Features

- Research-based nutrition information written by authors who are Board Certified as Specialists in Sports Dietetics (CSSDs).
- Can be used alone or as a companion to ADA’s *Sports Nutrition: A Practice Manual for Professionals*, authored by the Sports, Cardiovascular, and Wellness Nutrition (SCAN) dietetic practice group.
- Printable client education handouts and meal plans.
- Calculators for BMI, energy expenditure, sweat rate, lean body mass, and healthy body weight.
- Online customization tools, including sticky notes, highlighting, e-mail a page, and other useful functions.
- Useful links to the Commission on Dietetic Registration (CDR) Web site, including information on becoming a Board Certified Specialist in Sports Dietetics (CSSD).
- Links to the SCAN Web site.

Outline

**ENERGY**

Energy Systems
- Overview
- Creatine phosphate (CrP)
- Anaerobic Glycolysis
- Oxidative Phosphorylation

Energy Metabolism Overview

Substrate Utilization
- Overview
- Carbohydrate
• Fat
• Protein

Energy Metabolism in Sport
• Strength / Power
• Endurance
• Team Sports

Nutrition-Related Fatigue in Sport

CONDITIONS
Diabetes

Overview

Type 1
Nutrition Assessment
Nutrition Guidelines for Athletes
Pre-Exercise Nutrition
Preventing Hypoglycemia during Exercise
Hyperglycemia
Endurance Exercise
Post-Exercise
Insulin Dosage
Eating Disorders
Celiac Disease
General Guidelines
Nutrition Diagnosis
Nutrition Intervention
Nutrition Monitoring & Evaluation
Insulin Pumps
Diabetes Management Strategies

Type 2
Nutrition Assessment
Nutrition Diagnosis
Nutrition Intervention
Eating for Type 2 Diabetes and Sport
Nutrition Monitoring & Evaluation

NUTRITION CARE

Nutrition Assessment
• A-Es of Sports Nutrition Assessment
• Anthropometric
• Biochemical
• Clinical
  o Client History
  o Nutritional Indicators
  o Nutrition-Focused Physical Findings
  o Kilocalorie Needs Assessment
  o Fluid Needs Assessment
• Dietary
  o Methods
  o Energy Balance
  o Athletic Diet
    ▪ Competition Diet
    ▪ Macronutrients
      • Dietary Carbohydrates
      • Dietary Protein
      • Dietary Fat
    ▪ Micronutrients
    ▪ Training Diet
    ▪ Sport Periodization
    ▪ Heat Acclimatization
    ▪ Travel Guidelines for Athletes
  o Fluid Balance
• Environmental

Nutrition Diagnosis
  • Examples of Possible Nutrition Diagnoses for Sports Nutrition and Performance
  • Sample PES diagnostic statements for Sports Nutrition and Performance

Nutrition Intervention
  • Examples of Possible Nutrition Intervention Terminology
  • Fluid Balance
  • Nutrition Prescription
  • Hydration Schedule
  • Nutrition Therapy Efficacy
  • Goals

Nutrition Monitoring & Evaluation
  • Components
  • Key Strategies
  • Examples of Possible Terminology
  • Nutrition Therapy Efficacy
    o Lean Mass Accretion
    o Iron Deficiency
    o Vitamin D Deficiency
    o Athletic Amenorrhea
Nutrition Care FAQs

- A client asks, "I want to gain muscle while losing fat and still have enough energy to exercise. What should I do?"
- A client asks, "What should I do to promote recovery after a hard workout?"
- How are sweat loss and sweat rate determined? How do they relate to hydration during exercise?
- Does consuming sports drinks that contain protein during exercise enhance athletic performance?
- How does iron affect athletic performance? Who should be screened?
- A client asks, "Should I follow a high-fat diet to increase fat-burning capacity and to induce training adaptations?"
- What is the concept of "train low, compete high"? Can training under conditions of low carbohydrate availability benefit athletic performance?
- What is the optimum dose of caffeine to enhance performance?
- What is low energy availability? What is its impact on athletic performance?
- A client asks, "Supplement companies report that new federal legislation and voluntary controls mean that problems with contamination that had been reported earlier no longer occur. Should I believe them?"
- What is carbohydrate loading? Why, when, and how is it used?
- Is weight loss enhanced by consuming a reduced carbohydrate diet?
- What is the role of the glycemic index in fueling athletes and managing body weight?

CLIENT EDUCATION

Type 2 Diabetes and Sport

- Eating for Type 2 Diabetes and Sport
- Easy to carry carbohydrate sources for fuel and to treat hypoglycemia
- Log sheet for blood glucose, carbohydrate intake, exercise and insulin

Endurance Athletes

- Endurance Athlete Nutrition Therapy
- Meal Planning Tips and Food Lists
- 2,500 Calorie Sample 1-Day Menu
- 4,500 Calorie Sample 1-Day Menu

Strength Athletes

- Strength Athletes Nutrition Therapy
- Meal Planning Tips and Food Lists
- Sample 1-Day Menu
Team Sport Athletes
- Nutrition Therapy for Team Sports
- Meal Planning Tips and Food Lists
- Sample 1-Day Menu
- Nutrition Tips for Traveling Teams

Weight Gain for Athletes
- Weight Gain for Athletes Nutrition Therapy
- Meal Planning Tips and Food Lists
- 3,500-3,800 Calorie Sample 1-Day Menu
- 5,100-5,400 Calorie Sample 1-Day Menu
- Sample Snacks

Weight Loss for Athletes
- Weight Loss Nutrition Therapy
- Meal Planning Tips and Food Lists
- 1,800-2,000 Calorie Sample 1-Day Menu
- 2,200-2,400 Calories Sample 1-Day Menu

SCAN Nutrition Fact Sheets

EQUATIONS
Basal Metabolic Rate (BMR)
Estimations of Energy Requirements
- RMR via Predictive Equations
- RMR via Indirect Calorimetry
Total Daily Energy Expenditure (TDEE)
Sweat Rate Calculation Method
Skinfold Thickness Test
Girth Measurements

CALCULATORS
TDEE Calculation by Dietary Reference Intake
TDEE Calculation by Activity Factor Formulas
Basal Energy Expenditure (BEE)
Sweat Rate
Body Composition
REE/EEE
RESOURCES
The USOC Sports Dietetics Assessment Form
Board Certified as a Specialist in Sports Dietetics (CSSD)
Sports, Cardiovascular, and Wellness Nutrition (SCAN)
Nutrition Care Process
Evidence Analysis Library (EAL)
Professional Resources
Web Resources

**Dietary Supplement Evaluation**
- Reasons to Evaluate Dietary Supplements
- Primary Concerns in Dietary Supplement Evaluation
- Safety
- Effectiveness
- Legality
- Quality
- How to Evaluate Dietary Supplements
- How to Communicate Dietary Supplement Information to Athletes and Others
- ADA Code of Ethics
- National Collegiate Athletic Association (NCAA): Supplement Regulations
- Anti-Doping Resources for Athletes
- Resources Dietary Supplement Quality
- Federal Government Information and Resources on Dietary Supplements

REFERENCES