Nutrición clínica: de la valoración a la prescripción. Tendencias actuales

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Soporte nutricional en el paciente crítico: las preguntas importantes

¿Qué ha cambiado en 15 años?

- ¿A quién?

- ¿Por qué?

- ¿Cuándo?

- ¿Cuánto?

- ¿Qué ruta?

- ¿Cómo?

Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically Ill Patient

Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.)

Number of Source Documents

A total of 727 studies were identified for review. Of those, 368 met the inclusion criteria and were included in the guideline review.

Critical Care Nutrition

Where's the Evidence?

Jayshil J. Patel, MD[a], Ryan T. Hurt, MD, PhD[b], Stephen A. McClave, MD[c], Robert G. Martindale, MD, PhD[d],*
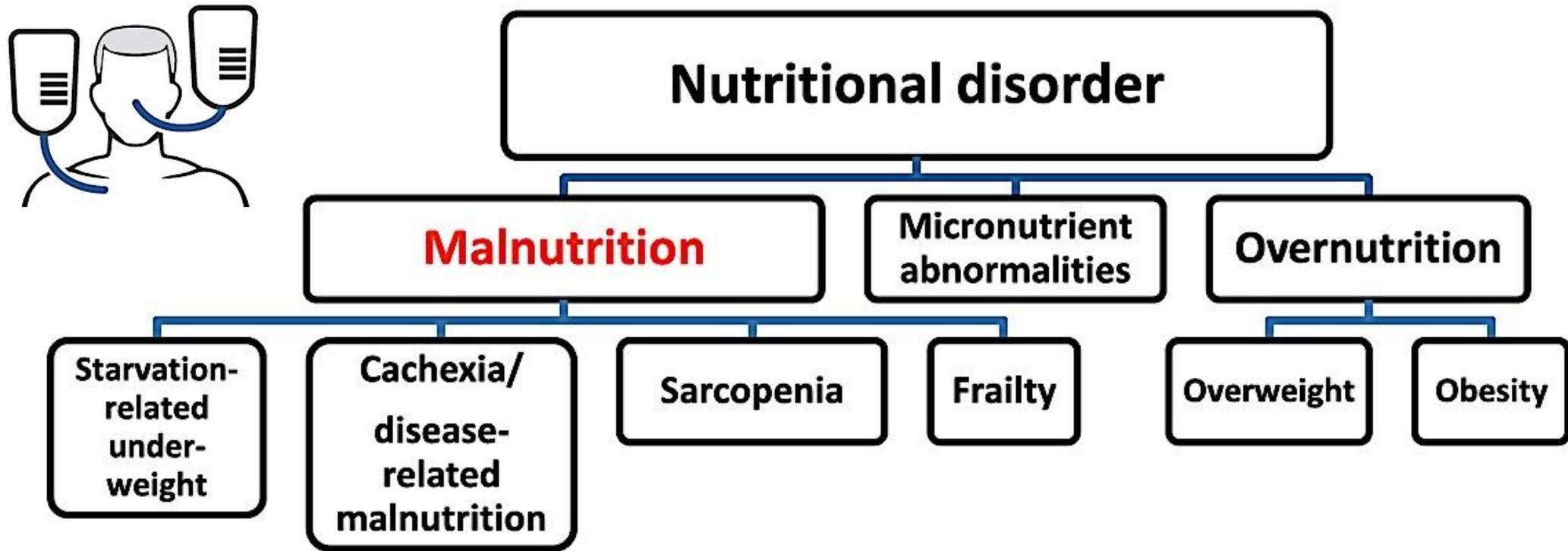
Fig. 3. A conceptual tree of nutritional disorders.

