

Uddrag af ESPEN guideline



ESPEN Guideline

ESPEN guideline on clinical nutrition and hydration in geriatrics

Dorothee Volkert ^{a,*}, Anne Marie Beck ^b, Tommy Cederholm ^c, Alfonso Cruz-Jentoft ^d, Sabine Goisser ^e, Lee Hooper ^f, Eva Kiesswetter ^a, Marcello Maggio ^{g,h}, Agathe Raynaud-Simon ⁱ, Cornel C. Sieber ^{a,j}, Lubos Sobotka ^k, Dieneke van Asselt ^l, Rainer Wirth ^m, Stephan C. Bischoff ⁿ

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ESPEN GUIDELINES

ESPEN Guidelines on Enteral Nutrition: Geriatrics[☆]

D. Volkert^{a,*}, Y.N. Berner^b, E. Berry^c, T. Cederholm^d, P. Coti Bertrando^e, A. Milne^f, J. Palmblad^g, St. Schneider^h, L. Sobotkaⁱ, Z. Stanga^j, DGEM: [☆] R. Lenzen-Grossimlinghaus, U. Krym, M. Pirlich, B. Herbst, T. Schütz, W. Schröer, W. Weinrebe, J. Ockenga, H. Lochs

Clin Nutr 2006; 25: 220-360

ESPEN Guidelines on Parenteral Nutrition: Geriatrics

L. Sobotka^a, S.M. Schneider^b, Y.N. Berner^c, T. Cederholm^d, Z. Krznaric^e,
G. Toigo^h, M. Vandewoudeⁱ, D. Volkert^j

Clin Nutr 2009; 28: 461-466








ESPEN Guideline - Methods

FAU

FRIEDRICH-ALEXANDER
UNIVERSITÄT
ERLANGEN-NÜRNBERG

Clinical Nutrition 2015; 34: 1043-51



Editorial

Standard operating procedures for ESPEN guidelines

- Developed according to SOPs for ESPEN guidelines
- International multidisciplinary working group
- PICO questions
- Systematic literature search and grading (SIGN 1++ to 4)
- Creation of evidence tables
- Consensus process


Bischoff S et al. Clin Nutr 2015

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Bischoff S et al. Clin Nutr 2015



[illegible][illegible]

Ernærings- og
træningsindsatser til
ældre med geriatrike
problemstillinger

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ESPEN GUIDELINES

ESPEN Guidelines on **Enteral Nutrition**; Geriatrics[☆]

D. Volkert^{a,*,1}, Y.N. Berner^b, E. Berry^c, T. Cederholm^d, P. Coti Bertrand^d, A. Milne^e, J. Palmblad^f, St. Schneider^g, L. Sobotka^h, S. Stangaⁱ, DGEA^{j,k}, R. Lenzen-Grossimlinghaus, U. Kryz, M. Pirlich, B. Herbst, T. Schütz, W. Schröder, W. Weinreb, J. Ockenga, H. Lochs

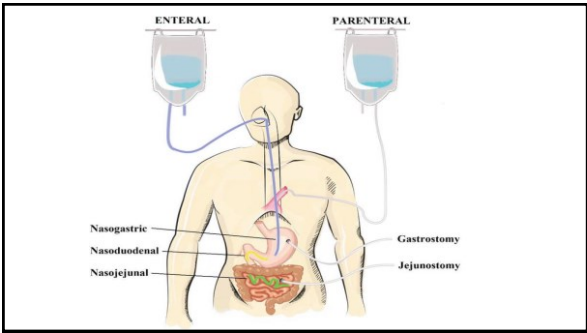
Clin Nutr 2006; 25: 220-360

ESPEN Guidelines on **Parenteral Nutrition**; Geriatrics

L. Sobotka^h, S.M. Schneider^g, Y.N. Berner^c, T. Cederholm^d, Z. Krznarić^e, G. Toigo^l, M. Vandewoude^l, D. Volkert^l

Clin Nutr 2009; 28: 461-466





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journal homepage: <http://www.elsevier.com/locate/clinu>

ELSEVIER

ESPEN Guideline
ESPEN guideline on clinical nutrition and hydration in geriatrics

