ESPEN GUIDELINES

on clinical nutrition and hydration in geriatrics

SUMMARY

Malnutrition and dehydration are widespread in older people, and obesity is an increasing problem.

A range of effective interventions is available to support adequate nutrition and hydration in older persons in order to maintain or improve nutritional status and improve clinical course and quality of life. These interventions should be implemented in clinical practice and routinely used.

AIM

The ESPEN guidelines give evidence-based recommendations for clinical nutrition and hydration in older persons to prevent and/or treat malnutrition and dehydration. Further, to address whether weight reducing interventions are appropriate for overweight or obese older persons.

Reference: Volkert D, et al., ESPEN guideline on clinical nutrition and hydration in geriatrics, Clinical Nutrition (2018) 1-38, https://doi.org/10.1016/j.clnu.2018.05.024.

Evidence level and grades of recommendation

Levels of evidence

1++ High quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias.

1+ Well-conducted meta-analyses, systematic reviews, or RCTs with a low risk of bias.

1 Meta-analyses, systematic reviews, or RCTs with a high risk of bias.

2++ High quality systematic reviews of case control or cohort or studies. High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal.

2+ Well-conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal.

2- Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal.

3 Non-analytic studies, e.g. case reports, case series.

4 Expert opinion.

Grades of recommendation

A At least one meta-analysis, systematic review, or RCT rated as 1++, and directly applicable to the target population; or a body of evidence consisting principally of studies rated as 1+, directly applicable to the target population, and demonstrating overall consistency of results.

B A body of evidence including studies rated as 2++, directly applicable to the target population; or A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; or and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 1++ or 1+.

0 Evidence level 3 or 4; or Extrapolated evidence from studies rated as 2++ or 2+.

GPP Good practice points/expert consensus: Recommended best practice based on the clinical experience of the guideline development group.

Who should benefit from medical nutrition?

Nutritional screening

All older persons, independent of specific diagnosis and including also overweight and obese persons, shall routinely be screened for malnutrition with a validated tool in order to identify those with (risk of) malnutrition.

Grade of recommendation GPP – strong consensus (100% agreement)

A positive malnutrition screening shall be followed by systematic assessment, individualized intervention, monitoring and corresponding adjustment of interventions.

Grade of recommendation GPP – strong consensus (100% agreement)

Nutritional education

Health care professionals, as well as informal caregivers, should be offered nutritional education to ensure awareness of and basic knowledge on nutritional problems and thus promote adequate dietary intake of older persons with malnutrition or at risk of malnutrition.

Grade of recommendation B – strong consensus (95% agreement)

How much energy and nutrients should be delivered?

How much energy should be offered/delivered?

Guiding value for energy intake in older persons is 30 kcal per kg body weight and day; this value should be individually adjusted with regard to nutritional status, physical activity level, disease status and tolerance.

Grade of recommendation B – strong consensus (97% agreement)

How much protein should be offered/delivered?

Protein intake in older persons should be at least 1 g protein per kg body weight and day. The amount should be individually adjusted with regard to nutritional status, physical activity level, disease status and tolerance.

Grade of recommendation GPP – strong consensus (100% agreement)

How much fiber should be delivered?

Daily amounts of 25 g are regarded as guiding value also for older patients. Enterally nourished patients should not be deprived of the well-known beneficial metabolic effects of dietary fiber. For enteral nutrition (EN), fiber-containing products should be used.

Grade of recommendation B – strong consensus (91% agreement)

How much should older persons drink each day?

Older women should be offered **at least 1.6 L of drinks each da**y, while older men should be offered **at least 2.0 L of drinks each day** unless there is a clinical condition that requires different approach.

Grade of recommendation B – strong consensus (96% agreement)

Oral Nutritional Supplements

Should older persons with malnutrition or at risk of malnutrition be offered oral nutritional supplements?

Older persons with malnutrition or at risk of malnutrition with chronic conditions shall be offered ONS when dietary counseling and food fortification are not sufficient to increase dietary intake
and reach nutritional goals.