T. Cederholm [a, *], I. Bosaeus [b], R. Barazzoni [c], J. Bauer [d], A. Van Gossum [e], S. Klek [f],
M. Muscaritoli [g], I. Nyulasi [h], J. Ockenga [i], S.M. Schneider [j], M.A.E. de van der Schueren [k, l],
P. Singer [m]

# Diagnostic criteria for malnutrition — An ESPEN Consensus Statement

T. Cederholm [a, *], I. Bosaeus [b], R. Barazzoni [c], J. Bauer [d], A. Van Gossum [e], S. Klek [f],
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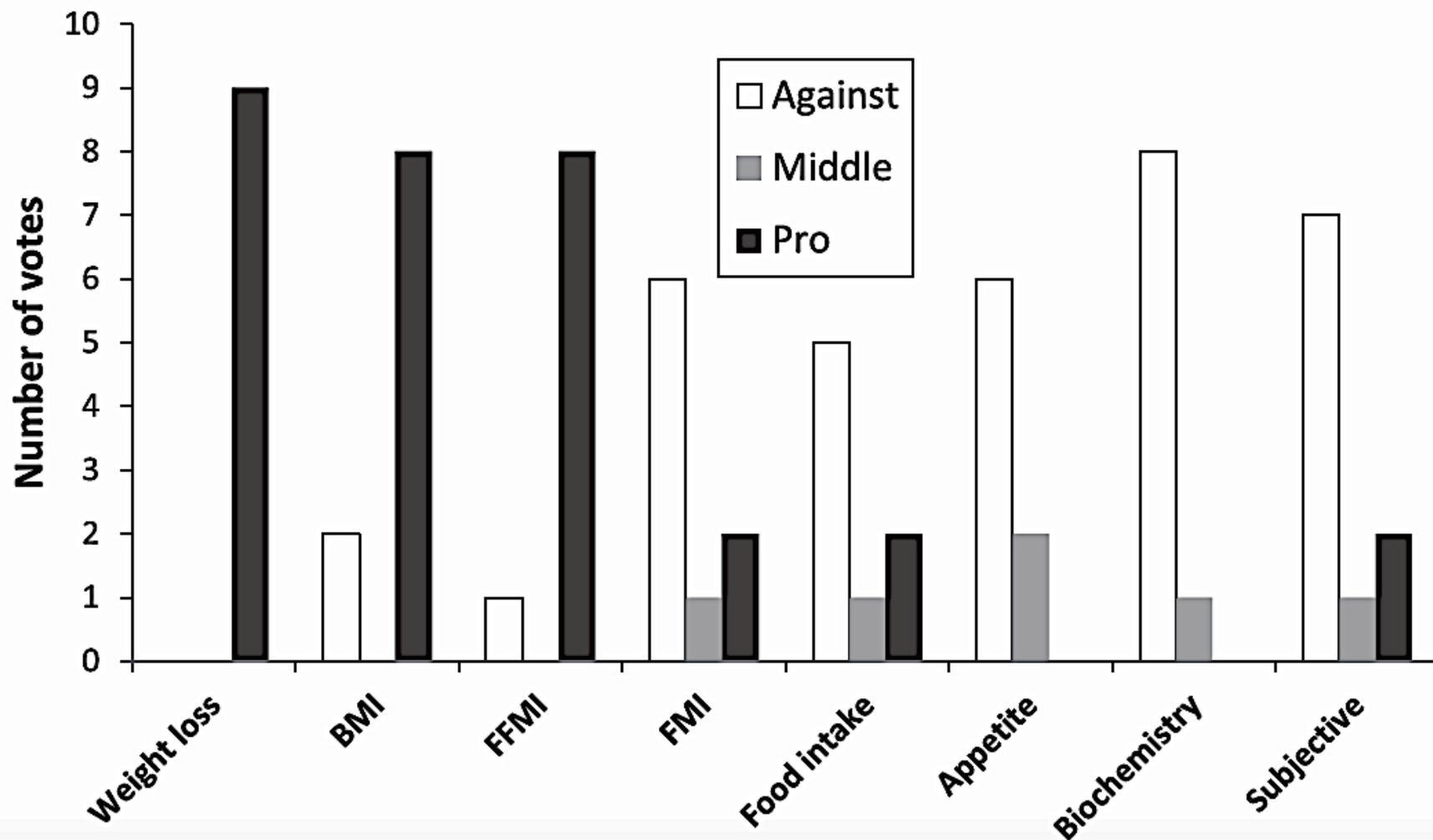
NUTRIC

Table 3		
Nutrition risk in the critically ill score		
Variable	**Range**	**Points**
Age	<50	0
	50 to <75	1
	≥75	2
APACHE II score	<15	0
	15 to <20	1
	20–28	2
	≥28	3
Sequential Organ Failure Assessment score	<6	0
	6 to <10	1
	≥10	2
Number of comorbidities	0–1	0
	≥2	1
Days from hospital to ICU admission	0 to <1	0
	≥1	1
IL-6	0 to <400	0
	≥400	1