Dorothee Volpert ^{1,2}, Anne Marie Beck ³, Tommy Cederholm ⁴, Alfonso Cruz-Jentoft ⁵, Sabine Gaisner ⁶, Leo Hooper ⁷, Eva Krenwetter ⁸, Marcello Maggi ^{9,10}, Agathe Raynaud-Simon ¹, Cornel C. Sieber ^{11,12}, Lubos Sobocka ¹³, Dieneke van Asselt ¹, Rainer Wirth ¹⁴, Stephan C. Bischoff ¹⁵

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ESPEN
THE EUROPEAN
SOCIETY FOR
CLINICAL
NUTRITION AND
METABOLISM



European Society for Clinical Nutrition and Metabolism

ESPE Guideline Group Nutrition in Geriatrics



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Anne Marie Beck (DK)
Tommy Cederholm (SE)
Alfonso Cruz-Jentoft (ES)
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European Society for Clinical Nutrition and Metabolism

ESPE Guideline Group Nutrition in Geriatrics







Cornel Sieber (DE)
Rainer Wirth (DE)
Dorothee Volkert (DE)

Wissenschaften / Technologie

Wissenschaften / Technologie



LÖSUNG



SCHWEIN RIND SCHAF ZIEGE

BANSS
NEW MEAT TECHNOLOGIES

BANSS ist ein innovatives Fleischverarbeitungssystem, das die Fleischverarbeitung effizienter und nachhaltiger macht.





Recommendations ...



II. ... for older persons with (risk of) malnutrition

- 1. Supportive interventions (6 rec.)
- 2. Nutritional counselling (2 rec.)
- 3. Food modification (3 rec.)
- 4. Oral nutritional supplements (6 rec.)
- 5. Enteral and parenteral nutrition (12 rec.)
- 6. Exercise (2 rec.)


An example

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Bischoff S et al. Clin Nutr 2015

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SHOULD OLDER PERSONS WITH MALNUTRITION
OR AT RISK OF MALNUTRITION BE OFFERED
INDIVIDUALIZED NUTRITIONAL COUNSELLING?

Anne Marie & Sabine





Background



Contents lists available at ScienceDirect

Clinical Nutrition

journal homepage: <http://www.elsevier.com/locate/clinu>



Randomized control trials

Oral nutritional supplements in a randomised trial are more effective than dietary advice at improving quality of life in malnourished care home residents

Emma L. Parsons ^{a, b}, Rebecca J. Stratton ^{a, b}, Abbie L. Cawood ^{a, b}, Trevor R. Smith ^c, Marinos Ella ^{a, b, c}

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Background



ESPEN Guideline
ESPEN guidelines on definitions and terminology of clinical nutrition

T. Cederholm ^{a,*}, R. Barazzoni ^b, P. Austin ^{c,y}, P. Ballmer ^d, G. Biolo ^e, S.C. Bischoff ^f, C. Compher ^{g,h}, I. Correia ^{a,i}, T. Higashiguchi ^{k,l}, M. Holst ^j, G.L. Jensen ^{h,i}, A. Malone ^{k,l}, M. Muscaritoli ^m, I. Nyulasi ^{n,o}, M. Pirlich ^o, E. Rothenberg ^p, K. Schindler ^q, S.M. Schneider ^r, M.A.E. de van der Schueren ^{s,t}, C. Sieber ^j, L. Valentini ^u, J.C. Yu ^{v,w}, A. Van Gossum ^{xy}, P. Singer ^x

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Background



ESPEN Guideline
ESPEN guidelines on nutrition in cancer patients*

Jann Arends ^a, Patrick Bachmann ^b, Vickie Baracos ^c, Nicole Barthelemy ^d, Hartmut Bertz ^a

