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Featured Researcher | Beth Miller

(http://www.tntech.edu/files/research/Featured_Researchers/BMiller_reg.jpg) Senior Beth Miller applied her research on nutrition to her teammates on the cross-country team.

Summary:

Senior human ecology major in the food, nutrition and dietetics track Beth Miller, of Watertown, Wis., took the principles and concepts she learned from her classes and other research and applied them to her teammates on the cross-country team. She worked with the team throughout the semester, leading sessions and workshops, to help them improve their awareness of an athlete's nutritional needs. Focusing on the theme "Food as Fuel," Miller taught her teammates how to read a nutrition label, to cook healthy meals, and to time their meals to benefit their workout regimen.



Research procedure, findings:

Miller worked with her 22 fellow members of the TTU cross-country team. Before starting her study, she asked each of them to track their diet over three days and complete an attitudinal survey. During the eight-week study, she gave 45-minute lectures and workshops, as well as sending out educational emails three times a week. At the end of the eight weeks, she had them do another survey and track their diets for three days.

At the end of the survey, Miller found that though runners were still eating too much fat and not enough carbohydrates, they did eat more whole grains and vegetables by the end of her survey. She did note that their attitudes, based on the survey, were more open to changing and improving their diets.

Research application:

Using her survey data and the other research she gathered, Miller said she hopes to see improvements in her teammates' and other athletes' nutrition intake. Another benefit might be improved athletic performance from the information she shared with her team.

Funding:

Miller was awarded two grants worth a total of \$1,500 from Tennessee Tech's Undergraduate Research and Creative Activity program.

What motivated you to do this research?

"I had so many different topics I wanted to study, so I started reading research articles and ideas kept flowing. I decided to work with the cross-country team because I'm on it, so it was more accessible to me."

"People feel that because they are athletes, they can eat whatever they want because they will burn it off anyway. But it's the quality of the nutrition that matters."

What are your future plans?

Miller plans to write a paper based on her findings to submit to an academic journal and an abstract to submit to a professional conference.

What have been the biggest challenges you've faced?

"Because this is my team, people saw me as a peer, so it was a challenge getting them to take it seriously and getting all the data in to me sometimes."

What is your dream project?

"I would love to focus on nutrient timing for optimal athletic performance. I really enjoy that. Being an athlete myself, since I've put my studies to use, I've seen my performance improve. In finding that, I want to help other athletes as well."

Miller also said she is interested in studying the female athletic triad, which is a collection of health problems composed of eating disorders, osteoporosis and amenorrhea, or menstrual disturbances. Women athletes who experience any single element of the triad can be in danger, but when the three combine, women are urged to seek medical help immediately, according to the Female Athlete Triad Coalition.

*Last edited **2014.08.15** by **unknown**.*