

Evidence-Based Nutrition for Wound Healing and Malnutrition- Part 2: New Insights into Malnutrition Assessment and Intervention Webinar

Live Webinar: March 27, 2025 (1:30-2:30 pm ET) Convert to your own [time zone](#)

Professional Approvals

Becky Dorner & Associates has been a trusted provider of high quality continuing professional education since 1993 (Commission on Dietetic Registration provider number NU004).

Live Webinar: Evidence-Based Nutrition for Wound Healing and Malnutrition - Part 2: New Insights into Malnutrition Assessment and Intervention awards 1.25 CPEUs in accordance with the Commission on Dietetic Registration CPEU Prior Approval.



Recorded/Enduring Webinar: Evidence-Based Nutrition for Wound Healing and Malnutrition - Part 2: New Insights into Malnutrition Assessment and Intervention awards 1.25 CPEUs in accordance with the Commission on Dietetic Registration CPEU Prior Approval.

Intended Audience: RDNs and NDTRs	CPEUs	CDR Level	CDR Activity Type	CDR Activity Number	Expiration Date
Live Webinar	1.25	2	186516	172	1/10/26
Recorded/Enduring	1.25	2	186517	741	1/10/28
Suggested CDR Performance Indicators: 5.1.2, 7.8.1, 11.2.1, 11.3.9					
Note: Numerous Other Performance Indicators May Apply.					

Funding has been provided through an independent medical educational grant from Abbott Nutrition.

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You must complete this program prior to the expiration date. To obtain your certificate, review the materials, take and pass the online test, and complete the evaluation. For multiple choice questions select the one best answer from the choices given. You may retake the online test as many times as needed prior to the expiration date. If you are interrupted and cannot finish the test, you can save it and come back later to finish it. Also see the last slide in this handout for more information.


If you wish, you may submit evaluations of the quality of this course activities/materials to CDR at qualityCPE@eatright.org.

Also visit <https://www.beckydorner.com/continuing-education/how-to-complete-cpe/>.

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Evidence-Based Nutrition for Wound Healing and Malnutrition- Part 2: New Insights into Malnutrition Assessment and Intervention

Today's Webinar



Program Length <ul style="list-style-type: none">• 60 minutes Handouts <ul style="list-style-type: none">• Live: Available on our website and posted in the Go To Webinar System• Recording: Available on our website with the recording	Questions <ul style="list-style-type: none">• Live: Use GoToWebinar to ask questions• Recording: Email info@beckydorner.com Credit Hours/Certificate <ul style="list-style-type: none">• Please refer to handouts for details
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Evidence-Based Nutrition for Wound Healing and Malnutrition Care

Part 2: New Insights into Malnutrition Assessment and Intervention




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Disclosure of Funding

Funding from non-CPE revenue for CPE planning, development, review, and/or presentation has been provided by Abbott Nutrition.

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Evidence-Based Nutrition for Wound Healing and Malnutrition- Part 2: New Insights into Malnutrition Assessment and Intervention



**Ainsley Malone, MS, RDN,
CNSC, FAND, FASPEN**

- Clinical Practice Specialist
- The American Society for Parenteral and Enteral Nutrition

Disclosures:
Ainsley discloses that she is a speaker for Abbott Nutrition Health Institute, however, no conflict of interest exists for this program.

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Objectives

- 1 Outline recent evidence and recommendations for malnutrition assessment methodologies in acute care and long-term care settings.
- 2 Describe successful nutrition interventions in patients with nutrition risk or who are malnourished.
- 3 Summarize optimal transitions of nutrition care beyond the acute care setting.

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**Validated Nutrition
Assessment
Methodologies**

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Subjective Global Assessment (SGA)

“A nutrition assessment tool that refers to an overall evaluation of a patient’s history and physical examination and uses structured clinical parameters to diagnose malnutrition.”



Duerksen D. Nutr Clin Pract 2021;36(5):942.