Sum of Points	Category	Explanation
5–9	High score	• Associated with worse clinical outcomes (mortality, ventilation) • These patients are the most likely to benefit from aggressive nutrition therapy
0–4	Low score	• These patients have a low malnutrition risk

NRS 2002

Table 1
Nutritional risk screening 2002

Impaired Nutritional Status	Severity of Disease

Normal nutritional status
  Absent
  Score 0
	Normal nutritional requirements
	  Absent
	  Score 0

Weight loss >5% in 3 mo
Or
Food intake <50%–75% of normal requirement in
  preceding week
  Mild
  Score 1
	Hip Fracture
	Chronic patients[a]
	  Mild
	  Score 1

Weight loss >5% in 2 mo
Or
BMI 18.5–20.5 + impaired general condition
Or
Food intake 25%–50% of normal requirement in
  preceding week
  Moderate
  Score 2
	Major abdominal surgery, stroke, severe
	  pneumonia, hematologic malignancy
	  Moderate
	  Score 2

Weight loss >5% in 1 mo
Or
BMI <18.5 + impaired general condition
Or
Food intake 0%–25% of normal requirement in
  preceding week
  Severe
  Score 3
	Head injury
	Bone marrow transplant
	ICU patient (APACHE score >10)
	  Severe
	  Score 3

¿Los índices nutricionales identifican los pacientes que se benefician de un soporte nutricional?

- Utilice un índice (NUTRIC, NRS 2002) en todo paciente que ingrese a la UCI en quien se prevea una pobre o nula ingesta oral en los siguientes días.

- NRS 2002>= 5 o NUTRIC >= 5 (sin IL6) – 80% en 48-72 horas

- Evalúe función del TGI, riesgo de aspiración y comorbilidades.

