

Course Title: Certified Sports Nutritionist Program

Duration: 4 months

Modules:

1. Introduction to Sports Nutrition

- Definition and scope of sports nutrition
- Energy systems in sports (aerobic vs. anaerobic)
- Nutritional goals for athletes (performance, recovery, injury prevention)
- Role of a sports nutritionist

- Learning Outcome: Understanding the basics of sports nutrition and its importance in enhancing athletic performance.

2. Macronutrients and Micronutrients in Athletic Performance

- Role of carbohydrates, proteins, and fats in energy metabolism
- Vitamins and minerals for athletes (e.g., calcium, iron, magnesium)
- Fluid and electrolyte balance
- Timing of nutrient intake (pre-, intra-, and post-workout nutrition)

- Learning Outcome: Mastering the fundamentals of macronutrient and micronutrient needs for athletes and how to balance them.

3. Sport-Specific Nutrition

- Endurance sports (e.g., marathon running, cycling): energy and hydration needs
- Strength-based sports (e.g., weightlifting, bodybuilding): protein requirements
- Team sports (e.g., football, basketball): nutrient strategies for mixed energy demands
- Weight-class sports (e.g., wrestling, boxing): managing weight without compromising performance
- Learning Outcome: Customizing nutritional strategies based on different sports and energy demands.

4. Carbohydrates and Fuel Intake during Competition and Training

- Glycogen stores and carbohydrate usage during different sports.
- Timing of carbohydrate intake: pre, intra, and post-competition.
- Examples of carbohydrate-rich foods and sports drink.

5. Nutrition for Injury Prevention and Recovery

- Anti-inflammatory foods and their role in recovery
- Nutrition during rehabilitation
- Role of supplements (e.g., omega-3, glucosamine) in joint health
- Hydration and muscle recovery

- Learning Outcome: Designing nutrition plans that support faster recovery and prevent injuries.

6. Supplements in Sports

- Types of supplements: protein powders, amino acids (BCAAs), creatine, etc.
- Ergogenic aids: caffeine, beta-alanine, nitrates
- Understanding legality and safety of supplements (doping rules)

- Evidence-based supplementation protocols

- Learning Outcome: Understanding the role of supplements and making evidence-based recommendations.

7. Sports Nutrition for Special Populations

- Youth athletes: special nutritional considerations
- Female athletes: hormonal cycles and nutrition
- Vegetarian and vegan athletes: meeting protein and nutrient needs
- Athletes with medical conditions (e.g., diabetes, anemia)
- Learning Outcome: Adapting sports nutrition plans to meet the unique needs of different populations.

8. Hydration and Electrolyte Balance

- Importance of hydration for athletes
- Water vs. sports drinks
- Electrolyte replacement: sodium, potassium, and magnesium
- Dehydration risks and signs
- Learning Outcome: Mastering hydration strategies to optimize performance and recovery.

9. Aerobics and Exercise Techniques

- -Aerobic vs anaerobic training and their impact on energy systems.
- -Specific aerobic exercises (e.g., running, swimming, cycling).
- -Incorporating aerobic workouts in sports-specific training regimens.

10. Planning and Periodizing Nutrition for Athletes

- Nutritional periodization (off-season, in-season, competition phase)
- Creating personalized meal plans
- Adjusting nutrition based on training intensity
- Monitoring and adjusting nutrition plans based on feedback and performance

- Learning Outcome: Designing flexible, periodized nutrition plans for different phases of an athlete's training cycle.

11. Nutrition Disorders in Athletes

-Symptoms and causes of nutrition disorders in athletes.

-Effects on performance and overall well-being

-Prevention and treatment approaches for eating disorders, overtraining, and RED-S.

12. Ethics and Professionalism in Sports Nutrition

- Ethical considerations in sports nutrition (supplement endorsements, health claims)
- Working with professional sports teams and individual athletes
- Scope of practice for a sports nutritionist
- Legal responsibilities and staying updated with anti-doping regulations
- Learning Outcome: Maintaining professionalism and ethical standards in sports nutrition practice.

Assessment:

- Quizzes and case studies after each module

- Final Project: Creating a comprehensive, periodized nutrition plan for an athlete (based on the sport of choice)

- Practical Exam: Designing and adjusting an athlete's diet in a simulated environment.

Certification:

Upon successful completion, learners will be awarded the title of Certified Sports Nutritionist.

Target Audience:

- Dietitians and nutritionists seeking specialization in sports nutrition
- Fitness professionals and personal trainers
- Coaches and athletic trainers
- Sports enthusiasts with a background in nutrition

This structure provides comprehensive knowledge and practical skills needed to work in the growing field of sports nutrition.



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