CMTF: https://nutritioncareinacanada.ca/sites/default/uploads/files/SGA%20Tool%20EN%20BKWT_2017.pdf

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SGA Domains

Medical History

- Nutrient intake
- Weight
- Symptoms
- Functional capacity
- Metabolic requirement

Physical Exam

- Loss of body fat
- Loss of muscle mass
- Presence of edema/ascites

CMTF: https://nutritioncareinacanada.ca/sites/default/uploads/files/SGA%20Tool%20EN%20BKWT_2017.pdf

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SGA Rating

Well nourished,
normal

Mildly to
moderately
malnourished

Severely
malnourished

Descriptions included for each rating covering the specific domain areas

Duerksen D. Nutr Clin Pract 2021;36(5):942.


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Nutrition Assessment Methodologies – Mini Nutrition Assessment (MNA-SF)

<https://www.mna-elderly.com/sites/default/files/2021-10/mna-mini-english.pdf>

If BMI is not available, replace with calf circumference




Kaiser MJ. J Nutr Health Aging 1009;13:782-788.

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Academy/ASPEN (AAIM) Consensus Characteristics

Consensus Statement: Academy of Nutrition and Dietetics and American Society for Parenteral and Enteral Nutrition: Characteristics Recommended for the Identification and Documentation of Adult Malnutrition (Undernutrition)

Etymology-based malnutrition definitions.



White JV, et al. JPEN J Parenter Enteral Nutr. 2012;36(3):275-283.

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Academy/ASPEN Consensus Characteristics

THE PRESENCE OF TWO OR MORE ARE NECESSARY FOR THE DIAGNOSIS OF MALNUTRITION:

Unintentional weight loss	Evidence of inadequate intake	Loss of muscle mass
Loss of subcutaneous fat	Fluid accumulation	Reduced hand grip strength

White JV, et al. JPEN J Parenter Enteral Nutr. 2012;36(3):275-283.

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Evidence-Based Nutrition for Wound Healing and Malnutrition- Part 2: New Insights into Malnutrition Assessment and Intervention

GLIM: Malnutrition Diagnostic Approach

- AIM: REACH GLOBAL CONSENSUS ON THE IDENTIFICATION AND ENDORSEMENT OF CRITERIA FOR THE DIAGNOSIS OF MALNUTRITION IN CLINICAL SETTINGS.

Jensen GL, JPEN 2020;43(1):32

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GLIM Diagnostic Approach

Phenotypic Criteria	
Weight Loss (%)	>5% within past 6 months >10% beyond 6 months
Body Mass Index	<20 if < 70 years <22 if ≥ 70 years
Muscle Mass	Reduced

Etiologic Criteria	
Food Intake or Assimilation	Ingestion ≤/=50% ER Any reduction for > 2 weeks Any chronic GI condition that adversely impacts food assimilation or absorption
Inflammation	Presence of acute disease/injury or chronic disease related

Malnutrition: One criterion from each category

BMI: Worldwide
< 20 kg/m² if < 70 years
< 22 kg/m² if ≥ 70 years

BMI: Asian
< 18.5 kg/m² if < 70 years
< 20 kg/m² if ≥ 70 years

BMI- Body Mass Index
ER- Energy Requirement
GI- Gastrointestinal

Jensen GL, et al. JPEN J Parenter Enteral Nutr. 2019;43(1):32-40.

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Malnutrition Severity

Global Leadership Initiative on Malnutrition (GLIM)

GLIM. Accessed January 30, 2025.
[https://www.nutritioncare.org/uploadedFiles/Documents/Malnutrition/Global%20Leadership%20Initiative%20on%20Malnutrition%20\(GLI\)%20A%20Framework%20for%20Diagnosing%20Adult%20Malnutrition.pdf](https://www.nutritioncare.org/uploadedFiles/Documents/Malnutrition/Global%20Leadership%20Initiative%20on%20Malnutrition%20(GLI)%20A%20Framework%20for%20Diagnosing%20Adult%20Malnutrition.pdf)

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GLIM – A Scoping Review 2023