CALIDAD DE LA EVIDENCIA: MUY BAJA

**FUERZA DE LA RECOMENDACIÓN: DEBIL**
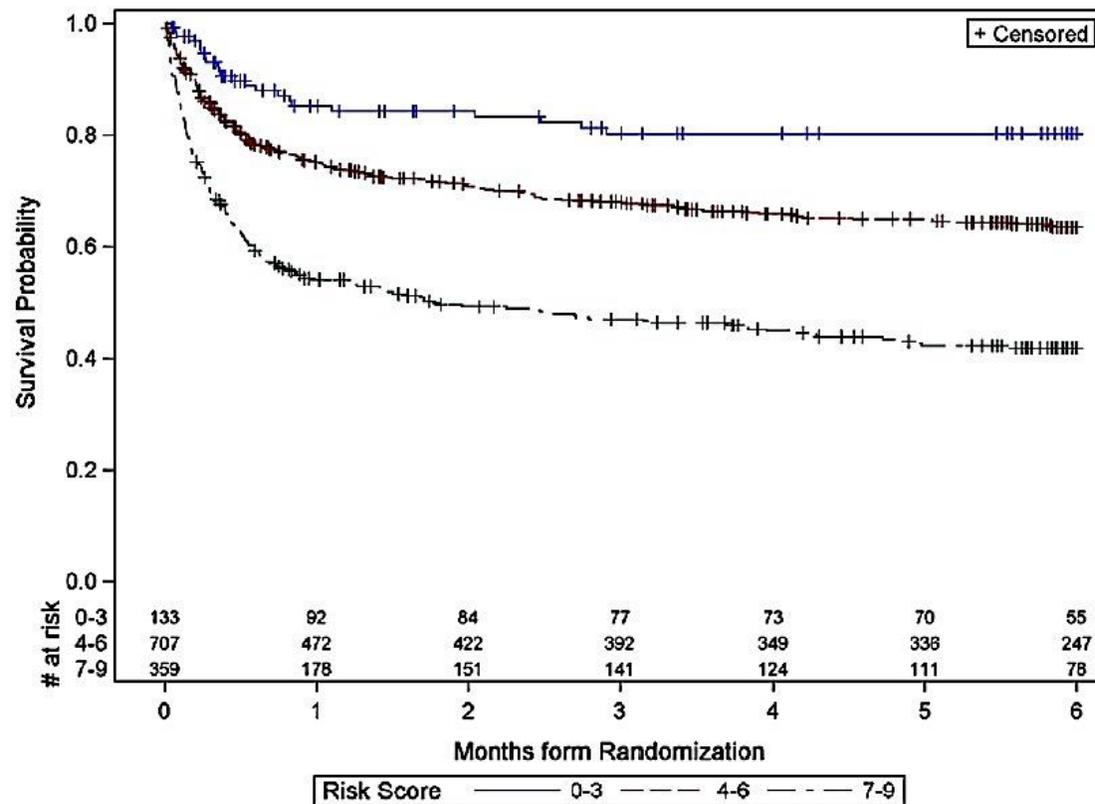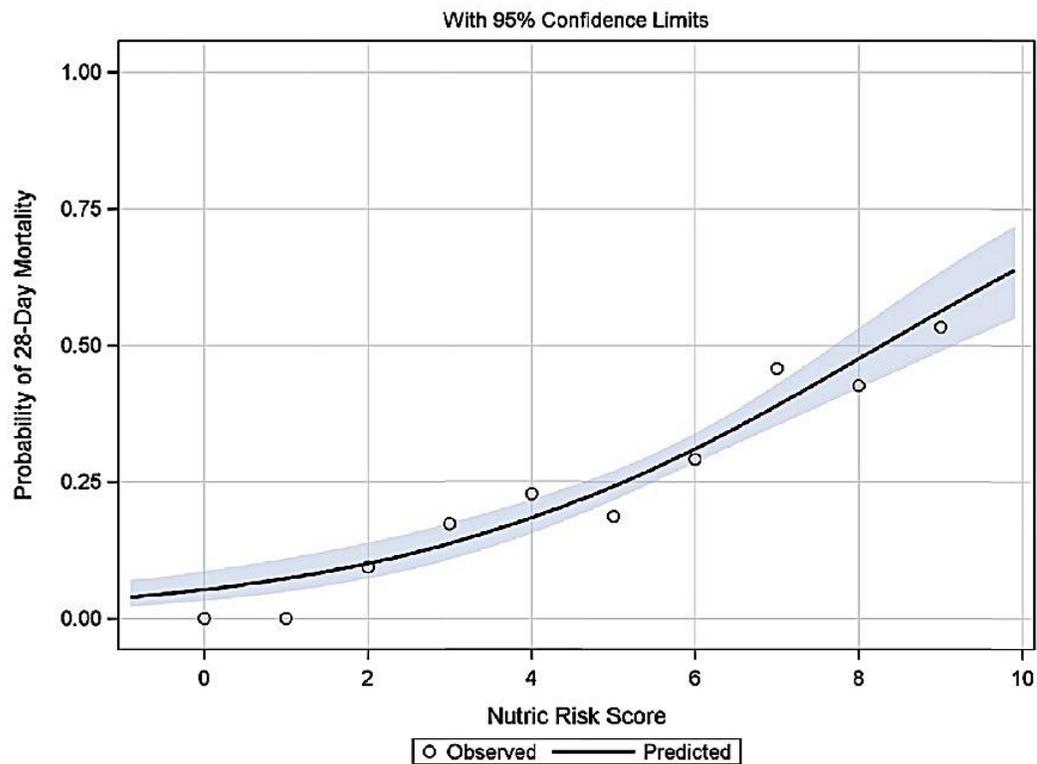
Fig. 5. NUTRIC scores versus 6-month mortality.

Identifying critically-ill patients who will benefit most from nutritional therapy: Further validation of the "modified NUTRIC" nutritional risk assessment tool

Adam Rahman [a, b], Rana M. Hasan [a], Ravi Agarwala [c], Claudio Martin [a, d, e], Andrew G. Day [f], Daren K. Heyland [f, g, h, *]