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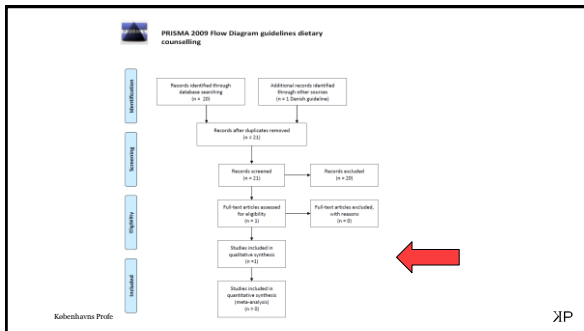
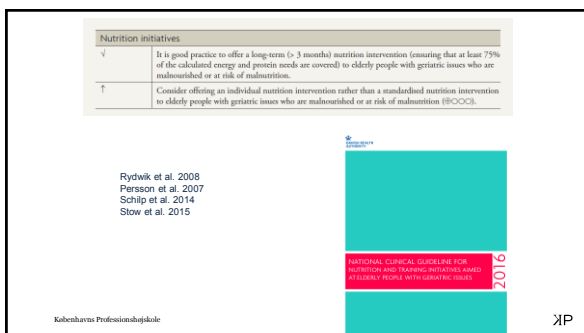
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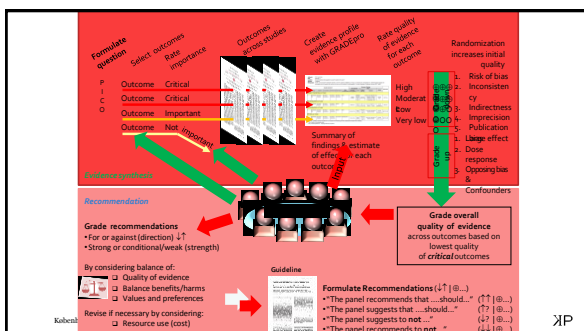
Specific definition

Nutrition counselling by a health care professional is regarded as the 1st line of nutrition therapy. Professional counselling, as distinct from brief and casual nutritional "advice", is a dedicated and repeated professional communication process that aims to provide patients with a thorough understanding of nutritional topics that can lead to lasting changes in eating habits. Nutritional counselling includes nutritional history, diagnosis, and nutrition therapy and may be combined with educative group sessions, written advice and/or telephone contacts. The counselling should be performed by trained nutrition professionals (registered/ accredited dieticians or nutritionists) based on the nutrition care process. In frail geriatric patients that are malnourished or at risk of malnutrition, counselling should be performed with the aim to increase dietary intake. Clearly, the best way to maintain or increase energy and protein intake is with normal food. However, this is often difficult and in these cases, counselling should recommend adding other types of interventions, such as using dietary fortification to optimise the energy and protein density of the diet without increasing quantity; and/or adding extra snacks or drinks and/ or oral nutritional supplements (adapted from Arends et al. 2016)


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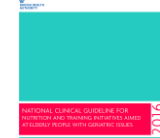
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SECTION 2: OVERALL ASSESSMENT OF THE STUDY	
2.1	<p>What is your overall assessment of the methodological quality of this review?</p> <p><u>In AMSTAR tool scores are:</u> bottom (score 0 to 3), middle (score 4 to 7), and upper (score 8 to 11)</p>
2.2	<p>Are the results of this study directly applicable to the patient group targeted by this guideline?</p>





Kabeerhavani Professionshøjedole

2016

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[illegible]

PRISMA 2009 Flow Diagram S&S dietary counselling

Identification
Screening
Eligibility
Included

Records identified through database searching (n=40) and (EPIC)

Additional records identified through references (n=12) [8,9]

Records after duplicates removed (n=40)

Records screened (n=22)

Studies excluded on qualitative synthesis (n=5)

Studies included in qualitative synthesis (n=5)

Studies excluded on qualitative synthesis (n=17) reasons: not relevant (n=10) and not answer (PICO)

Kopenhagen P

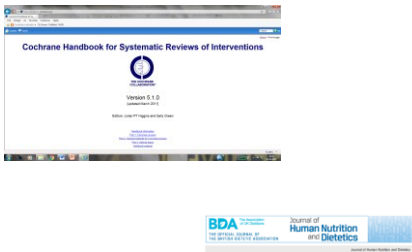
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Figure 4: Meta-analysis of the effect of individualized dietary counselling on energy following discharge from an acute hospital compared to standard care on weight change among older patients at nutritional risk. CI, confidence interval.

Figure 5: Meta-analysis of the effect of individualized dietary counselling on protein following discharge from an acute hospital compared to standard care on energy and protein intake among older patients at nutritional risk. CI, confidence interval.

Beck et al. 2012
Persson et al. 2007
Fidlbium et al. 2011
Neelander et al. 2011



Kellenbachs Professionschule



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SECTION 2: OVERALL ASSESSMENT OF THE STUDY	
2.1	What is your overall assessment of the methodological quality of this review? AMSTAR 9/11
2.2	Are the results of this study directly applicable to the patient group targeted by this guideline?



