



OFFICE OF PROFESSIONAL AND
CONTINUING EDUCATION

Office of Professional & Continuing Education
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Student Full Name: _____

Start Date: _____ End Date: _____

Sports Health Consultant
450 Hours/12 Months/Mentor Supported

Course Code:	AU-SNC
Program Duration:	12 Months
Course Contact Hours:	450
Student Tuition:	\$3,250

Overview

The exciting field of sports nutrition combines the sciences of nutrition and exercise physiology. Our Sports Nutrition course takes a personalized approach that guides you through the elements of carbohydrates, fats, proteins, minerals, vitamins, and fluids using case studies and practical applications for working with athletes. You'll be introduced to the functions of these nutrients, proper dietary intakes, and how they affect your body. Proper nutrition is vital to the overall athletic performance and experience. To get a job in the sports nutrition field, you need to understand current guidelines, emerging research, and be able to apply knowledge to athletes of all ages. This course will meet those needs by using the most up to date information and tools.

Although many people understand the importance of healthy nutrition habits and good fitness patterns, it is sometimes hard to accomplish goals on their own. A nutritional consultant can help clients adopt a healthy lifestyle. Our nutritional consultant training provides students with an exploration of how food nutrition contributes to the prevention of illness and the promotion of optimal health. Students will identify how to conduct in-depth diet and lifestyle evaluations and create food plans customized to each individual's taste, temperament, and health goals. The fundamentals of whole food nutrition, digestive physiology, metabolism, nutritional biochemistry, and current research are presented. Additionally, students will discover how healthy nutrition habits are used in the food industry. Our Nutritional Consultant course will give students the training they need to work with clients of all ages, backgrounds, and fitness levels.

After completing this course, you should be able to:

- Recall the importance of basic nutrients, the effects on our bodies, and energy systems
- Identify the functions of carbohydrates, fats, proteins, vitamins, and fluids to overall body composition

- Recognize the fundamentals of nutritional ergogenics, weight management, and endurance
- Differentiate between strength/power athletes, team sports athletes, and types of consultations
- Recall how to work with special populations and potential jobs in sports nutrition
- Define healthy food guidelines
- Identify how nutrition aids in health
- Recall the roles of various foods, vitamins and minerals and their impact on the body
- Identify how the food industry uses nutrition information credibly
- List nutritional needs throughout human development

Outline

Sports Nutrition Module 1

Basic Nutrients

- Why Study Sports Nutrition?
- How Does the Body Produce Energy?
- Dietary Reference Intakes
- Enriched and Fortified Foods
- Basic Nutrition Guidelines
- How are Carbs Digested?
- How are Fats Digested?
- How are Proteins Digested?
- What is Energy?
- Cells and ATP
- Three Energy Systems

Sports Nutrition Module 2

Carbohydrates and Fats

- How are Carbohydrates Classified?
- Functions of Carbohydrates
- Sources of Dietary Carbohydrates
- Glycemic Index and Glycemic Load
- How are Lipids (Fats) Classified?
- Which Foods Contain Fat?
- Cholesterol
- Fats Affect Daily Training and Competitive Performance
- How Much Fat Should be Consumed?

Sports Nutrition Module 3

Proteins and Vitamins

- Main Functions of Proteins
- Nitrogen Balance
- Daily Protein Consumption
- Foods with Protein
- Benefits of Protein Supplements
- Why is Protein Essential for Daily Training?
- Water-Soluble Vitamins
- Fat-Soluble Vitamins
- Antioxidant Properties
- What are Phytochemicals?

Sports Nutrition Module 4

Minerals and Water

- What are Major Minerals?
- What are Trace Minerals?
- Consequences of Poor Water Balance
- How Much Fluid do Individuals Need?
- Pre-exercise Hydration
- Hydration During Exercise
- Post-exercise Hydration

Sports Nutrition Module 5 Nutritional Ergogenics and Consultation

- What is Ergogenic Aid?
- What are Dietary Supplements?
- What is Doping?
- Commonly Encountered Doping Substances
- Diet History
- How are Food Records Analyzed?
- Steps for Initial Consultation with Athletes
- Walk-In and Short-Sessions

Sports Nutrition Module 6 Weight Management and Endurance

- Prevalence and Significance of Overweight and Obesity
- Methods for Weight Status
- Body Composition
- Energy Intake
- Methods for Losing Weight
- Ultra-Endurance Athletes
- Differing Protein Needs
- Are Fluids Critical to Endurance Performance?

