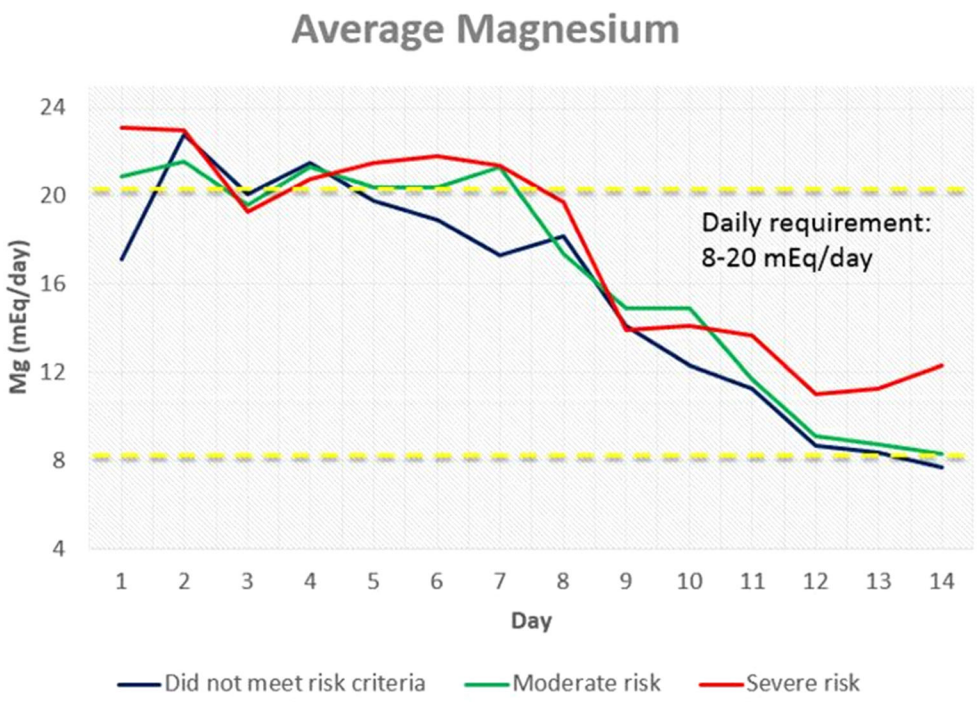

Figure 4. Average amount of Magnesium prescribed to patient during the first 14 days of parenteral nutrition (mEq/day).

1364592 - In Good Hands: Application of the Nutrition-Focused Physical Exam in Hospitalized Adult Patients

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Background: The Nutrition-Focused Physical Exam (NFPE) is a valuable nutrition assessment tool, but the practical application of the NFPE with hospitalized patients has not been well-documented. Using data from the Academy/ASPEN Indicators to Diagnose Malnutrition (AAIM) Validation and Staffing study, we assessed the application of the NFPE in adult hospitalized patients.

Methods: Between August 2019 and June 2022, registered dietitian nutritionists (RDNs) across the United States conducted the NFPE for randomly selected hospitalized adult patients. These patients were assessed for malnutrition based on the AAIM criteria. RDNs reported whether they were able to assess each site within the subcutaneous fat, muscle mass, fluid accumulation, handgrip strength, and micronutrient parts of the NFPE. They also indicated whether these exams were used to support a malnutrition diagnosis. Results were analyzed descriptively and are presented as number of observations and respective percentages.

