Nutrition Focused Physical Assessment

Introduction

Nutrition-focused physical assessment (NFPA) is an emerging area of nutrition and dietetics practice for RDNs and NDTRs. Although it is only one component of the nutrition assessment process, it can help identify causes of nutritional deficiency and characteristics of malnutrition. NFPA goes beyond the traditional measurement of height, weight, body fat, arm and calf circumference and is considered an adjunct to traditional nutrition assessment. The NFPA combines a physical examination, vital signs, and anthropometrics with patient/resident interviews and data from the medical record (1). It is an important tool in the identification of malnutrition using the new guidelines proposed by the Academy of Nutrition and Dietetics and the American Society for Enteral and Parenteral Nutrition.

The 2015 Academy of Nutrition and Dietetics. Nutrition Terminology (eNCPT) Reference Manual defines NFPA as: "findings from an evaluation of body systems, muscle and subcutaneous fat wasting, oral health, suck, swallow/breathe ability, appetite, and affect" (2).

Performing a Nutrition-Focused Physical Assessment

Nutrition-focused physical assessment is a hands-on assessment that uses four steps (1,3):

- Inspection: A general observation that progresses to a more focused observation using the senses of sight, smell, and hearing. Most RDNs and NDTRs already perform a general observation of an individual's condition and this should include things like noticing an order that might indicate ketosis or alcohol use and observing visually for signs of undernutrition or wasting.
- 2. **Palpitation:** Touching the individual to feel the skin's temperature, and presence of edema, and touching the abdomen to assess for tenderness, and superficial masses.
- 3. **Percussion:** Assessment of body sounds to detect gas in the abdomen, fluid in the lungs, or other issues.
- 4. **Auscultation:** Use of the ear or a stethoscope to listen to heart and lung sounds, bowel sounds, and blood vessels.

The assessment uses a systems approach by evaluating the factors in the Table on the next page (1,3,4).

Traditionally physicians, nurse practitioners, physician's assistants, and nurses perform these assessments. However, RDNs can embrace a hands-on approach and incorporate physical assessment into their practices (3) and/or review findings of another health care professional (1). Clinical judgment must be used to select indicators and determine the appropriate measurement techniques and reference standards (2). To successfully use the results of a NFPA, the practitioner must be able to interpret vital signs and physical findings and be familiar with how findings correlate with compromised nutritional status. Understanding these correlations is key to identifying and categorizing malnutrition.

Nutrition Focused Physical Assessment and Scope of Practice

In 2013 the Academy of Nutrition and Dietetics published a *Scope of Practice for the Registered Dietitian Nutritionist (RDN)*. RDNs must practice under the state statutes (practice acts) that may or may not outline the types of activities they can perform. Each individual is responsible for understanding the legal requirements they operate under in the state in which they practice. The Academy's *Scope of Practice* indicates that individual RDNs "can only practice in areas in which they are qualified and have demonstrated competence to achieve ethical, safe, and quality outcomes in the delivery of food and nutrition services" (5). This applies to all areas of nutrition and dietetics practice including the NFPA.

It is imperative that RDNs who plan to conduct NFPA develop their assessment skills and demonstrate competence using a framework outlined by an employer or qualified agency. Reference standards that are outlined in facility policies and procedures should be used (2). For example, a hospital or nursing facility may have competency guidelines for nurses and nursing assistants for taking vital signs, listening to bowel sounds, etc. An RDN could easily undergo facility training and demonstrate competency to perform these evaluations and interpret their results. RDNs that are learning the NFPA process should, with the agreement of their employer, shadow other professionals who perform assessments and participate in hands-on assessments as part of the training process.

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Systems Approach to Evaluating Physical Factors for Nutrition Focused Physical Assessment (1-4)

Assessment (1-4)	
Physical Appearance	Nerves and Cognition
 Body size Body type Appearance of wasting or obesity Level of consciousness Paralysis or involuntary movement Amputations or contractures Affect Condition of hair and nails 	 Ability to communicate Cognitive status Reflexes Ability to feel pain in extremities Gross and fine motor skills
Vital Signs	Extremities, Muscles, and Bones
 Blood pressure Heart rate Oxygen saturation/respiratory rate Temperature 	 Hand grip strength Range of motion Subcutaneous fat Muscle mass Edema Ability to stand and walk
Skin	HEENT (Head, Eyes, Ears, Nose, and Throat)
 Skin turgor Skin color Presence of surgical wounds, pressure ulcers, stasis ulcers, or diabetic foot ulcers Poor or delayed wound healing 	 Ability to smell and taste Loss of orbital (around the eye), buccal (around the cheeks), facial fat Vision and hearing Chewing or swallowing problems
Digestive System	The Cardiopulmonary System
 Condition of teeth, presence of dentures and/or partials Condition of oral cavity and tongue Inflamed or bleeding gums Bowel sounds Abdominal pain 	Ability to breatheBreath soundsRegular heart rhythm

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