Sports Nutrition Module 7 Strength/Power Athletes and Team Sport Athletes

- Calorie Needs for Strength/Power Athletes
- Are Carbs and Protein Needs Different for Strength/Power Athletes?
- Are Minerals, Vitamins, Fluid Needs Different for Strength/Power Athletes?
- Energy Systems Utilized During Team Sports
- Are Carbs and Protein Needs Different for Team Sport Athletes?
- Are Minerals, Vitamins, Fluid Needs Different for Team Sport Athletes?
- Meal Planning/Event Logistics

Sports Nutrition Module 8 Special Population and Jobs in Sports Nutrition

- Special Considerations for Diabetes
- Special Considerations for Pregnancy
- Special Considerations for Child and Teen Athletes
- Special Considerations for College Athletes
- Special Considerations for Masters Athletes
- Special Considerations for Vegetarians
- Registered Dietitian

- Licensures
- Potential Job Markets in Sports Nutrition

Nutritional Consultant

Nutritional Consultant Module 1 Nutrition and You

- What is Nutrition?
- Individual Nutrients
- How Can Diet Improve Your Health?
- Assessing Nutritional Status
- Average American Diet
- Principles of Healthy Eating
- Dietary Reference Intakes
- MyPlate Food Guidance System
- Food Labels

Nutritional Consultant Module 2 Digestion, Absorption, Transport, and Carbohydrates

- Processes and Organs Involved in Digestion
- How is Food Chemically Digested?
- How Nutrients are Absorbed
- How are Nutrients Transported throughout the Body?
- How Do We Digest and Absorb Carbohydrates
- How Do We Maintain Blood Glucose Levels?
- Dietary Fiber
- Carbohydrate Intake Recommendations
- Differences with Sugars

Nutritional Consultant Module 3 Lipids and Proteins

- Lipids Structure
- How Are Lipids Digested, Absorbed, & Transported in the Body?
- Functions of Lipids in the Body
- Daily Intake Triglycerides
- Trans Fat and Cholesterol
- Digesting and Absorbing Proteins
- Function of Protein in the Body
- How Much Protein Do You Need Daily?

Nutritional Consultant Module 4 Alcohol

- What is Alcohol?
- How is it Made?
- Why Do People Drink Alcohol?
- Alcohol Absorption Stomach and Small Intestine
- Alcohol Metabolized Stomach and Liver
- Alcohol Circulates in the Blood
- Gender, Genetics, and Ethnicity – Alcohol Blood Levels
- Immediate and Short Term Effects

- Long Term Effects

Nutritional Consultant Module 5 Energy Metabolism

- What is Metabolism?
- Chemical Reactions
- Enzymes and Hormones Regulate Metabolism
- How Does ATP Fuel Metabolism?
- How Do the Macronutrients Provide ATP?
- Absorptive and Post-absorptive States
- How Does the Body Metabolize Alcohol?

Nutritional Consultant Module 6 Fat-Soluble Vitamins

- What are Vitamins?
- How Do Vitamins Differ in Their Absorption and Storage?
- What are Antioxidants?
- What's the Best Source of Vitamins?
- Vitamins Destroyed During Cooking or Storage
- Some Vitamins are Fortified with Vitamins

Nutritional Consultant Module 7 Water-Soluble Vitamins

- Primary Functions of Water-Soluble Vitamins
- Vitamin-Like Compounds
- Choline Helps Protect the Liver
- Carnitine, Lipoic Acid, and Inositol Are Needed for Overall Health
- The B Vitamins Act as Coenzymes in Many Metabolic Processes
- Water-Soluble Vitamins in Other Critical Roles

Nutritional Consultant Module 8 Water

- Why is Water Essential to Life?
- How is Water Balance Maintained?
- How Do Water and Sodium Affect Blood Pressure?
- How Much Water Do You Need?
- Best Sources of Water
- Diuretics Affect on Water Balance

Nutritional Consultant Module 9 Major and Trace Minerals

- What are Minerals?
- Fluid Balance
- Participate as Cofactors
- Bones and Teeth
- Toxicity
- Why Do We Need Trace Minerals?
- Trace Mineral Deficiencies
- Arsenic, Boron, Nickel, Silicon, Vanadium

Nutritional Consultant Module 10

Energy Balance and Body Composition

- What is Energy Balance and Why is it Important?
- Food and Beverages Provide Energy
- Body Processes
- Total Daily Energy
- How to Measure Energy Expenditure
- How Body Composition is Assessed
- How Do We Estimate a Healthy Body Weight?

