

Pediatric Nutrition
R. Charles Dumont, M.D.

COMPETENCY 1. Patient Care. Provide family centered patient care that is developmentally and age appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.

1. Effectively observe, communicate, and interact with patients, families, and other healthcare workers to obtain histories, deal with difficult situations, and insure proper record keeping.
2. Perform, record, present, and interpret appropriately focused physical exams pertinent to nutritional assessment.
3. Integrate data obtained from the history, physical, and laboratory to develop plans for nutritional intervention, and patient education, for common pediatric problems including disease-specific nutritional modifications, including:
 - a. Failure to gain weight
 - b. Abnormal weight loss
 - c. Protein/calorie malnourishment/re-feeding syndrome
 - d. Specific vitamin nutrient deficiencies
 - e. Diabetes
 - f. Cystic fibrosis
 - g. Inflammatory bowel disease
 - h. Renal disease
 - i. Respiratory disease
 - j. Trauma/burns
 - k. Intensive care patients
 - l. Prematurity
 - m. Celiac disease
 - n. Food Allergy
 - o. Liver disease
 - p. Obesity
4. Arrive at clinical decisions and solve nutritional problems using deductive reasoning based on data obtained about the patient, principles of clinical epidemiology, and evidence-based medicine, for pediatric infectious diseases, including,
 - a. The child with frequent infections
 - b. Prolonged fever (> 1 week) in children
 - c. HIV-infected child
 - d. HIV-exposed infant
 - e. Nosocomial infections in ICU and their prevention
5. Interpret the results of clinical and laboratory tests commonly used in nutritional assessment, including:
 - a. Weight/Height charts and BMI
 - b. Bone age
 - c. Vitamin levels

- d. Metabolic , liver and renal functions including: liver and renal panels, albumin, prealbumin, total protein, electrolytes and minerals.

COMPETENCY 2. Medical Knowledge. Understand the scope of established and evolving biomedical, clinical, epidemiological and social-behavioral knowledge needed by a pediatrician; demonstrate the ability to acquire, critically interpret and apply this knowledge in patient care.

1. Describe the etiology, epidemiology, clinical manifestations, differential diagnosis and treatment of common pediatric nutritional problems, including:
 - a. Failure to gain weight
 - b. Abnormal weight loss
 - c. Protein/Calorie malnutrition
 - d. Refeeding syndrome
 - e. Specific vitamin and mineral deficiencies
2. Discuss the underlying pathophysiology of nutritional problems encountered in the chronic and acute pediatric disorders listed below.
 - a. Protein/calorie malnourishment
 - b. Re-feeding syndrome
 - c. Celiac disease
 - e. Respiratory disease
 - f. Renal disease
 - g. Inflammatory bowel disease
 - h. Diabetes
 - i. Cystic fibrosis
 - j. Liver disease
 - k. Trauma/burns
 - l. Intensive care patients
 - m. Trauma/burns
 - n. Intensive care patients
 - o. Obesity
3. Discuss the normal nutritional needs for all age groups including infants, toddlers, school age children and adolescents with special attention to caloric, protein, lipid, vitamin and mineral needs.
4. Explain different indications for tube feedings, including the appropriate situations for the use of bolus, continuous and jejunal feedings.
5. Describe the appropriate use of the various specialized formulas including:
 - a. Age appropriate formulas
 - b. Elemental formulas
 - c. Protein hydrolysate formulas
 - d. Formulas with alternate protein, sugar and lipid sources
 - e. Formulas with alternate osmolalities
 - f. schedule
6. Explain the relationships in management and consultation between primary care, pediatric nutrition specialists and other specialties.

COMPETENCY 3. Communication Skills. Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates.

1. Elicit, record, and present focused history and physical examinations for nutritional problems encountered in Pediatric Diseases.
2. Explain to physician and non-physician healthcare workers who consult Pediatric Nutrition services and patients and families the findings from clinical investigations, plans for follow up, possible courses of nutritional therapy with indications, risks, benefits, and alternatives.
3. Motivate and instruct patients and their families in promoting nutritional health maintenance.
4. Demonstrate sensitivity in communicating with patients and families of how age, culture, religion, and personal beliefs can influence their perception of physician-patient interactions.

COMPETENCY 4. Practice-based Learning and Improvement. Demonstrate knowledge, skills and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve one's patient care practice.

1. Identify and use resources to obtain up-to-date information dealing with nutritional management.
2. Use information technology to access and manage clinical information and perform online searches about patients and acquire knowledge of specific topics, including current information on nutritional issues related to their patients.

COMPETENCY 5. Professionalism. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.

1. Display behaviors that foster and reward the patient's trust in the physician such as appropriate dress, grooming, punctuality, honesty, courtesy, respect for patient confidentiality, and other norms of behavior in professional relationships with patients.
2. Converse appropriately and behave with personal integrity in all elective activities and in interactions with peers, faculty, residents, and non-physician staff involved in the care and treatment of Pediatric Nutritional patients.
3. Work collaboratively as a member of a healthcare team including nurses, dietitians, social workers and other personnel in providing Pediatric Nutritional services.
4. Advocate the interests of patients over personal interests while developing an appropriate balance between personal and professional beliefs and obligations.

COMPETENCY 6. Systems-Based Practice. Understand how to practice quality health care and advocate for patients within the context of the health care system.

1. Describe the impact of economic and health insurance issues on patient care and the ability to provide Pediatric Nutritional services.
2. Interact with social services and the home care team to facilitate patient access to nursing care and home care services outside of the hospital.