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Considerations

	Comments
Quality of the evidence	High level quality of SLR and guideline (but not of included primary studies)
Consistency of study results	All are in favour of intervention
Clinical relevance of end-points	Biomedical and patient-centred reported (see table 4 in SOP)
Effect sizes	Small
Risk-benefit ratio	No adverse events reported
Patient preferences	An individual offer may be better to tackle the very different causes to malnutrition in the target group
Application to relevant patient group	Specifically for frail/vulnerable old people suffering from diabetes, CVD or other food-related lifestyle diseases an individualised approach is needed in order to explain the difference between the dietary advices for these diseases and those aimed at tackling undernutrition. Knowledge of the effect of a nutritional intervention is expected to be important among all the health care professionals, which is involved in interdisciplinary work around the old person so that they can support and motivate the intake of food. This may for some health care professions require training in the field.
Application to health care setting	There is a need for dietetic expertise to handle the intervention
Legal considerations	None
Economic considerations	Advice given by dieticians to geriatric patients discharged from hospital may save costs (Pohju et al. 2016)

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Recommendations

Frail, vulnerable older persons with malnutrition or at risk of malnutrition shall be offered individualised dietary counselling in order to improve dietary intake and maintain nutritional status (Grade of recommendation **A**, [BM])

Individualized dietary counselling should be offered by a qualified dietician to these persons or their caregivers, should consist of several (at least 2) individual sessions that may be combined with group sessions, telephone contacts and written advice and should be maintained over a longer period of time (at least 8 weeks) (Grade of recommendation **GPP**.)

Individualized dietary counselling should be combined with other types of interventions if necessary (Grade of recommendation **GPP**).

Kohlenstein Professionshygiene

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Guideline Geriatrics



Timetable

- Sept 2015 Creation of the working group in Lisbon
- April 2016 **BANSS Symposium Biedenkopf (DE)**
Definition of PICO questions
- Summer 2016 Literature search, title/abstract screening
- Sept 2016 **Group meeting in Copenhagen**
Division of work among group members
- April 2017 **BANSS Symposium Biedenkopf (DE)**
Discuss and agree on recommendations
- July 2017 Online voting of 83 recommendations
- Sept 2017 **Consensus Conference in The Hague**
- Winter 2017/18 Writing of commentaries




Older persons with malnutrition or at risk of malnutrition **and/or their caregivers** should be offered individualized nutritional counselling in order to support adequate dietary intake and improve or maintain nutritional status. (BM)
Grade of recommendation B – strong consensus (100 % agreement)

Individualized nutritional counselling should be offered by a qualified dietician to these persons **and/or their caregivers**, should consist of several (at least 2) individual sessions that may be combined with group sessions, telephone contacts and written advice and should be maintained over a longer period of time (**at least 8 weeks - deleted**).
Grade of recommendation GPP – strong consensus (97 % agreement)

Individualized dietary counselling should be combined with other types of interventions if necessary (Grade of recommendation **GPP**). - **deleted**

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Guideline Geriatrics




Statistics

33 PICO questions – 82 recommendations

Evidence: 15 A, 22 B, 2 O, 44 GPP

Endpoints: 35 BM, 6 DM, 3 PC (48 no endpoint)

Consensus: 79 strong, 3 consensus





Dansk Selskab for Klinisk Ernæring inviterer til initiativmøde om
Ernæring til Geriatriske patienter

Mandag den 20. januar 2020 kl. 16.00 – 18.45
Aarhus Universitetshospital, Skejby, indgang 1, auditorium J 116-113*,
Palle Juul-Jensens Boulevard 99, 8200 Aarhus N

Hospitalized older persons with malnutrition or at risk of malnutrition shall be offered ONS, in order to improve dietary intake and body weight, and to lower the risk of complications and readmission. (BM)
Grade of recommendation A – strong consensus (100 % agreement)

Hospitalized older persons with malnutrition or at risk of malnutrition shall be offered ONS, in order to improve dietary intake and body weight, and to lower the risk of complications and readmission. (BM)
Grade of recommendation A – strong consensus (100 % agreement)

BMJ Open 2019;9:e024111. doi:10.1136/bmjopen-2019-024111
Protein supplementation combined with low-intensity resistance training in geriatric medical patients during and after hospitalisation: a randomised, double-blind, multicentre trial
Josephine Gade^{1,2,3}, Anne Marie Beck^{1,2}, Søren E. Andersen¹, Bjarth Christensen¹, Peter Nordhøj¹, Søren W. Helmer¹, Anders Vildgaard¹ and Jens Jørgen