- Aim: assess the association between malnutrition and all-cause mortality in older people
- Studies selected for review between 11/2018 – 1/2023
- 17 studies included
 - Hospital (n=10,671)
 - 1.23 – 7.29 risk of mortality
 - Community (n=8,096)
 - 1.62 – 4.41 risk of mortality
 - Extended care (n=485)
 - 1.36 – 2.41 risk of mortality

Sanchez-Rodriguez D. Int J Environ Res Public Health 2023;20:5320

Association between Malnutrition Assessed by the Global Leadership Initiative on Malnutrition Criteria and Mortality in Older People: A Scoping Review

“The GLIM criteria have a high diagnostic accuracy for distinguishing malnutrition in patients...the accuracy of later studies (n=15) was better than that in the earlier studies (n=5)”

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GLIM In Hospital Settings

REVIEW

GLIM criteria to identify malnutrition in patients in hospital settings: A systematic review

Luana Ferreira Alves BC¹ | José David Santos de Jesus BC² | Vanessa Nunes Menezes Brito BC³ | Suzana Alves de Jesus BC⁴ | Gabriel Silva Santos BC⁵ | Carolina Cunha de Oliveira PhD⁶

SGA – Subjective global assessment
NRS 2002 – Nutrition risk score
MUST – Malnutrition universal screening tool
MNA-SF – Mini nutrition assessment, short form
MST – Malnutrition screening tool
ESPEN – European Society for Clinical Nutrition and Metabolism

Alves LF, et al. JPEN J Parenter Enteral Nutr. 2023;47(6):702-709.

- Study Aim:
 - Evaluate ability of GLIM to identify malnutrition
 - Compare prevalence with other methods (screening and assessment)
 - SGA, NRS 2002, MUST, MNA-SF, MST, ESPEN
- Systematic review – PRISMA methodology
- 12 studies included – moderate quality
- Malnutrition prevalence: 16% - 80%
 - 19% severe
- Predictive ability – SGA: 85% sensitivity; 79% specificity
- Agreement – with SGA: kappa ranged from 0.53 – 0.80 (average to good)

PRISMA- Preferred Reporting Items for Systematic Reviews and Meta-Analyses

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- Study Aim:
 - Evaluate ability of GLIM to identify malnutrition
 - Compare prevalence with other methods (screening and assessment)
 - SGA, NRS 2002, MUST, MNA-SF, MST, ESPEN

“The GLIM criteria **can identify malnutrition** in hospital settings in patients with different clinical and pathological conditions, with a **high prevalence and severity of malnutrition**. It proved to be a **sensitive and specific** tool to establish the diagnosis, in addition to presenting **good agreement** with the screening and nutrition assessment methods.”

PRISMA- Preferred Reporting Items for Systematic Reviews and Meta-Analyses

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Recent AAIM Validation - 2024



Original Research Article
Predictive validity of the Academy of Nutrition and Dietetics/American Society for Parenteral and Enteral Nutrition indicators to diagnose malnutrition tool in hospitalized adults: a cohort study

Elizabeth Yakes Jimenez^{1,2,3,4}, Erin Lamers-Johnson¹, Julie M Long¹, George McCabe¹, Xingzi Ma¹, Lindsay Woodcock¹, Courtney Britz¹, Jenica K Abram¹, Alison L Steiber^{1,5}

Systematic Review of Content Validity and Meta-analysis of Predictive Validity for Clinical Outcomes Associated with Malnutrition Identified by The Academy of Nutrition and Dietetics and American Society for Parenteral and Enteral Nutrition Indicators of Malnutrition

Charlene Compher, Gordon L. Jensen, Ainsley Malone, Sherry Morgan, Sarzalena Becker, Laura Cresta, Alex M. Paul, Alison Steiber
Published online: February 06, 2024

Jimenez EY, et al. *Am J Clin Nutr*. 2024;119(3):779-787.
Compher C, et al. Published: February 06, 2024; DOI <https://doi.org/10.1016/j.ajcn.2024.02.002>