Critical Care Nutrition

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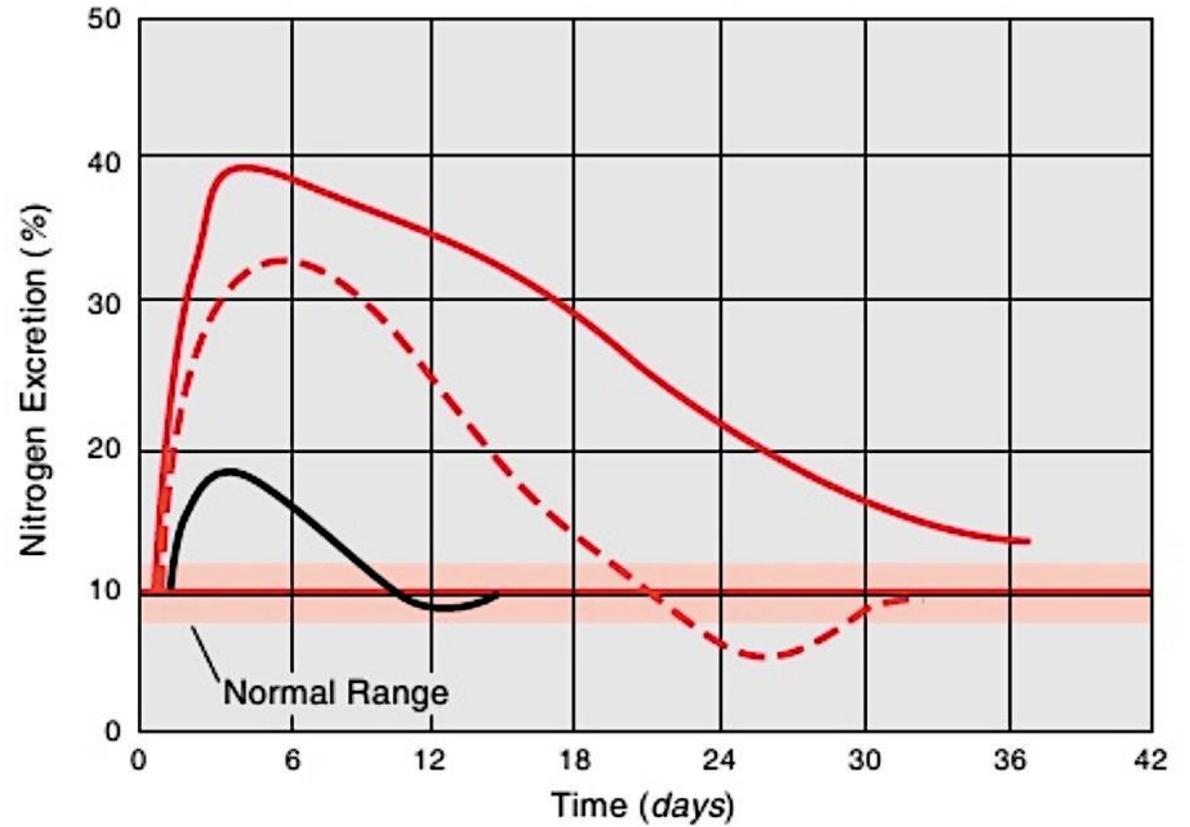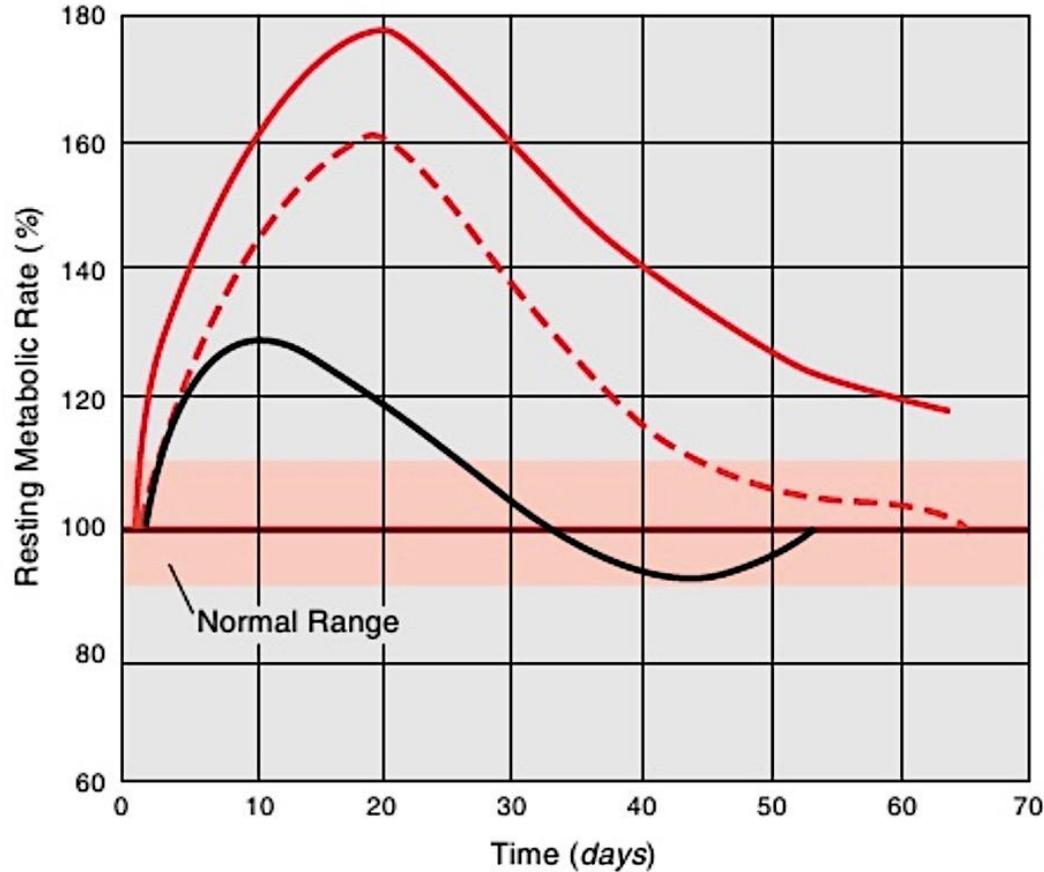