Average protein and energy intake during the study periods, by treatment group^a

	During the hospital admission ¹				During the 12 weeks after discharge ²			
	Protein		Placebo		Protein		Placebo	
	Median	Q1, Q3	Median	Q1, Q3	Median	Q1, Q3	Median	Q1, Q3
From the diet ²	(n=70)		(n=74)		(n=70)		(n=72)	
•Protein (g/d)	42	36, 52	42	30, 52	54	43, 64	56	44, 68
•Protein (g/kg ^{0.75} /d)	0.6	0.5, 0.8	0.6	0.5, 0.8	0.8	0.7, 1.0	0.8	0.6, 1.0
•Energy (MJ/d)	5.3	4.4, 6.2	5.1	3.7, 6.0	5.4	4.8, 6.8	5.8	4.9, 7.2

Ernæringscreening

SCREENINGSKEMA TIL BESTEMMELSE AF ERNÆRINGSMESSIG RISIKO	
BESVARET UDENFOR	
Ernæringsstatus	Overvægtighed af typen (overvægtighed) - eget besvar
normal score +0 normal ernæringsstatus	normal score +0 normal barm
let score +1	let score +1
moderat score +2	moderat score +2
svær score +3	svær score +3
score -1	score -1
score -2	score -2
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XP

En ommer!



Københavns Professionshøjskole

XP

After discharge from the hospital, older persons with malnutrition or at risk of malnutrition shall be offered ONS in order to improve dietary intake and body weight, and to lower the risk of functional decline. (BM) Grade of recommendation A – strong consensus (100 % agreement)

After discharge from the hospital, older persons with malnutrition or at risk of malnutrition shall be offered ONS in order to improve dietary intake and body weight, and to lower the risk of functional decline. (BM) Grade of recommendation A – strong consensus (100 % agreement)

Adskriv patientens navn

Adskriv patientens navn eller
Lægepatient

Navn, adresse
Cpr.nr.

Adskriv patientens adresse

sp: "sundhedsanmelders navn" - type 2
dn: _____ nr: dn/gg
sp: emailadresse
sp: "navn" (en. Jernstjerne s.a.)
sp: evt. lge. af patient
Udleveres efter bøn
#

Older persons with malnutrition or at risk of malnutrition and/or their caregivers should be offered individualized nutritional counselling in order to support adequate dietary intake and improve or maintain nutritional status. (BM)
Grade of recommendation B – strong consensus (100 % agreement)



Original Article

CLINICAL
REHABILITATION

Review

CLINICAL
REHABILITATION

Does adding a dietician to the liaison team after discharge of geriatric patients improve nutritional outcome: A randomised controlled trial

A Beck¹, UT Andersen¹, E Leede¹, LL Jensen¹, K Martinsen¹, H Qveng¹, RØ Rank¹, A Vedhøvang¹ and F Rasmussen¹

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Open Peer Review on
www.nordicmedicalresearch.com

DOI: 10.1111/j.1365-3113.2019.00611.x

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A nutritional intervention program improves the nutritional status of geriatric patients at nutritional risk—a randomized controlled trial

Rikke Terp¹, Kim Otto Jacobsen¹, Pia Kannegaard¹, Anne-Mette Larsen¹, Ole Rink Madsen¹ and Eline Nielsen¹

Open Peer Review on
www.nordicmedicalresearch.com

DOI: 10.1111/j.1365-3113.2019.00611.x

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Original article

Effectiveness of nutritional interventions in older adults at risk of malnutrition across different health care settings: Pooled analyses of individual participant data from nine randomized controlled trials


Ilse Reinders ^{a,b,*}, Dorothee Volkert ^c, Lisette C.P.G.M. de Groot ^d, Anne Marie Beck ^e, Ilana Feldblum ^f, Inken Jobse ^g, Floor Neelemaat ^h, Marian A.E. de van der Schueren ^{b,g}, Danit R. Shahar ⁱ, Ellen T.H.C. Smeets ^j, Michael Tieland ^k, Jos W.R. Twisk ^l, Hanneke A.H. Wijnhoven ^g, Marjolien Visser ^a

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Original article

Effectiveness of nutritional interventions in older adults at risk of malnutrition across different health care settings: Pooled analyses of individual participant data from nine randomized controlled trials

Ilse Reinders ^{a,b,*}, Dorothee Volkert ^c, Lisette C.P.G.M. de Groot ^d, Anne Marie Beck ^e, Ilana Feldblum ^f, Inken Jobse ^g, Floor Neelemaat ^h, Marian A.E. de van der Schueren ^{b,g}, Danit R. Shahar ⁱ, Ellen T.H.C. Smeets ^j, Michael Tieland ^k, Jos W.R. Twisk ^l, Hanneke A.H. Wijnhoven ^g, Marjolien Visser ^a

Conclusions: Based on pooled data of older adults (at risk of malnutrition), nutritional interventions have a positive effect on energy intake and body weight. Dietary counseling combined with ONS is the most effective intervention.