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Academy's Evidence Analysis Library – 2023 Malnutrition in the Older Adult Guideline

Malnutrition Assessment in Long Term Care

"We suggest that registered dietitian nutritionists use the Mini-Nutritional Assessment (MNA) for malnutrition assessment in older adults living in long-term care. The MNA is a valid tool that can identify older adults that are malnourished and may predict mortality." (Level 1C)

"We suggest that registered dietitian nutritionists consider using the Subjective Global Assessment (SGA) or Patient Generated Global Assessment (PGA-SGA) if use of the Mini-Nutritional Assessment (MNA) is not feasible for malnutrition assessment in older adults living in long-term care. (Consensus)

Evidence Analysis Library: https://www.andeal.org/template.cfm?template=guide_summary&key=4873, Accessed 1.31.25

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Academy's Evidence Analysis Library – 2023 Malnutrition in the Older Adult Guideline

Malnutrition Assessment in the Community

"We suggest that registered dietitian nutritionists use the Mini-Nutritional Assessment (MNA) for malnutrition assessment in older adults living in the community. The MNA is a valid and reliable tool that can identify older adults that are malnourished and may predict mortality." (Level 1C)

"We suggest that registered dietitian nutritionists consider use of the Subjective Global Assessment (SGA) if the Mini-Nutritional Assessment (MNA) is not feasible for malnutrition assessment in older adults living in the community. (Consensus)

Evidence Analysis Library: https://www.andeal.org/template.cfm?template=guide_summary&key=4873, Accessed 1.31.25

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Evidence-Based Nutrition for Wound Healing and Malnutrition- Part 2: New Insights into Malnutrition Assessment and Intervention

Nutrition Intervention
in High Risk or
Malnourished Patients

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Optimizing Food Intake

- RCT
- Investigate improved meal presentation and culinary expertise on food intake
 - n=206
- Study groups
 - Intervention – meals developed at culinary institute in France
 - Control – standard food presentation
- Food intake measured through photographic evaluation

- Total amount eaten
 - Intervention – 77%
 - Control – 58%
 - 19% higher (p = 0.012)

Navarro D. Clin Nutr 2016;35:1153-1158

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Enhancing Dietary Intake In Malnourished Adults

Supportive interventions for enhancing dietary intake in malnourished or nutritionally at-risk adults (Review)

- Aim: to assess the effects of supportive interventions for enhancing dietary intake in malnourished adults.
 - Residential care, acute care and outpatients
- 41 trials included with 10,681 participants.
- Evidence quality: moderate (mortality outcome)
- All cause mortality risk reduction: 0.78 (CI:0.66-0.92) p=0.005

- ✓ Changes to the organization of nutrition care
- ✓ Changes to the feeding environment
- ✓ Modification of meal profile or pattern
- ✓ Additional supplementation of meals
- ✓ Congregate and home delivery system

Baldwin C, Kimber KL, Gibbs M, Weekes CE. Cochrane Database of Systematic Reviews 2016 Issue 12

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Enhancing Dietary Intake In Malnourished Adults

Cochrane Library
Cochrane Collaboration Systematic Reviews

Supportive interventions for enhancing dietary intake in malnourished or nutritionally at-risk adults (Review)

Aim: to assess the effects of supportive interventions in malnourished hospitalized patients

41 trials

Evidence: All cause mortality risk reduction: 0.78 (CI:0.66-0.92) p=0.005

Outcomes: "This review has identified a range of interventions that may benefit nutritionally vulnerable individuals and highlights the importance of assessing patient-important outcomes in different healthcare settings in future research."

