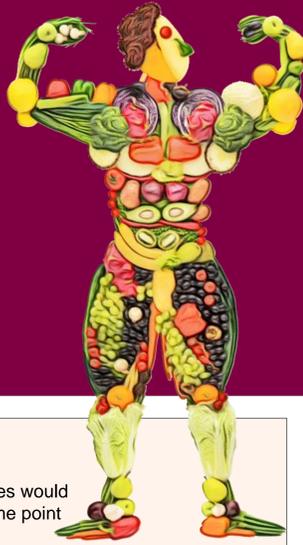


# Assessing Sports Nutrition Knowledge Among Collegiate Athletes and Coaches

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## INTRODUCTION

- College athletes obtain sports-related nutrition information from the athletic support staff, who may have limited educational background in nutrition (Andrews et al., 2016; Giles et al., 2014; Torres-McGehee et al., 2012)
- Discrepancies exist regarding the available nutrition-related resources and services provided to athletes depending on division, potentially impacting the nutritional status of college athletes (Karpinski, 2012)
- There is uncertainty as to whether college athletes would utilize the service of a registered dietitian if provided with the opportunity (Karpinski, 2012)
- There is limited information on how sports nutrition information should be provided to collegiate athletes as well as the athletic support staff

## PURPOSE

To determine the nutrition knowledge, sources of nutrition information, and best way to distribute sports-related nutrition information to Concordia College athletes and coaches.

## MATERIALS AND METHODS

### Participants

- Collegiate student athletes and coaches at Concordia College-Moorhead
- Inclusion criteria:
  - Agreement to participate
  - 18 years of age or older
  - Current athlete or coach at Concordia College

### Assessment Measures

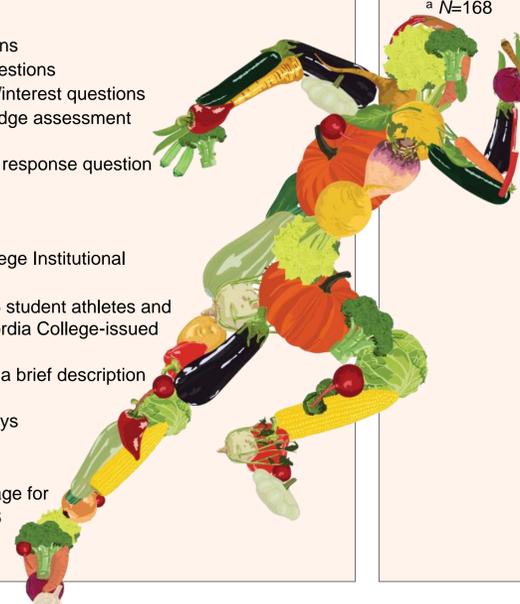
- Constructed using Qualtrics Survey Software
- Athlete survey consisted of:
  - Consent form
  - Verification of age
  - 17 multiple-choice questions
    - Three demographic questions
    - Five research/utilization/interest questions
    - Nine nutrition knowledge assessment questions
- Coach survey consisted of:
  - Consent form
  - 16 multiple-choice questions
    - Three demographic questions
    - Six research/utilization/interest questions
    - Seven nutrition knowledge assessment questions
- Both surveys consisted of a text response question intended for further comments

### Procedures

- Approved by the Concordia College Institutional Review Board
- Distributed to approximately 525 student athletes and 40 collegiate coaches via Concordia College-issued email
- Email contained survey link and a brief description of study purpose
- Survey remained open for 14 days

### Analysis

- Analyzed using Statistical Package for the Social Sciences (SPSS®) 26

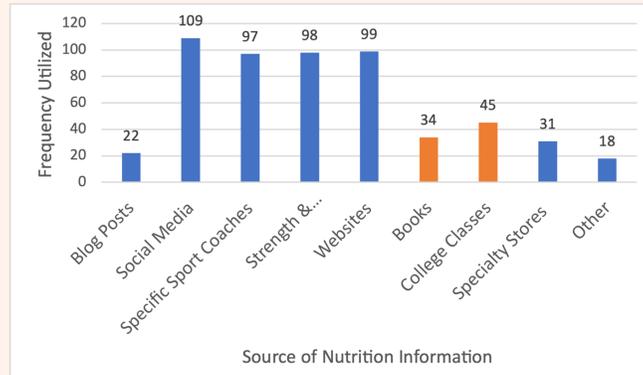


## RESULTS

### Student Athletes

Figure 1

Nutrition information sources used by student athletes



Note. Categories reflect most common resources utilized by student athletes to obtain information

<sup>a</sup> Orange bars refer to reliable resources for nutrition information

Table 1

Interest of athletes in receiving nutrition information through different means

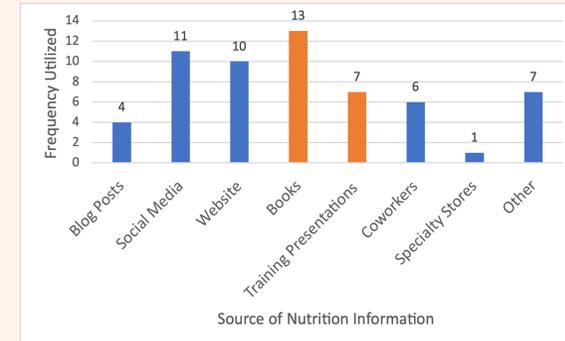
	Not Interested n (%)	Very Interested n (%)
Group Sessions	53 (31.5%)	26 (15.5%)
Individual Counseling	59 (35.1%)	41 (24.4%)
Newsletters	65 (38.7%)	39 (23.2%)
Independent Study Modules	88 (52.4%)	21 (12.5%)
Conferences/Presentation	63 (37.5%)	33 (19.6%)
Academic Courses	48 (28.6%)	33 (19.6%)