Results: RDNs across 39 acute care hospital sites conducted the NFPE for 328 patients, 190 of whom were diagnosed with moderate or severe malnutrition based on the AAIM criteria. For all 190 patients diagnosed with malnutrition, RDNs successfully assessed at least one aspect of the subcutaneous fat, muscle mass, fluid accumulation, or micronutrient exams. RDNs were most often able to assess the orbital region in the subcutaneous fat exam, temporalis and pectoralis in the muscle mass exam, and upper and lower body fluid accumulation, each with success in 99.5% of patients (n = 189) (Table 1). RDNs were least successful in assessing the thoracic/lumbar region in the subcutaneous fat exam (n = 141; 74.2%), the calf/gastrocnemius muscle in the muscle mass exam (n = 151; 79.5%), sacral fluid accumulation (n = 133, 70.0%), and handgrip strength in the functional status exam (n = 128; 67.4% successful). All aspects of the micronutrient exam were frequently completed, with skin successfully assessed most frequently (n = 188, 98.9%) and gums successfully assessed least frequently (n = 167, 87.9%). Most commonly, RDNs reported that loss of muscle mass supported their malnutrition diagnosis (n = 162, 85.3%), followed by loss of subcutaneous fat (n = 137, 72.1%), functional status (n = 56, 29.5%), and fluid accumulation (n = 9, 4.7%) [micronutrient findings were not considered]. RDNs successfully completed the full NFPE in less than half of patients (n = 44; 23.1%), meaning that they successfully assessed every site on the exam. When RDNs were unable to complete certain aspects of the NFPE, the most common reasons were limited patient mobility/range of motion (n = 65; 34.2%) and medical equipment interfering (n = 26; 13.7%).

Conclusion: RDNs were able to assess some sites for all components of the NFPE in the majority of patients. Although upper and lower body fluid accumulation was almost always successfully assessed, it was rarely used as an indicator to support a malnutrition diagnosis. RDNs commonly used the indicators "loss of subcutaneous fat" and "loss of muscle mass," which suggests that when possible, these indicators should be prioritized if the full NFPE is not feasible.

Financial Support: This study was funded by the Academy of Nutrition and Dietetics Foundation, the Commission on Dietetic Registration, the Pediatric Nutrition Practice Group, the Clinical Nutrition Management Dietetic Practice Group, and the Renal Dietitians Practice Group.

Table 1. Practical Application of Nutrition-Focused Physical Exam Components Among Hospitalized Patients Who Were Diagnosed With Malnutrition Based on the Academy/ASPEN Indicators to Diagnose Malnutrition (AAM) Criteria.

Aspect/Assessment Site of the NFPE	Site successfully assessed, among N = 190 patients diagnosed with malnutrition N (%)	Site successfully assessed, among those who indicated it supported the malnutrition diagnosis
Subcutaneous Fat Exam		**N = 137 indicated loss of subcutaneous fat supported diagnosis**
Orbital Region: Orbital Fat Pads	189 (99.5)	136 (99.3)
Facial Region: Buccal Fat	187 (98.4)	134 (97.8)
Upper Arm Region: Triceps	184 (96.8)	132 (96.4)
Thoracic/Lumbar Region: Ribs/Mid-Axillary Line	141 (74.2)	97 (70.8)
Muscle Mass Exam		**N = 162 indicated loss of muscle mass supported diagnosis**
Temples: Temporalis	189 (99.5)	161 (99.4)
Clavicle: Pectoralis	189 (99.5)	161 (99.4)
Shoulder: Deltoid	187 (98.4)	160 (98.8)
Scapula: Trapezius, Supraspinatus, Infraspinatus	158 (83.2)	133 (82.1)
Dorsal Hand: Interosseous	180 (94.7)	152 (93.8)
Patellar: Quadriceps	166 (87.4)	140 (86.4)
Anterior Thigh: Quadriceps	164 (86.3)	140 (86.4)
Calf: Gastrocnemius	151 (79.5)	128 (79.0)
Fluid Accumulation Exam		**N = 9 indicated fluid accumulation supported diagnosis**
Upper Body	189 (99.5)	9 (100.0)
Lower Body/Extremities	189 (99.5)	9 (100.0)
Sacral (Non-Ambulatory)	133 (70.0)	6 (66.7)
Functional Status Exam		**N = 56 indicated reduced handgrip strength supported diagnosis**
Handgrip Strength	128 (67.4)	55 (98.2)
Micronutrient Exam		N/A [1]
Hair	176 (92.6)	
Eyes	180 (94.7)	
Face	186 (97.9)	
Mouth	175 (92.1)	
Lips	181 (95.3)	
Tongue	171 (90.0)	
Gums	167 (87.9)	
Taste	170 (89.5)	
Neck	180 (94.7)	
Nails	173 (91.1)	
Skin	188 (98.9)	

[1] Micronutrient findings were not assessed as an indicator supporting a malnutrition diagnosis.

1366928 - Vitamin D Screening and Intervention for Fracture Care on an Inpatient Trauma Service

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