Interventions:

- Changes to the organization of meals
- Congregate and home delivery system

Baldwin C, Kimber KL, Gibbs M, Weekes CE. Cochrane Database of Systematic Reviews 2016 Issue 12

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Nutrition Intervention in Malnourished Patients

RCT in malnourished hospitalized patients (n=55)	Randomized to diet intervention	Outcomes
<ul style="list-style-type: none"> Chronic diseases Acute medical conditions 	<ul style="list-style-type: none"> Specific energy/protein intakes and daily nutrition counseling Standard meals to provide 25-30 kcal/kg/day 	<ul style="list-style-type: none"> Primary outcome variable: reduced hospital length of stay – 6.4 ± 3 vs 8.4 ± 4 (p<0.03) No difference in 6 month mortality (low powered)

Cano-Torres, E. J Am Coll Nutr 2017;36:235-239

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Oral Nutrition Supplements and Outcomes

Multicenter PRCT

Malnourished older adults (n=622)

ONS randomized during hospital stay

- Following screening and assessment of malnutrition
- Two 8 oz servings/day during hospitalization and at discharge
- High protein oral supplement with added HMB

Results

- 90-day readmission/mortality (primary)
 - 31.1% w/placebo vs 26.8% w/ONS (p=0.214)
- 90-day mortality
 - 9.7% w/placebo vs 4.8% w/ONS (p=0.018)

Deutz NE. Clin Nutr 2016;35:18-26.

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Oral Nutrition Supplements and Cost Benefit

Meta-analysis

A systematic review of the cost and cost effectiveness of using standard oral nutritional supplements in community and care home settings

M. Elia ^{1,2}, C. Normand ³, A. Laviano ⁴, K. Norman ⁵

¹ Faculty of Medicine, University of Southampton, National Institute of Health Research Biomedical Research Centre (Nutrition), Southampton and University Hospital Southampton NHS Foundation Trust, Southampton, England, UK

² Centre for Health Policy and Management, Trinity College, Dublin, Ireland

³ Department of Clinical Medicine, Sapienza University, Rome, Italy

⁴ Research Group on Geriatrics, Charité – Universitätsmedizin, Berlin, Germany

- Examine the cost and cost effectiveness of oral supplements
- 9 studies included (≤ 3 months usage)
 - 31 separate cost analysis
- Median cost saving of 5%
- Meta-analysis: reduced hospitalization by 16.5% (p<0.001)

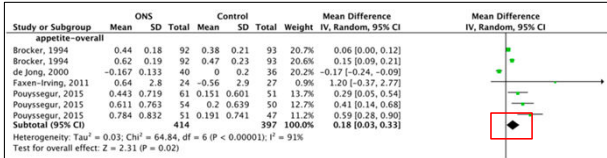
Elia M, et al. *Clin Nutr*. 2016;35(2):370-380.

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Oral Nutrition Supplements

- Meta-analysis: aim to examine the effectiveness of ONS on anorexia of aging
- Primary outcome: effect on appetite



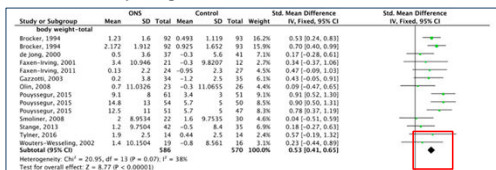
Nutrients. 2021 Mar 3;13(3):835. doi: 10.3390/nu13030835

<http://creativecommons.org/licenses/by/4.0/>

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Oral Nutrition Supplements – Secondary Outcomes

- ONS had a positive effect:
 - Overall energy intake 0.46 (0.29,0.63), p<0.001
 - Overall protein intake: 0.59 (0.16,1.02), p<0.007
- ONS increased body weight



Nutrients. 2021 Mar 3;13(3):835. doi: 10.3390/nu13030835

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Individualized Support in Medical Inpatients

Multicenter randomized trial

- n=2028
- High nutrition risk (NRS ≥ 3)

Intervention group

- RD assessment
- Nutrition support initiated no later than 48 hrs after admission

Control group

- No RD assessment; standard hospital food

Demographics

- Mean age 72.6 years
- Infection, cancer and cardiovascular disease most frequent diagnosis

Schuetz P. Lancet 2019;393:2312

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Outcomes in High-Risk Medical Inpatients

