

Fueling for Success

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Assessment

Opportunity:

- Female athletes at Quincy University (QU) lack education regarding the Female Athlete Triad (the Triad) and proper nutrition

Driving Forces:

- Support from QU Women's Soccer Coach
- Data showing a need for education
- Reducing preventable injuries and optimizing athletic performance

Restraining Forces:

- Access to QU coaches
- Reluctance of female athletes to change their dietary habits
- Limited team budgets for food
- Dietary offerings in the QU cafeteria

Planning

Short-Term Goal:

- Educate stakeholders on the importance of nutrition as it relates to the Triad

Long-Term Goal:

- Prevent the Triad development in QU female athletes

Plan of Evaluation:

- Assess educational changes implemented by coaches to female athletes

Strategies to Hardwire Change:

- Pass on project to be continued by younger QU/CSC/BRCN student athletes
- Educate college community on the importance of the Triad

Evaluation

Evaluation of Change:

- Evaluate athletes' understanding of the Triad and how it relates to performance and health
- Assess use of poster in training rooms and locker rooms by female athletes and coaches

Strategies to Stabilize:

- Coaches and athletes continue to educate each other to fuel bodies with proper nutrition
- Provide data to QU Senior Women's Administrator (SWA)
- Involve the Student-Athlete Advisory Committee

Summary

What We Learned:

- Implementing change is difficult
- Professional collaboration with stakeholders
- Timely communication is imperative
- Persistence to achieve goals

What We Would Do Differently:

- Begin earlier
- Obtain data from all female athletes and coaches
- Meet with QU Athletic Director to discuss team budgets for food

Literature Review

- There is a greater prevalence of the Triad risk factors in female athletes now than there has been in the past³
- 76.3% of participants were classified as currently having disordered eating³
- Low energy availability is the most common force of the Triad¹
- Energy deficit suppresses the menstrual cycle and bone mineral density thus developing all three factors of the Triad¹
- Need an energy-positive state by increasing food intake and decreasing energy expenditure¹
- Need adequate calcium, vitamin D, iron, zinc, and vitamin K¹
- Athletes need 15-30% of calories from protein sources, 20-35% of calories from fat sources, and need to consume 8-12 grams per kilogram of body weight of carbohydrates for intense training²

Implementation

Strategies for Handling Resistance:

- Gathered survey data face to face
- Created and analyzed paper surveys
- Provided coaches with data gathered from surveys

Implementation Steps:

- Completed literature review to support the need for better nutrition provided to athletes
- Surveyed coaches and female athletes
- Analyzed data to assess need for education
- Developed educational poster for athletes to read in the athletic training room and locker rooms

QU FEMALE ATHLETES 74 Participants

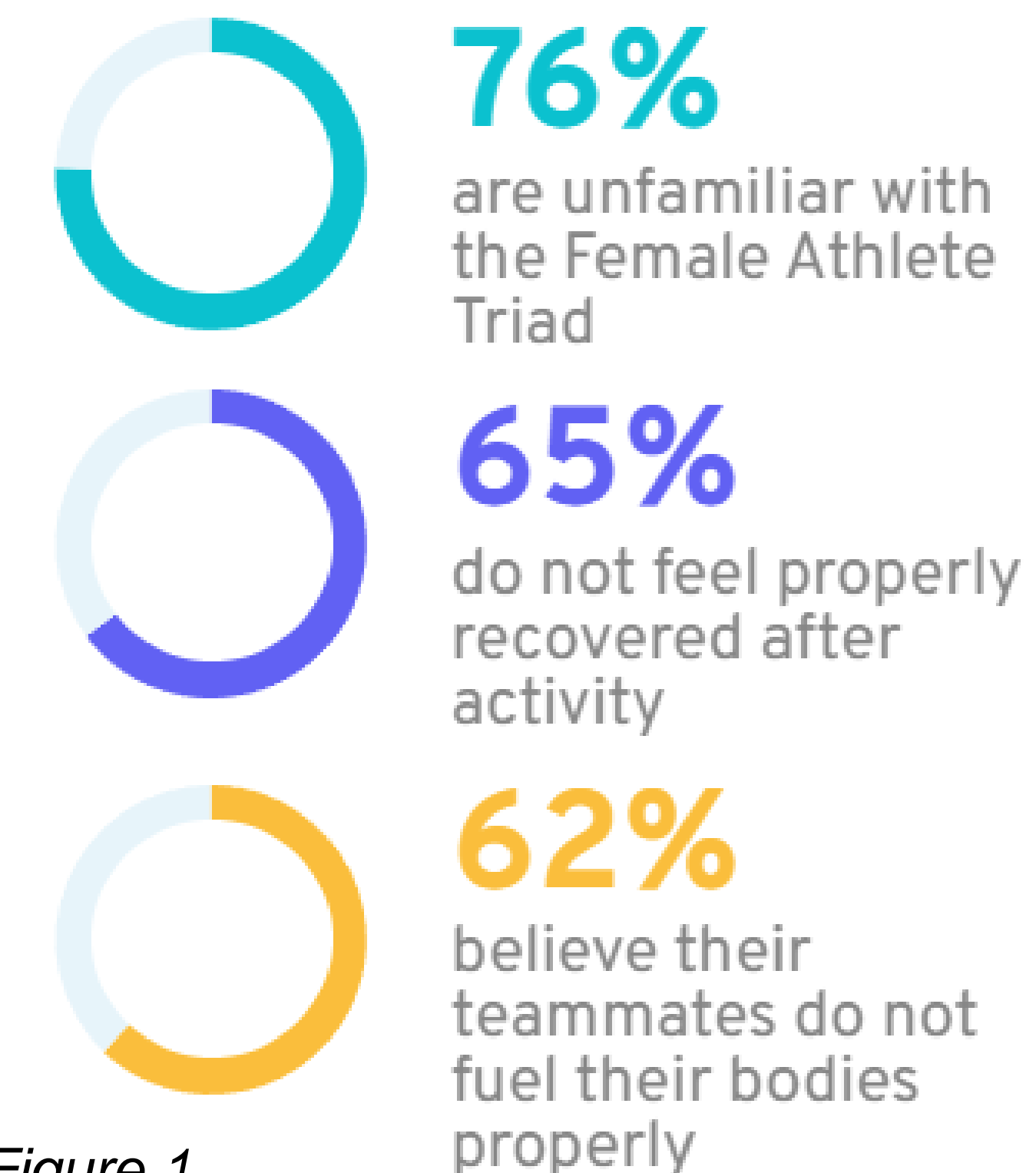


Figure 1.

References

- Mehta, J., Thompson, B., & Kling, J. (2018). The female athlete triad: It takes a team. *Cleveland Clinic Journal of Medicine*, 85(4), 313-320. doi:10.3949/ccjm.85a.16137
- Bytowski, J. (2017). Fueling for performance. *Sports Health: A Multidisciplinary Approach*, 10(1), 47-53. doi:10.1177/1941738117743913
- Skorseth, P., Segovia, N., Hastings, K., & Kraus, E. (2020). Prevalence of female athlete triad risk factors and iron supplementation among high school distance runners: Results from a triad risk screening tool. *The Orthopaedic Journal of Sports Medicine*, 8(10). doi:10.1177/2325967120959725

Figure List

Figure 1. Anderson, P., Autry, E., & Vaughn, E. (2022). *QU Female Athletes* [Infographic].