CATEGORY: SPORTS NUTRITION

Nutrition is critical for athletes as it provides a source of energy required to perform activities and impacts strength, training, performance and recovery. These sessions review nutrition strategies that athletes can use to improve their overall performance.

Optimal Nutrition for Athletes

Fitness, Sports, and Nutrition

- A Calorie is Not a Calorie: 21st Century Optimization of an Athlete's Diet
- Balancing Protein and Carbs for Athletic Performance and Body Composition
- Can Endurance Athletes Perform Well Without the Traditional High Carbohydrate Eating Pattern?
- Feeding the Recovery Muscle
- High-Quality Protein in Promotion of Exercise Adaptation: The Role of Nutrient Density
- Nutritional Strategies to Improve Performance for Endurance Athletes
- On Your Mark, Get Set.... Eat to Compete
- Sports Nutrition in the Real World Translating Research into Reality
- Whole Foods or Sports Nutrition Products Hype vs. Reality

Sports Nutrition for Specific Populations

- Nutritional Concerns of Female Athletes: One Runner's Story
- Young Athletes: What's In, What's Out, & What's Essential

Speakers Available for this Category

- Donald Layman, PhD
- Jill Castle, MS, RD, LDN
- Kim Schwabenbauer, MS, RD, CSSD, NASM-CPT
- Mike Roussell, PhD
- Nancy Rodriguez, PhD, RD, CSSD, FACSM
- Richard Wood, PhD
- Sarah-Jane Bedwell, RD, LDN
- Stu Phillips, PhD, FACSM, FACN

SESSION DESCRIPTIONS

Optimal Nutrition for Athletes

A Calorie is Not a Calorie: 21st Century Optimization of an Athlete's Diet

When it comes to fueling our athletes what matters? Calories? Macronutrients? Food Timing? Should we be recommending carb loading? How much protein is enough? This talk will explore how we can use the recent findings in sports nutrition research to fuel our athletes for maximum performance in the 21st Century.

• Possible Learning Needs Codes: 2000, 4000, 6000

Balancing Protein and Carbs for Athletic Performance and Body Composition

This presentation will focus on protein and carbohydrate needs for endurance and strength sports. Rehydrate, Refuel and Repair are key nutrition goals for everyone from elite athletes to individuals who practice daily fitness. Optimizing muscle protein synthesis and glycemic regulations at individual meals determines the anabolic response and impact on body composition.

Possible Learning Needs Codes: 2000, 4000, 6000

Can Endurance Athletes Perform Well Without the Traditional High Carbohydrate Eating Pattern?

This presentation will briefly review exercise physiology and bio-energetic demands, followed by a brief review of traditional nutrition recommendations for endurance athletes. The majority of the presentation will review literature and other evidence that the traditional high-carbohydrate eating pattern may not be required for peak performance in endurance sports.

• Possible Learning Needs Codes: 2000, 4000, 6000

Feeding the Recovery Muscle

This presentation is focused on nutritional strategies immediately after a bout of training or competition to optimize muscle refueling and muscle protein balance. The presentation will begin with a brief review of the effects of training and competition on muscle fuel stores, followed by a review of the literature pertaining to refueling the muscle. Needs for refueling will be compared with needs for optimized protein synthesis and degradation. Practical examples, which combine refueling and protein balance needs, will be given and the placement of the presented nutritional strategies within overall nutrition periodization will be covered.

• Possible Learning Needs Codes: 2000, 4000, 6000

High-Quality Protein in Promotion of Exercise Adaptation: The Role of Nutrient Density

Proteins are often nutrient-dense. That is, they contain, relative to their caloric content, nutrients that are often found to be lacking in our diet. Thus, a central portion of dietary planning should, we propose, be based around nutrient-dense dietary proteins. Analysis of available data (NHANES) shows that increasing pressure to reduce saturated fat intakes would further reduce the intakes of these same nutrient-dense protein sources. The central tenet of this presentation is that nutrient-dense dietary proteins should form a cornerstone of dietary planning and omission of these protein sources makes ingestion of recommended levels of many nutrients difficult to achieve.

Possible Learning Needs Codes 2000, 4000, 6000, 9000

Nutritional Strategies to Improve Performance for Endurance Athletes

Whether athletes are training for their first marathon or an Ironman triathlon, it's critical to employ nutritional strategies that will prepare them for success from a body composition, training and racing standpoint. Ensuring they plan for success by incorporating the right foods with accurate timing is essential to building strength and endurance and promoting recovery. Learn to understand their needs and the correlation between training and nutrition for this ever-growing group of specialized endurance athletes.

Possible Learning Needs Codes: 2000, 4000, 6000

On Your Mark, Get Set.... Eat to Compete

This presentation reviews the dietary needs for athletes including timing of fuel, as well as pre- and post-recovery fuel options.

• Possible Learning Needs Codes: 2000, 4000, 6000

Sports Nutrition in the Real World-Translating Research into Reality

The media is quick to interpret a single research study in sports nutrition as a new fad or blanket statement for all athletes. As nutrition experts, registered dietitians and health professionals must determine the validity of the source, as well as practical applications for real world athletes attempting to improve exercise performance. Learning Objectives include:

- 1. Identify the mechanisms of caffeine as an ergogenic aid and discuss the benefits of ingestion, as well as the appropriate use among athletes.
- 2. Identify the mechanisms of beta-alanine supplementation on high intensity exercise performance and state its protocol for use.
- 3. Understand the real value of "training low" (in a fasted or low glycogen state) for athletes and evaluate whether it is of benefit to that particular athlete for training adaptation.
- 4. Interpret several research studies indicating how inorganic nitrate ingestion might alter the physiological responses to exercise, as well as state applications and practical recommendations.
 - o Possible Learning Needs Codes: 2000, 4000, 6000

Whole Foods or Sports Nutrition Products – Hype vs. Reality

Weekend warrior or seasoned endurance junkie, athletes tend to think specifically-designed sports nutrition products are better suited to their activities than traditional whole foods. While both can have a place in their training and racing, certain situations may call for one option over another to provide a better nutritional strategy to meet their requirements. Learn how different types of athletes can use both real food and ergogenic aids, such as bars, gels, or drinks appropriately to provide energy and electrolytes during their training sessions and races.

• Possible Learning Needs Codes: 2000, 4000, 6000

Sports Nutrition for Specific Populations

Nutritional Concerns of Female Athletes: One Runner's Story

In this session, RDs and fitness professionals will learn about the unique nutritional concerns for female athletes and fitness enthusiasts at any level. This session will also provide specific nutritional recommendations for before, during, and after exercise as well as daily nutrition recommendations for female athletes to prevent deficiencies and optimize performance.

Learning Needs Codes: 1000, 4030, 4040, 4060, 4180, 8090

Young Athletes: What's In, What's Out, & What's Essential

With young athletes emerging every day, the field of youth sports nutrition is exploding. The speaker helps parents and practitioners understand the evidence regarding the nutritional needs of the young athlete, aged 8 to 18 years, highlighting major topics like protein, carbohydrates, supplements, sideline snacks and the food environment.

• Learning Codes: 3150, 4060, 4160, 5080