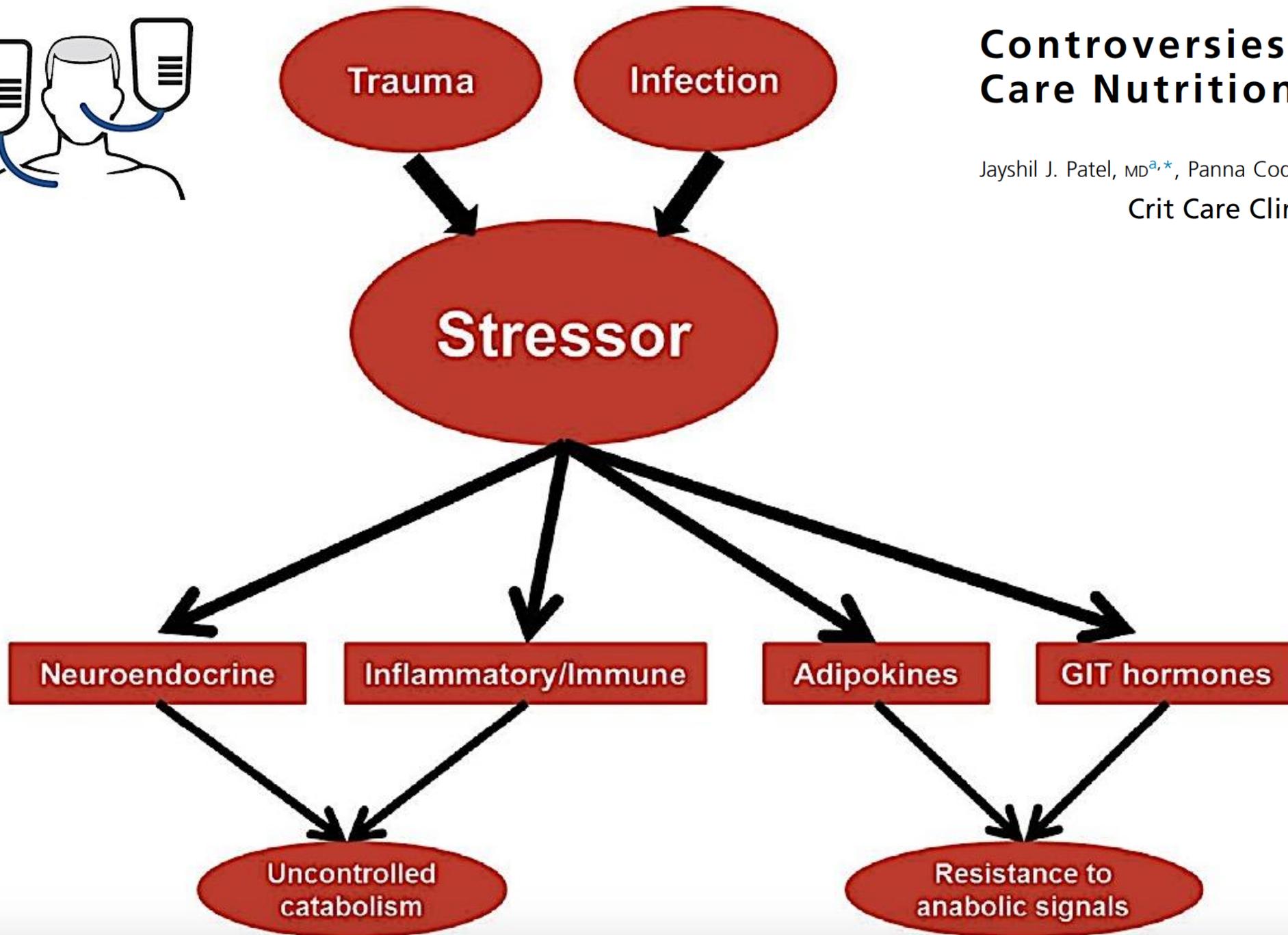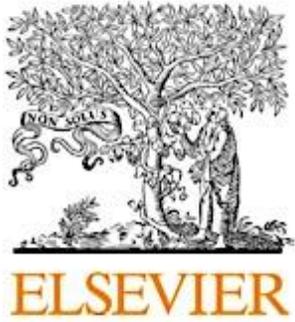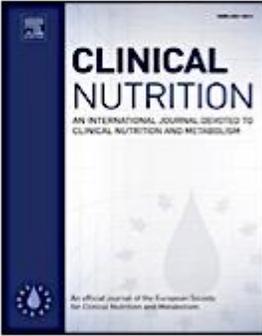
Review

