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Research Centre
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EAPC
Research Network



ESPEN cachexia guidelines

Jann Arends
I. Dep Medicine, Tumor Biology, University of Freiburg



aim of the guideline

Translate current evidence and **expert opinion** into **recommendations for the multi-disciplinary team** responsible for prevention, identification and treatment of reversible elements of malnutrition in cancer patients

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time frame and methodology

2012 - 2015
20 experts, 2 ESPEN leaders, 2 methodologists
evidence search and GRADE technique*
recommendations
consensus process
commentaries
→ online commentaries on ESPEN website

*ESPEN disease-specific guideline framework; Clin Nutr 2011

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baseline message for oncologists

Nutrition and metabolism are essential components of best supportive care.

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guideline topic

Malnutrition:	to avoid, revert, decrease, slow MN
Process:	detect MN and risk assess treatment needs treat appropriately adapt treatment as required

→ How to move awareness to oncology wards?

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questions for implementation

- 1: what needs to be done on the ward?
- 2: how to change oncology policy?

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tasks on the ward

- 1: screen for MN → use validated tools → weight change, food intake, severity of disease, age → detect patients at risk
- 2: assess all patients at high risk → nutrition expert → energy intake, nutrition impact symptoms, performance index, systemic inflammation → define treatable targets
- 3: design and implement treatment → nutrition expert
- 4: follow up and adapt treatment → nutrition expert

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changing policy

Endorsements/ similar/ adapted guidelines

ESMO	European Society of Medical Oncology
MASCC	Multinatl Assoc Support Care in Cancer
EAPC	European Association for Palliative Care

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visions, goals

- Every cancer patient is screened regularly
- All patients at risk are assessed and treated
- All treated patients are followed-up
- New high-quality trials are performed to ..
 - .. prove effects of proposed treatments
 - .. evaluate new multimodal concepts

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Integrating nutrition into oncology

Nutrition and metabolism are essential components of best supportive care.

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Guideline: Problems

Evidence of high quality is very limited

Recommendations triggered solely by the level of evidence are not helpful for clinical practice

ESPEN Cancer-GL 2006&2009
AGREE rating of applicability: 0-7/100
[van den Berg T et al. JPEN 2011]

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Evidence → Recommendations: GRADE

Level of evidence:	initially	after adjustment
RCT:	high	very low .. high
Observ. Study:	low	very low .. high
Expert opinion:	very low	very low

adjusting for: - study quality, inconsistencies, indirectness, imprecision, bias
+ magnitude of effect, dose-response relationship

Strength of recommendation

STRONG: desirable effects clearly outweigh harms

WEAK: trade-offs are uncertain

ESPEN disease-specific guideline framework. Preiser JC & Schneider SM, Clin Nutr 2011
Grading quality of evidence and strength of recommendations. Oxman AD et al., Br Med J 2004
GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. Guyatt GH et al., Br Med J 2008

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outline

- 0 Methods**
Goals, target population, professional groups involved
patient views, target users, conflict of interest and funding
design, searches, recommendations, consensus
professional review, updating of GL
facilitators/barriers, costs, monitoring/auditing
- A Introduction**
Major alterations in cancer patients
effects on clinical outcome
aims of nutritional interventions
- B General concepts – relevant to all cancer patients**
- C Interventions relevant to specific patient categories**

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outline

- 0 Methods**
- A Introduction**
- B General concepts – relevant to all cancer patients**
 - B1 Screening and assessment
 - B2 Energy and substrate requirements
 - B3 Nutritional interventions
 - B4 Physical exercise
 - B5 Pharmacological agents
- C Interventions relevant to specific patient categories**

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outline

- 0 Methods**
- A Introduction**
- B General concepts – relevant to all cancer patients**
- C Interventions relevant to specific patient categories**
 - C1 Surgery
 - C2 Radiotherapy
 - C3 Curative medical anticancer treatment
 - C4 High-dose chemotherapy and HSCT
 - C5 Cancer survivors
 - C6 Incurable cancer patients