Outcomes	Intervention group (n=1015)	Control group (n=1013)	Odds ratio or coefficient (95% CI)	p value
Primary outcome				
Adverse outcome within 30 days	232 (23%)	272 (27%)	0.79 (0.64 to 0.97)	0.023
Single components of primary outcome				
All-cause mortality	73 (7%)	100 (10%)	0.65 (0.47 to 0.91)	0.011
Admission to the intensive care unit	23 (2%)	26 (3%)	0.85 (0.48 to 1.51)	0.58

Early use of individualized nutritional support to reach calorie and protein goals in medical inpatients at nutrition risk is **effective** in increasing energy and protein intakes and in lowering the risk of adverse outcomes and mortality within 30 days

Schuetz P. Lancet 2019;393:2312

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Nutrition Support – Systematic Review 2019

Aim: to assess the association of nutritional support with clinical outcomes in malnourished or high-risk medical patients.

- Update from a 2016 systematic review

27 trials (n=6803)

- 45% in studies published since 2015

Outcomes

- Mortality: 8.3% with intervention; 11% in control (p=0.03)
 - OR 0.73; 95% CI, 0.56-0.97
 - Risk of mortality lower for malnourished
- Hospital readmission: 14.7% with intervention; 18% in control (p=0.02)
 - OR 0.76; 95 CI, 0.60-0.96

Gomes F. JAMA Network Open 2019. doi:10.1001/jamanetworkopen.2019.15138

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Evidence-Based Nutrition for Wound Healing and Malnutrition- Part 2: New Insights into Malnutrition Assessment and Intervention

Nutrition Support – Systematic Review 2019

Aim: to assess the association of nutritional support with clinical outcomes in malnourished or

“This analysis supports the current practice guidelines issued by the European Society for Clinical Nutrition and Metabolism (ESPEN) and the American Society for Parenteral and Enteral Nutrition (ASPEN), advocating a proactive, screening-based approach for **initiating nutritional support** during the hospital stay of medical inpatients who are malnourished or at nutritional risk” – Gomes, et al.


- Mortality: 8.3% with intervention; 11% in control (p=0.03)
 - OR 0.73; 95% CI, 0.56-0.97
 - Risk of mortality lower for malnourished
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 - OR 0.76; 95 CI, 0.60-0.96


Gomes F. JAMA Network Open 2019. doi:10.1001/jamanetworkopen.2019.15138

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Guideline Recommendations for Older Adults with Malnutrition – Academy EAL

Use of oral nutrition supplements

 Recommended for use in long term care, in the community and following an acute care hospital admission. Rating Level 1B-C

 1-2 servings per day is likely to increase calorie and protein intakes and improve nutrition status

Evidence Analysis Library. Malnutrition in Older Adults 2023: https://www.andeal.org/template.cfm?template=guide_summary&key=4910

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Barriers & Facilitators to Oral Supplement (ONS) Use Systematic Review

Barriers	Facilitators
<ul style="list-style-type: none"> • High cost • Healthcare professionals lack of knowledge • High degree of illness • Disease treatments 	<ul style="list-style-type: none"> • How ONS is served and timing • Strong social support • Person-centered care • Importance of ONS is high

Liljeberg E. Nutr Res Rev 2024; <https://doi.org/10.1017/S0954422424000192>

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Evidence-Based Nutrition for Wound Healing and Malnutrition- Part 2: New Insights into Malnutrition Assessment and Intervention

The Importance of Education

CLINICAL RESEARCH
The effect of nutrition education intervention for caregivers on the nutrition status of the elderly receiving home care: A 1-year follow-up interventional trial
Capday Sills Merit PhD¹ | Narayan Yehoodi Ashba PhD²

- One-year single-arm interventional trial
- Aim: effect of nutrition education caregivers on nutrition status and quality of life (n=94)
- Dependent home care patients
- Intervention: education with patients and caregivers (6 and 12 months)
- Outcomes
 - 84% consumed ≥4 meals/day
 - MNA score increased by 1.4 points (p<0.001)
 - Significant increase of normally nourished after intervention: 18.1% to 27.7% (p<0.05)
 - Body weight increased: 70.9 kg to 71.4 kg (p<0.001)

Merit CS. Nutr Clin Pract 2025; https://doi.org/10.1002/ncp.11273

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Merit CS. Nutr Clin Pract 2025; https://doi.org/10.1002/ncp.11273

“Implementing an NEI for caregivers may help reduce the risk of malnutrition among patients of older age.”
“Dietitians can play a central role in providing medical nutrition therapy to those of older age receiving home care.”

