

## ORIGINAL RESEARCH

## NUTRITIONAL KNOWLEDGE AND EATING BEHAVIORS OF FEMALE, COLLEGIATE SWIMMERS

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## ABSTRACT

**Background.** Female athletes often have inadequate diets due to lack of nutritional knowledge and nutritional misconceptions. Poor nutrition may lead to an increased chance of developing the Female Athlete Triad, a trio of low energy availability, menstrual dysfunction, and low bone mass. Physical therapists, as part of a healthcare team, must be prepared to address nutritional issues, recognize signs and symptoms of the female athlete triad, and make the appropriate intervention or referral.

**Objectives.** The purpose of this study was to determine the nutritional knowledge of female collegiate swimmers and how effectively they apply their nutritional knowledge to their everyday eating habits.

**Methods.** Eighty-five female collegiate swimmers from six Michigan universities completed a nutritional knowledge questionnaire and a 24-hour food recall survey. Demographic, nutritional, and statistical data were analyzed.

**Results.** The mean score on nutritional knowledge test was 54.53/76 (71.75% correct). Mean total caloric intake of

swimmers was 3229.10 calories per day. Ninety-five point nine percent did not meet the recommended dietary allowance (RDA) for all three macronutrients. No difference in total mean survey score existed between the three collegiate divisions.

**Conclusion.** This study suggests that athletes lack knowledge of nutrition, healthy food choices, components of a well-balanced diet, and the implications of nutrition on performance.

**Key Words.** nutrition, swimming, and female athlete triad

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