

NBPNS EXAMINATION CONTENT OUTLINE

- I. GENERAL ASPECTS OF NUTRITION
 - A. Nutrition through the Life Cycle
 - 1. Infancy and Childhood
 - 2. Adolescence
 - 3. Pregnancy and Lactation
 - 4. Aging
 - 5. Gender Differences
 - B. Physiology and Pathophysiology
 - 1. Biochemical Composition of the Human Body
 - 2. Energy Metabolism
 - 3. Starvation
 - 4. The Hypermetabolic/Hypercatabolic State
 - 5. Cytokines and Eicosanoids
 - 6. Gastrointestinal Tract
 - C. Complementary and Alternative Therapies
 - 1. Nutraceuticals
 - 2. Dietary Supplements
 - 3. Functional Foods
 - 4. Vegetarian Diets
 - 5. Elimination Diets
 - D. Public Health
 - E. Cultural, Ethnic, and Ethical Issues
 - F. Technology
 - 1. Food Composition and Technology
 - 2. Genomics and Proteomics
- II. NUTRIENTS AND INTEGRATIVE NUTRITION
 - A. Protein
 - 1. Dietary
 - 2. Essential Amino Acids
 - 3. Nonessential Amino Acids
 - B. Carbohydrates
 - 1. Complex
 - 2. Disaccharides
 - 3. Glucose
 - 4. Others
 - C. Fiber
 - 1. Properties of Dietary Fiber
 - 2. Water Soluble
 - 3. Water Insoluble
 - D. Fats and Oils
 - 1. Omega 3 Fats
 - 2. Monounsaturated Fats
 - 3. Cholesterol
 - 4. Others

- E. Fat Soluble Vitamins
 - 1. Vitamin A
 - 2. Vitamin D
 - 3. Vitamin E
 - 4. Vitamin K
- F. Water Soluble Vitamins
 - 1. Thiamin
 - 2. Folic Acid
 - 3. B12
 - 4. Vitamin C
 - 5. Others
- G. Electrolytes, Minerals and Water
 - 1. Sodium
 - 2. Potassium
 - 3. Calcium
 - 4. Magnesium
 - 5. Phosphorus
 - 6. Iron
 - 7. Water
 - 8. Others
- H. Trace Elements and Ultra-Trace Elements
 - 1. Zinc
 - 2. Copper
 - 3. Selenium
 - 4. Others

III. NUTRITIONAL STATUS ASSESSMENT

- A. History and Physical
 - 1. Medical History
 - 2. Diet History and Counseling
 - 3. Physical Exam and Anthropometry
- B. Laboratory Data
- C. Body Composition
- D. Nutrient Deficiencies and Excesses
- E. Energy and Protein Requirements
 - 1. Energy Expenditure
 - 2. Protein-Energy Malnutrition
 - 3. Altered Requirements in Disease States

IV. OBESITY

- A. The Obesity Epidemic: Changes in the Environment
 - 1. Physical Activity
 - 2. Food Supply
 - 3. Psycho-social Environment
 - 4. Controversial Factors
 - a. Infection Theory
 - b. Other Environmental Agents
- B. Regulation of Energy Balance

1. Appetite Regulation
 2. Adaptation to Starvation
 3. Energy expenditure
 4. Neuro-endocrine Regulation of Energy Balance
- C. Changes in Body Composition in Overnutrition
- D. Eating Disorders
1. Binge-Eating Disorder
 2. Night Eating Syndrome
 3. Compulsive Overeating
 4. Anorexia Nervosa
 5. Bulimia Nervosa
 6. Other Eating Disorders
- E. Secondary Obesity
1. Obesity Genetics
 2. Endocrine Factors
 3. Neurological Causes
 4. Pharmacologic Causes
- F. Pediatric Obesity
- G. Co-morbidities of Obesity
- H. Nonsurgical Interventions
1. Caloric Restriction
 2. Physical Activity, Exercise, Fitness
 3. Cognitive and Behavior Therapy
 4. Popular Weight Control Programs
 5. Multidisciplinary Team Management
 6. Pharmacotherapy of Obesity
 7. Iatrogenic Complications
 8. Other
- I. Bariatric Surgery (Nonoperative Management)
1. Selection and Screening
 2. Bariatric Procedures
 3. Preoperative Evaluation and Management
 4. Perioperative Monitoring and Management
 5. Long Term Monitoring and Management
- V. DISEASE-SPECIFIC NUTRITION
- A. Gastrointestinal Disorders
1. Intestinal Failure
 2. Pancreatitis, Acute and Chronic
 3. Inflammatory Bowel Disease
 4. Irritable Bowel Syndrome
 5. Disorders of Gastrointestinal Motility and Flora
 6. Celiac
 7. Short Bowel Syndrome
 8. Other
- B. Hepatobiliary Disorders
1. Cholestasis

- 2. Cholelithiasis
- 3. Hepatic Failure
- 4. Other
- C. Critical Illness
- D. Infection and Sepsis
- E. Blood Lipids and Lipoprotein Disorders
- F. Endocrine Conditions
 - 1. Type I Diabetes
 - 2. Type II Diabetes
 - 3. Metabolic Syndrome
 - 4. Secondary Hyperparathyroidism
 - 5. Polycystic Ovaries and other Ob/Gyn Disorders
 - 6. Other
- G. Renal Pathophysiology and Disorders
- H. Cardiovascular Disorders
 - 1. Hypertension
 - 2. Atherosclerosis
 - 3. Cardiac Cachexia
 - 4. Other
- I. Pulmonary Disorders and Respiratory Function
 - 1. Sleep Apnea
 - 2. Pulmonary Cachexia
 - 3. Other
- J. Bone Pathophysiology and Disorders
 - 1. Metabolic Bones Disease and Osteoporosis
 - 2. Osteoarthritis
 - 3. Dental
 - 4. Other
- K. Cancer
- L. Anemia and other Hematologic Diseases
- M. Nervous System Disorders
- N. Surgery and Trauma
- O. Genetic and Pediatric Disorders
- P. Transplantation
- Q. Adverse Effects of Ethanol
- R. Psychiatric Disorders
- VI. ENTERAL AND PARENTERAL NUTRITIONAL SUPPORT
 - A. Relative Merits of Enteral and Parenteral Nutrition
 - B. Indications and Contraindications
 - C. Management of Enteral and Parenteral Nutrition
 - 1. Routes
 - 2. Nutrient Composition and Glycemic Control
 - 3. Initiation and Refeeding Syndrome
 - 4. Transitional Feedings, Weaning and Discontinuation
 - 5. Monitoring Nutritional Support
 - D. Home Enteral and Parenteral Nutrition

- E. Short Bowel Syndrome
- F. Complications of Nutritional Support
 - 1. Mechanical
 - 2. Physiological
 - 3. Metabolic
 - 4. Septic
 - 5. Drug-Nutrient Interactions
- G. Pediatric Nutritional Support

NBPNS Curriculum Guide

- I. General Aspects of Nutrition
- II. Nutrients and Integrative Nutrition
- III. Nutritional Status Assessment
- IV. Obesity
- V. Disease-Specific Nutrition
- VI. Enteral and Parenteral Nutritional Support