THE LANCET

Refrigerator content and hospital admission in old people

Nadir Boumendjel, François Hermann, Véronique Girod, Cornel Sieber, Charles-Henri Rapin

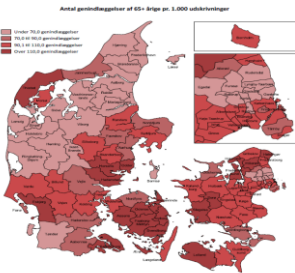
I Danmark udskrives ca. 50 % af de geriatriske patienter med en gen-optræningsplan (GOP) pga. tab af fysisk funktionsevne – kun ca. 10 % af disse har en op-ernæringsplan (OP)



XP

During periods of exercise interventions, adequate amounts of energy and protein should be provided to older persons with malnutrition or at risk of malnutrition in order to maintain body weight and to maintain or improve muscle mass. (BM)
Grade of recommendation B – strong consensus (100 % agreement)





Københavns Professionshøjskole

XP

Simple signs and tests commonly used to assess low-intake dehydration such as skin turgor, mouth dryness, weight change, urine color or specific gravity, shall **NOT** be used to assess hydration status in older adults. (DM)
Grade of recommendation A – consensus (83 % agreement)

Bioelectrical impedance shall **NOT** be used to assess hydration status in older adults as it has not been shown to be usefully diagnostic. (DM)
Grade of recommendation A – strong consensus (100 % agreement)



Forfatter(e)

Afdeling

Medforfatter(e) og afdeling

Tha Munk*, Torbjørn Østergaard*, Camilla Balle Beck*, Anne Wilkens Knudsen*

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Abstracts

Forskningens Dag 2019

Herlev og Gentofte Hospital

Abstract

Background
Older adults are at risk of hyperosmolar dehydration (HD). HD increases the risk of morbidity and mortality. The golden reference is expensive and not a routine assessment why current method is based on a subjective assessment. A simple objective diagnostic tool to detect HD is needed for older medical patients and therefore, we aimed to validate the agreement of measured s-osmolality (Osm/kg) (golden reference) versus a calculated s-osmolality (mOsm/L).

Method
Patients aged ≥65 were included from the emergency-medical department at Herlev Hospital. Exclusion criteria: eGFR <30 mL/min, severe heart failure, decompensated cirrhosis, influenced by alcohol, initiated rehydration. We obtained data for measured s-osmolality as well as calculated osmolality, using the by ESPEN recommended equation $[1.86(\text{Na}^+ + \text{K}^+) + 1.15 \cdot \text{glucose} + \text{urea} + 14]$. Dehydration was determined as Osm/kg >295.

Results
A total of 90 patients (53% female), mean age 79 (±8.4) were included. HD was evident in 28% (n=25). There was a significant correlation between calculated mOsm and measured Osm ($r=0.7513$, $p<0.001$). Bland-Altman-analyses showed that the calculated mOsm overestimated with a mean of 3.19 (±5.5). Further, a sensitivity of 88% (95% CL: 75-100), a specificity of 80% (95% CL: 70-90), PPV of 63% (95% CL: 47-79), and NPV of 95% (95% CL: 89-100) was observed. Notably, only 20% (n=5) of patients diagnosed with dehydration were dehydrated according to the measured s-osmolality.

Conclusion
The equation recommended by ESPEN to calculate osmolality was found to be an accurate objective diagnostic tool to assess hyperosmolar dehydration in older hospitalized medical patients. The method is markedly superior to the current clinical practice.




RAMMEPLAN

Ernæringsterapi til borgere med geriatriske problemstillinger

November 2019

FoKd

National guidelines/Apps based on ESPEN guidelines



Procedure

1. Application by a local PEN society or PEN members („local group“)
2. Nomination of national expert(s) by the national society(s)
3. Translation of a shortened ESPEN version according to the rules
4. Evaluation and Approval by the ESPEN guideline office/officers
5. Usage for national publication and/or App

Proposals:
guidelines-office@espen.org

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