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Section B1, Statement 1

B1 - 1	Screening
Strength of recommendation STRONG	<i>To detect nutritional disturbances at an early stage, we recommend to regularly evaluate nutritional intake, weight change and BMI, beginning with cancer diagnosis and repeated depending on the stability of the clinical situation.</i>
Level of evidence	Very low
Questions for research	relationship of screening to assessment interventions and clinical outcomes

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Section B1, Statement 2

B1 - 2	Assessment
Strength of recommendation STRONG	<i>In patients with abnormal screening, we recommend objective and quantitative assessment of nutritional intake, nutrition impact symptoms, physical performance and the degree of systemic inflammation.</i>
Level of evidence	Very low
Questions for research	Linking outcomes from current and future intervention trials with appropriate screening and assessment tools

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Section B2, Statement 1

B2 - 1	Energy requirements
Strength of recommendation STRONG	<i>We recommend, for practical purposes, that total energy expenditure of cancer patients, if not measured individually, be assumed to be rather similar to healthy subjects and ranging between 25 and 30 kcal/kg/day.</i>
Level of evidence	Low
Questions for research	improve prediction of energy requirements in the individual patient

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Section B2, Statement 2

B2 - 2	Protein intake
Strength of recommendation WEAK	<i>We suggest that protein intake should be above 1 g/kg/day and if possible up to 1.5 g/kg/day</i>
Level of evidence	Moderate
Questions for research	effect on outcome of increased supply and composition of protein/amino acids

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Section B4, Statement 1

B4 - 1	Exercise in combination with nutrition
Strength of recommendation STRONG	<i>We recommend maintenance or increased level of physical activity in cancer patients during and after treatment to support muscle mass, physical function and metabolic pattern.</i>
Level of evidence	High
Questions for research	effect of physical activity on outcome

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Section B5, Statement 6

B5 - 6	Non steroidal antiinflammatory drugs
Strength of recommendation NONE	<i>There is not enough data to recommend non-steroidal antiinflammatory drugs to improve body weight in weight losing cancer patients.</i>
Level of evidence	Low
Questions for research	Effect of NSAIDs on body composition and clinical outcome in cancer patients with systemic inflammation

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Section B5, Statement 7

B5 - 7	N-3 fatty acids to improve appetite and body weight
Strength of recommendation WEAK	<i>In cancer patients undergoing chemotherapy at risk of weight loss, we suggest to use the supplementation with long-chain n-3 fatty acids or fish oil to stabilize/improve appetite, food intake, lean body mass and body weight.</i>
Level of evidence	Moderate
Questions for research	Effect of long-chain N-3 fatty acids on body composition and clinical outcome in cancer patients undergoing antineoplastic treatment

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Section C2, Statement 1

C2 - 1	RT: Ensuring adequate nutritional intake
Strength of recommendation STRONG	<i>We recommend that during RT to the head-neck, upper and low GI tract and thorax, an adequate nutritional intake should be ensured primarily by individualized nutritional counseling and/or with use of ONS, in order to avoid nutritional deterioration, maintain intake and avoid RT interruptions</i>
Level of evidence	Moderate
Questions for research	

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Section C6, Statement 1

C6 - 1	Incurable patients: screening and assessment
Strength of recommendation STRONG	<i>We recommend to routinely screen all advanced, incurable cancer patients - whether receiving or not receiving anti-cancer treatment - for inadequate nutritional intake, weight loss and low body mass index, and if found at risk, to assess these patients further.</i>
Level of evidence	Low
Questions for research	Effects of malnutrition screening programs on quality of life in incurable cancer patients

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Section C6, Statement 2

C6 – 2	Incurable patients: ensuring nutritional intake
Strength of recommendation STRONG	<i>Nutritional interventions should be used in patients with advanced incurable cancer if their expected benefit outweighs the potential harm and the patient wants it.</i>
Level of evidence	Low
Questions for research	Effects of nutritional care on quality of life in incurable cancer patients

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Section C6, Statement 3

C6 – 3	Very advanced terminal phase
Strength of recommendation STRONG	<i>In patients who are imminently dying treatment should be based on comfort. Artificial hydration and nutrition are unlikely to provide any benefit for most patients.</i>
Level of evidence	Low
Questions for research	

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