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**Transitions of Care
and Nutrition
Follow-up**

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Evidence-Based Nutrition for Wound Healing and Malnutrition- Part 2: New Insights into Malnutrition Assessment and Intervention

Challenges and Gaps Across the Care Continuum

- Malnutrition frequently not documented at hospital discharge
- Nutrition plan of care usually not carried through
- Difficult to capture nutrition care during hospitalization
- Lack of nutrition follow up is common
- Nutrition risk is often not evaluated in the community setting

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Post Hospital Meal Programs are Prevalent

 <p>Medicare Advantage Programs - many offer meal benefits</p> <p>2024 - 72% offered programs including nutrition education, cooking classes or meal delivery plans (Kaiser Family Foundation)</p>	 <p>Private insurance programs</p>	 <p>Hospital programs for post-discharge meals</p>	 <p>Administration for Community Living</p> <p>Meal delivery services through Older Americans Act Nutrition Programs *Discover Locator</p>	 <p>Private companies</p> <p>Mom's Meals OA Foods</p>
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<https://eldercare.acl.gov/Public/index.aspx>

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Discharge Meal Programs and Outcomes

- Cohort study in heart failure vs no heart failure (n=4032 older adults)**
 - 4 week post-hospitalization home delivered meals
 - Exposure to the meals significantly associated with lower odds of 30-day rehospitalization or death (OR=0.55;95%CI, 0.43-0.71, p<0.001)
- Systematic review of nutritional intake in community living older adults**
 - Intakes of energy, protein and calcium increased
- RCT in community living high risk older adults (n=106)**
 - Received dietitian counseling, one meal and two snacks per day for 12 weeks
 - Weight gain: intervention group 1.7 +/- 2.5 kg; control group -3.5 +/- 3.9 kg
 - Short performance physical battery test: significant increase in scores in intervention group

Nguyen HQ. JAMA Health Forum. 2023;4(6):e231678; Walton K. J Human Nutr Diet 2020;33(1):38;Blondal BS Eur J Clin Nut 2023;77:45

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Evidence-Based Nutrition for Wound Healing and Malnutrition- Part 2: New Insights into Malnutrition Assessment and Intervention

Nutrition Follow Up and Readmissions

- RCT to evaluate post discharge nutrition follow up in malnourished geriatric patients (n=208)
- Follow up was either a home visit, by telephone or no follow up (control)
- Outcomes: 30 and 90 day hospital readmission

	Home visit (n=104)			Telephone group (n=104)			Control group (n=100)		
	n (%)	Readmission (95% CI)	p-value	n (%)	Readmission (95% CI)	p-value	n (%)	Readmission (95% CI)	p-value
30 days	11 (10.6%)	1.4 (0.3-2.5)	0.01	11 (10.6%)	1.4 (0.3-2.5)	0.01	11 (10.6%)	1.4 (0.3-2.5)	0.01
90 days	11 (10.6%)	1.4 (0.3-2.5)	0.01	11 (10.6%)	1.4 (0.3-2.5)	0.01	11 (10.6%)	1.4 (0.3-2.5)	0.01

Pedersen J. J Nutr Health Aging 2017;21:75

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Nutritional Support After Hospital Discharge

- Systematic review and meta-analysis
- Investigate: the effects of post-discharge nutrition support in the outpatient setting
- 14 randomized controlled trials
 - o n=2438 participants
- Primary outcome: all-cause mortality
 - o Intervention: 10.2%
 - o Control: 14.6%
 - o OR 0.63, 95%CI 0.48-0.84, p=0.001
- Secondary outcomes
 - o Readmission rate: no significant difference
 - o Weight change: 1.14 kg, p<0.0001
 - o Protein intake: increase of 24.3 g/day, p=0.005

Kaegi-Brown N, et al. Clin Nutr 2022;41(11):2431-2441.