Hospital malnutrition in Latin America: A systematic review

Maria Isabel T.D. Correia [a, *], Mario Ignacio Perman [b], Dan Linetzky Waitzberg [c]

[a] Department of Surgery, Universidade Federal de Minas Gerais Medical School, Belo Horizonte, Brazil
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1. Introduction

Disease-related malnutrition in hospitalised patients is a major public health issue in both industrialised and emerging countries around the world. Poor nutritional status is associated with increased morbidity and mortality, increased length of hospitalisation, more frequent re-admission, and increased healthcare costs [1–12]. However, despite the substantial health and economic burden, disease-related malnutrition remains a highly prevalent and frequently under-recognised and under-treated condition [5,13–16].

Malnutrition in the hospital setting can develop as a consequence of insufficient nutrient intake, impaired absorption or loss of nutrients due to illness or trauma, or increased metabolic demands during illness [17]. The definition of malnutrition remains a subject of debate, with various professional societies proposing different criteria—possibly explaining some of the variability in prevalence rates reported in the literature [18–20]. Generally, unintentional weight loss >5% in a short period of time and decreased food intake are associated with a deterioration in nutritional status.

The prevalence of disease-related malnutrition has been reported to be between 20% and 50%, although data vary considerably due to differences in study populations, ascertainment methods, and hospital setting [3]. The largest body of epidemiological evidence comes from Europe, where several large studies have reported prevalence figures in the range of 20%–30% [10,21–25], with a higher prevalence observed in the older adults (32%–58%) [2,26,27] and patients with malignant disease (31%–39%) [6,28,29]. Studies conducted in Asia have reported prevalence figures between 27% and 39% [8,14,15], with a higher prevalence in the older adults (88%) [30], the critically ill (87%) [31], surgical patients (56%) [32], and patients with gastrointestinal malignancies (48%) [33]. Prevalence data from studies conducted in North America and Australia range from 37% to 45% [34,35] and 23%–42% [5,36–39], respectively.

