# of Females	Total percentage of participants
Calcium	1	3	16%
Potassium	8	12	80%
Iron	0	3	12%
Vitamin D	12	11	92%
Magnesium	3	4	33%

### **Results**

- 64% of swimmers were eating competent with a score of ≥32 and a maximum score of 48, but nearly all swimmers should be eating competent
- Swimmers who were eating competent were satisfied with their weight
- Swimmers with ↑ satisfaction with weight consumed ↑ calories
- Caloric intake for men 3,459 ± 750 kcal and for women 2,227 ± 638 kcal did not ↑ from the beginning to peak season
- Eating competency was not related to diet quality within this population

#### Conclusion

Swimmers who feel comfortable with their body weight have a positive relationship with food according to their ecSI scores which indicates a lower risk for disordered eating.



### **Acknowledgements**

I want to thank the CSB/SJU swimmers for participating in this study, Richard Wielkiewicz for assisting in the statistical analysis, Amy Olson for her assistance, Carol Howe-Veenstra, CSB coach Dan Eckberg and SJU coach Bill Saxton for letting me work with the swimmers,

1) Hoogenboom B.J., Morris J., Morris C., Schaefer K. (2009). Nutritional knowledge and eating behaviors of female, collegiate swimmers. *North American Journal of Sports Physical Therapy*, 4(3),139-48.