Grade of recommendation GPP – strong consensus (100% agreement)

Hospitalized older persons with malnutrition or at risk of mal- nutrition shall be offered ONS, in order to improve dietary intake and body weight, and **to lower the risk of complications and readmission.**

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.**

Grade of recommendation A – strong consensus (100% agreement)

Oral nutritional supplements offered to an older person with malnutrition or at risk of malnutrition, shall **provide at least 400 kcal/day including 30 g or more of protein/day.**

Grade of recommendation A – strong consensus (97% agreement)

When offered to an older person with malnutrition or at risk of malnutrition, **ONS shall be continued for at least one month**. Efficacy and expected benefit of **ONS shall be assessed once a month.**

Grade of recommendation GPP – strong consensus (100% agreement)

When offered to an older person with malnutrition or at risk of malnutrition, compliance in ONS consumption shall be regularly assessed. Type, flavor, texture and time of consumption shall be adapted to the patient's taste and eating capacities.

Grade of recommendation GPP – strong consensus (100% agreement)

Enteral nutrition

Should enteral tube feeding be offered to older persons with malnutrition or at risk of malnutrition?

Older persons with reasonable prognosis shall be offered enteral nutrition (EN) if oral intake is expected to be impossible for more than three days or expected to be below half of energy requirements for more than one week, despite interventions to ensure adequate oral intake, in order to meet nutritional requirements and maintain or improve nutritional status.

Grade of recommendation GPP – strong consensus (100% agreement)

The expected benefits and potential risks of EN shall be evaluated individually and reassessed regularly and when the clinical condition changes.

Grade of recommendation GPP – strong consensus (100% agreement)

Older persons with reasonable prognosis (expected benefit) shall be offered Parenteral nutrition (PN) if oral and enteral intake are expected to be impossible for more than three days or expected to be below half of energy requirements for more than one week, in order to meet nutritional requirements and maintain or improve nutritional status.

Grade of recommendation GPP – strong consensus (100% agreement)

Dysphagia and/or chewing problems

Should older persons with malnutrition or at risk of malnutrition be offered texture-modified food?

Older persons with malnutrition or at risk of malnutrition and signs of oropharyngeal dysphagia and/or chewing problems shall be offered texture-modified, enriched foods as a compensatory strategy to support adequate dietary intake.

Grade of recommendation GPP – strong consensus (100% agreement)

Chewing and swallowing problems limit the ability to eat food of normal texture and thus increase the risk of malnutrition. Both problems are widespread in older persons.

Recommendations for older persons with specific diseases

Should older patients after hip fracture and orthopedic surgery be offered nutritional support?

Older patients with hip fracture shall be offered oral nutritional supplements postoperatively in order to improve dietary intake and reduce the risk of complications.

Grade of recommendation A – strong consensus (100% agreement)

Nutritional interventions in geriatric patients after hip fracture and orthopedic surgery shall be part of an individually tailored, multidimensional and multidisciplinary team intervention in order to ensure adequate dietary intake, improve clinical outcomes and maintain quality of life.

Grade of recommendation A – strong consensus (100% agreement)

Should older patients with or at risk for pressure ulcers be offered nutritional support?

Nutritional interventions should be offered to older patients at risk of pressure ulcers in order to prevent the development of pressure ulcers.

Grade of recommendation B – strong consensus (100% agreement)

Nutritional interventions should be offered to malnourished older patients with pressure ulcers to improve healing.

Grade of recommendation B – strong consensus (100% agreement)

Should older patients with diabetes mellitus be offered specific nutritional interventions or advised to follow a specific diet?

Older patients with diabetes mellitus shall routinely be screened for malnutrition with a validated tool in order to identify those with (risk of) malnutrition.

Grade of recommendation GPP – strong consensus (95% agreement)

In older patients with diabetes mellitus restrictive diets shall be avoided in order to prevent malnutrition and accompanying functional decline.

Grade of recommendation GPP – strong consensus (100% agreement)

Malnutrition and risk of malnutrition in older patients with diabetes mellitus shall be managed according to the recommendations for malnourished older persons without diabetes mellitus.

Grade of recommendation GPP – strong consensus (100% agreement)

Designed to meet your patients' nutritional needs

RESOURCE® 2.0+fibre

Energy dense nutritionally complete drink with protein and soluble fibre

For the dietary management of malnutrition and/or those at risk for malnutrition.

Each 200 ml bottles delivers:

- 400 kcal
- 18 g protein
- 5 g soluble fibres (FOS, GOS)
- 6 flavours

Suitable for use as a sole source of nutrition. 1–3 servings per day as a supplement or as recommended by a healthcare professional if used as a sole source of nutrition.

Food for special medical purposes. Use under medical supervision.

Information for health care professionals

NHS/RS Espen Guidelines/1811 SE

Nestlé Health Science,
Box 6026, 102 31 Stockholm
Tel: 08-561 525 00
www.nestlehealthscience.se

Nestlé HealthScience