Types of Interventions

- Dietary counseling (to reach targeted goals)
- Food fortification
- Oral nutrition supplements
- Snacks in between meals
- Enteral nutrition

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Nutritional Support After Hospital Discharge

- Primary outcome: all-cause mortality
 - o Intervention: 10.2%
 - o Control: 14.6%
 - o OR 0.63, 95%CI 0.48-0.84, p=0.001
- Secondary outcomes
 - o Readmission rate: no significant difference
 - o Weight change: 1.14 kg, p<0.0001
 - o Protein intake: increase of 24.3 g/day, p=0.005

Kaegi-Brown N, et al. Clin Nutr 2022;41(11):2431-2441.

Types of Interventions

- Dietary counseling (to reach targeted goals)
- Food fortification
- Oral nutrition supplements
- Snacks in between meals
- Enteral nutrition

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Evidence-Based Nutrition for Wound Healing and Malnutrition- Part 2: New Insights into Malnutrition Assessment and Intervention

Advocacy for Malnutrition Care is Critical

Medical Nutrition Therapy Act
Previous Congress - 2024

- RDN reimbursement for medical nutrition therapy
- Extends coverage to diseases and conditions
 - Includes malnutrition
- Adds referrals from physician assistants, nurse practitioners, clinical nurse specialists, or (for eating disorders) a clinical psychologist.



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National Blueprint: Achieving Quality Malnutrition Care for Older Adults, 2020 Update

defeatmalnutrition.today
...vital to healthy aging
<https://defeatmalnutrition.today/national-blueprint/>

Ensure High-Quality Transitions of Care (TOC)



Establish evidence-based best practices based upon patient-specific risk factors and ensure available resources to carry out effective TOC



Include text from updated Discharge Planning rule to facilitate documentation of nutritional needs as part of discharge planning



Implement quality improvement programs to test TOC models that include quality malnutrition care best practices for malnourished and at-risk older adults

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Continuity Of Nutrition Care from Hospital to Community: Step-wedge Cluster-randomized Trial

Testing a new referral process that will allow **continuity of nutrition care** for malnutrition treatment across settings and determine if it improves food security and quality of life in patients 60 years and older who are eligible for Title III C1 or Title III C2 meal provision services.







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Evidence-Based Nutrition for Wound Healing and Malnutrition- Part 2: New Insights into Malnutrition Assessment and Intervention






Transitions of Care

-  **Study Design:** Stepped Wedge Randomized Control Trial
-  **Research Sites:** 8 research pairs consisting of 1 acute care hospital and 1 community meal provision organization
-  **Study Participants:** Goal to enroll 1,120 participants across the entire study (140 participants per research pair)
-  **Data Collection Timeline:** Data collection will occur for nearly 3 years (5 period that are 7-months)

This project is supported by the Administration for Community Living (ACL), U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling \$3.99 million with 75% funded by ACL/HHS and 25% funded by the Academy of Nutrition and Dietetics. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by ACL/HHS, or the U.S. Government.


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Practice Takeaways

-  Multiple validated malnutrition assessment methodologies available
-  Nutrition intervention in malnourished patients can improve outcomes
-  Post hospital nutrition intervention and follow up critical
-  Improving nutrition transition of care essential
-  We all must advocate for MNT

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Questions



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Evidence-Based Nutrition for Wound Healing and Malnutrition- Part 2: New Insights into Malnutrition Assessment and Intervention

Thank you!



- **Credit Hours:** Please watch for a follow up email with detailed information on how to obtain your certificate (instructions are also on the next slide).
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