Nutritional Consultant Module 11

Weight Management, Nutrition, and Fitness

- How is Food Intake Regulated?
- How Do Fat Cells Form and Expand?
- Genetics and Environment Influence Obesity
- Healthy Weight Loss
- Why is Physical Fitness Important?
- Carbs, Fats, Proteins Used During Exercise
- Vitamins and Minerals Important for Fitness
- Fluid Intake Affect Fitness

Nutritional Consultant Module 12

Pregnancy Through Infancy

- Prenatal Development
- Nutrients and Health Behaviors
- Physiological Changes Occur in the Mother
- Second and Third Trimesters
- Breast-Feeding
- Formula Alternatives
- Infant's Nutrient Needs
- Introduce Solid Foods

Nutritional Consultant Module 13

Toddlers Through Adolescence

- Nutritional Needs of Toddlers and Preschoolers
- Adults Influence on Eating Habits
- Nutritional Needs of School-Aged Children
- Nutrition-Related Issues School-Aged Children
- Nutritional Needs of Adolescents
- Nutritional Issues Affect Adolescents

Nutritional Consultant Module 14

Older Adults

- Demographics of Aging in America
- What Changes Occur as Part of the Aging Process?
- Nutrient Needs of Older Adults
- Nutrition-Related Health Concerns of Older Adults
- Socioeconomic and Psychological Issues

Nutritional Consultant Module 15

Food Safety, Global Nutrition, and Availability

- Foodborne Illnesses
- Food Supply Protection
- Food Additives, Hormones, and Antibiotics
- Sustainable Food System
- Hunger and Malnutrition
- Population Risks
- How Can We Reduce Hunger?

Materials:

All materials are included in this course.

Certification:

Upon successful completion of our Nutritional Consultant course, students will be prepared for an entry-level position as a nutritional coach and will be prepared to sit for the NCCB national certification exam to become a **Certified Nutritional Coach (CNC)**.

System Requirements:

Internet Connection

- Broadband or High-Speed - DSL, Cable, and Wireless Connections

*Dial-Up internet connections will result in a diminished online experience. Classroom pages may load slowly and viewing large audio and video files may not be possible.

Hardware Requirements

- Processor - 2GHz Processor or Higher
- Memory - 1 GB RAM Minimum Recommended

PC Software Requirements

- Operating Systems - Windows 7 or higher
- Microsoft Office 2013 or higher. Also, you could use a general Word Processing application to save and open Microsoft Office formats (.doc, .docx, .xls, .xlsx, .ppt, .pptx)
- Internet Browsers - Google Chrome is highly recommended
 - Cookies MUST be enabled
 - Pop-ups MUST be allowed (Pop-up Blocker disabled)
- The Kindle Reader App or VitalSource Bookshelf App are needed for many of our courses (No special equipment needed. This can be downloaded for FREE onto your computer.)
- PowerPoint Viewer (if you do not have PowerPoint)
- Adobe PDF Reader
- QuickTime, Windows Media Player &/or Real Player

MAC Software Requirements

- Operating Systems - Mac OS x 10 or higher with Windows

- Mac office programs or a Word Processing application to save and open Microsoft Office formats (.doc, .docx, .xls, .xlsx, .ppt, .pptx)
- Internet Browsers- Google Chrome is highly recommended
 - Cookies MUST be enabled
 - Pop-ups MUST be allowed (Pop-up Blocker disabled)
- The Kindle Reader App or VitalSource Bookshelf App are needed for many of our courses (No special equipment needed. This can be downloaded for FREE onto your computer.)
- PowerPoint Viewer (if you do not have PowerPoint)
- Adobe PDF Reader
- Apple QuickTime Media Player

****Outlines are subject to change, as courses and materials are updated.****