<sup>a</sup> N=168

### Collegiate Coaches

Figure 4

Nutrition information sources used by collegiate coaches

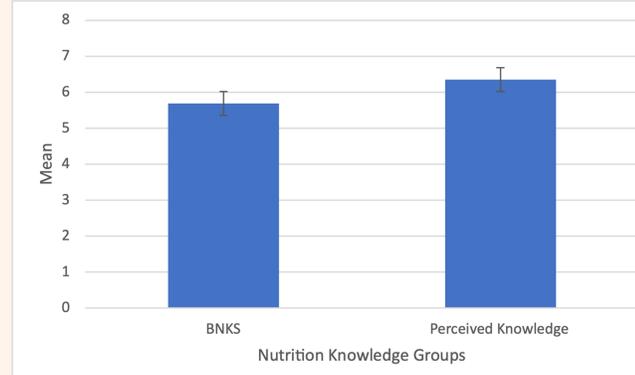


Note. Categories reflect most common resources utilized by collegiate coaches to obtain information

<sup>a</sup> Orange bars refer to reliable resources for nutrition information

Figure 2

Perceived compared to actual nutrition knowledge among student athletes



<sup>a</sup> BNKS = Basic Nutrition Knowledge Score <sup>b</sup> Perceived knowledge = personal rank given on a scale of 0-10

\*p < .05

Figure 3

Anticipated use of a registered dietitian by student athletes

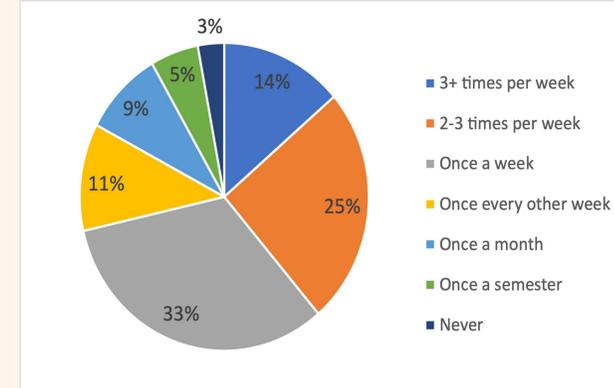
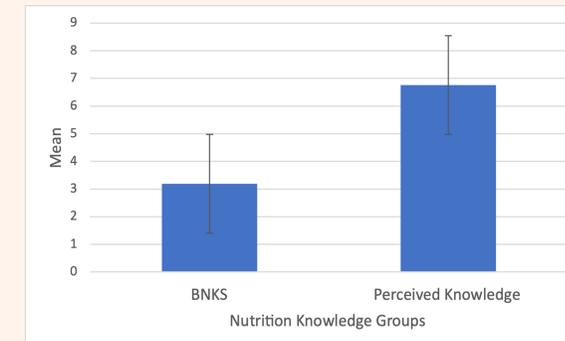


Figure 5

Perceived compared to actual knowledge among collegiate coaches



<sup>a</sup> BNKS = Basic Nutrition Knowledge Score <sup>b</sup> Perceived knowledge = personal rank given on a scale of 0-10

\*p < .05

## DISCUSSION

- A majority (97%) of student athletes would utilize a registered dietitian at some point throughout their athletic season if available to them
- Nutrition knowledge was inadequate among student athletes and collegiate coaches with a mean score of 63% and 35%, respectively, which is consistent with findings from previous research (Botsis & Holden, 2015; Gilis et al., 2014; Torres-McGehee et al., 2012)
- There was a significant difference between perceived and actual sports-related nutrition knowledge for collegiate coaches and student athletes suggesting a need for educational intervention in both populations
- Credible sources of nutrition information were only used 15% and 39% of the time by student athletes and collegiate coaches, respectively. Specific sport coaches as well as strength and conditioning coaches were used most of the time (35%) by athletes, which is consistent with findings from previous research (Torres-McGehee et al., 2012).

## CONCLUSION

A sports nutrition education intervention is needed for both collegiate student athletes and coaches. Such an intervention will provide the opportunity to increase overall health and athletic performance among the Concordia College athletes.

## REFERENCES

- Andrews, A., Wojcik, J.R., Boyd, J.M., & Bowers, C.J. (2016). Sports nutrition knowledge among mid-major division I university student-athletes. *Journal of Nutrition and Metabolism*, 2016, 3172460.
- Botsis, A. E., & Holden, S. L. (2015). Nutritional knowledge of college coaches. *Sport Science Review*, 24(3-4), 193-200. doi:10.1515/ssr-2015-0015
- Gilis J.T., Anderson D.L., Morgan A.L., & Hamady C.M. (2014). Nutrition knowledge and interest of collegiate athletes at a division I university. *Journal of Food and Nutrition* 1: 1-7.
- Karpinski, C. (2012). Exploring the feasibility of an academic course that provides nutrition education to collegiate student-athletes. *Journal of Nutrition Education and Behavior*, 44(3), 267-270. doi:10.1016/j.jneb.2011.09.004
- Torres-McGehee, T.M., Pritchett, K.L., Zippel, D., Minton, D.M., Cellamare, A., & Sibilia, M. (2012). Sports nutrition knowledge among collegiate athletes, coaches, athletic trainers, and strength and conditioning specialists. *Journal of Athletic Training*, 47(2), 205-11.

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## FOR FURTHER INFORMATION

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