3.1.7. Medical awareness

Despite the high prevalence of malnutrition across the Latin America region, several studies reported evidence of a general lack of medical awareness. In a large multicentre study of 4000 hospitalised adults in Brazil, fewer than 20% of patient charts contained any information regarding nutritional status [46]. A subsequent study of 1000 patients in 38 hospitals in Argentina found that only 39% of patient records contained information regarding nutritional status and less than 15% included any record of usual or current weight and height [45]. Only 13.9% of malnourished patients in another Brazilian study had a recorded diagnosis of malnutrition [52]. Finally, three studies reported that fewer than 10% of malnourished patients received enteral or parenteral nutrition during the course of hospitalisation [46–48], while only one study reported that a majority of malnourished patients (61%) received nutrition therapy [52].

CUADRO 5-1
Evaluación global objetiva (EGS) del estado nutricional

Anamnesis

Cambio de peso:

Pérdida en los 6 últimos meses: cantidad = _____ kg; % pérdida = _____

Cambio en las 2 últimas semanas: _____ Aumento _____ Sin cambio _____ Descenso

Cambio de dieta:

Sin cambio _____ Cambio _____ Duración = _____ semanas

Estado dietético:

_____ Dieta sólida inadecuada

_____ Líquidos hipocalóricos

_____ Inanición

Síntomas digestivos (durante más de 2 semanas):

_____ Ninguno _____ Náuseas _____ Vómitos
_____ Diarrea _____ Anorexia

Capacidad funcional:

_____ Sin disfunción _____ Disfunción

Duración = _____ semanas

Tipo:

_____ Trabajo inadecuado

_____ Ambulatorio pero no trabaja

_____ En cama

Efecto de la enfermedad en las necesidades nutricionales:

Diagnóstico principal: _____

Demanda metabólica: _____ Sobrecarga baja _____ Sobrecarga moderada _____ Sobrecarga alta

Exploración física (normal, moderada, avanzada)

_____ Pérdida de grasa subcutánea (tríceps, tórax)

_____ Pérdida de masa muscular (cuádriceps, deltoides)

_____ Edema en tobillo o sacro

_____ Ascitis

Calificación EGS [*]

[*] Los grados A, B y C de la EGS se asignan según una ponderación subjetiva. Un paciente con pérdida de peso y pérdida de masa muscular que en la actualidad come bien y gana peso se clasifica como bien nutrido. Un paciente con pérdida de peso moderada (entre el 5 y el 10%) que sigue comiendo mal, perdiendo peso, con deterioro funcional progresivo y estrés moderado por enfermedad se clasifica como paciente con malnutrición moderada. Un paciente con pérdida de peso avanzada (> 10%), ingestión inadecuada de nutrientes, deterioro funcional progresivo y pérdida de masa muscular se clasifica como paciente con malnutrición avanzada.

A = bien nutrido

B = malnutrición leve o moderada

C = malnutrición avanzada

SGA Questions	Maintained	Excluded
A. History		
1. Weight change		
Overall loss in the past 6 months (kg)		X
Overall loss in the past 6 months (%)	X	
Change in the past 2 weeks: ( ) increase ( ) no change ( ) decrease	X	
2. Dietary intake change		
( ) no change ( ) change		X
Duration of change (weeks)		X
Type: ( ) suboptimal solid diet ( ) full liquid diet ( ) hypocaloric liquids ( ) starvation	X	
3. Gastrointestinal symptoms (that persisted for > 2 weeks)		
( ) none ( ) nausea ( ) vomiting ( ) diarrhea ( ) anorexia	X	
4. Functional capacity		
( ) no dysfunction (full capacity) ( ) dysfunction		X
Duration of dysfunction (weeks)		X
Type of dysfunction: ( ) working sub optimally ( ) ambulatory ( ) bedridden	X	
5. Disease and its relation to nutritional requirements		
Primary diagnosis (specify)		X
Metabolic demand (stress): ( ) low ( ) moderate ( ) high	X	
B. Physical (for each trait specify: 0 = normal / 1+ = mild / 2+ = moderate / 3+ = severe)		
( ) Loss of subcutaneous fat (triceps, chest)	X	
( ) Muscle wasting (quadriceps, deltoids)	X	
( ) Ankle edema	X	
( ) Sacral edema	X	
( ) Ascites	X	