



## Complete Summary

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### GUIDELINE TITLE

Nutrition assessment - adults.

### BIBLIOGRAPHIC SOURCE(S)

Nutrition assessment - adults. JPEN J Parenter Enteral Nutr 2002 Jan-Feb; 26(1 Suppl):9SA-12SA. [26 references]

## COMPLETE SUMMARY CONTENT

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## SCOPE

### DISEASE/CONDITION(S)

Malnutrition

### GUIDELINE CATEGORY

Evaluation  
Prevention  
Screening

### CLINICAL SPECIALTY

Family Practice  
Gastroenterology  
Geriatrics  
Internal Medicine  
Nutrition

### INTENDED USERS

Advanced Practice Nurses  
Dietitians  
Hospitals  
Nurses  
Physician Assistants  
Physicians

#### GUIDELINE OBJECTIVE(S)

- To revise the 1993 American Society for Parenteral and Enteral Nutrition Clinical Guidelines so that:
  - The Guidelines are factually up-to-date to reflect current, evidence-based, best approach to the practice of nutrition support
  - The Guidelines support the clinical and professional activities of nutrition support practitioners by articulating evidence-based recommendations upon which to base personal and institutional practices and resource allocation
  - The Guidelines serve as tools to help guide policy makers, health care organizations, insurers, and nutrition support professionals to improve the systems and regulations under which specialized nutrition support is administered
- To assist clinical practitioners who provide specialized nutrition support to patients in all care settings

#### TARGET POPULATION

Adults in inpatient and outpatient (ambulatory, home, and specialized care) settings

#### INTERVENTIONS AND PRACTICES CONSIDERED

##### Nutrition Screening

1. Height
2. Weight
3. Weight change
4. Primary diagnosis
5. Comorbidities

##### Nutrition Assessment

1. Patient history and physical examination
  - Body mass index (BMI)
  - Weight: ideal, usual, current, recent weight loss
  - Change in eating habits
  - Change in gastrointestinal function
  - Nature and severity of underlying disease
  - Unusual personal dietary habits or restrictions
  - General patient appearance, noting presence of edema, ascites, cachexia, obesity, skin change, dry mucous membranes, petechiae or ecchymoses, poorly healing wounds, glossitis, stomatitis, cheilosis

- Patient musculoskeletal system, noting asymmetry; and examining temporalis muscles, deltoids, suprascapular, and infrascapular muscles, bulk and tone of biceps, triceps, quadriceps, and interosseus muscles of the hand
  - Loss of subcutaneous fat
  - Muscle wasting
  - Noticeable changes in hair-bearing areas, oral mucosa, gravity-dependent areas, peripheral sensation in hands and feet
2. Laboratory data, such as serum proteins: albumin, transferrin, prealbumin
  3. Indirect calorimetry and body composition analysis
  4. Multifactorial prognostic indices
    - Prognostic Nutrition Index (PNI)
    - Prognostic Inflammatory and Nutritional Index (PINI)
    - Nutritional Risk Index (NRI)
  5. Subjective global assessment (SGA)
  6. Nutrition care plan
    - Goals, short and long term
    - Route of administration of nutrition support
    - Monitoring

#### MAJOR OUTCOMES CONSIDERED

Not stated

## METHODOLOGY

#### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

#### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

#### NUMBER OF SOURCE DOCUMENTS

Not stated

#### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

#### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

A modified version of the method used by the Agency for Healthcare Research and Quality (AHRQ), US Department of Health and Human Services was used:

- A. There is good research-based evidence to support the guideline (prospective, randomized trials).

- B. There is fair research-based evidence to support the guideline (well-designed studies without randomization).
- C. The guideline is based on expert opinion and editorial consensus.

#### METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

#### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

#### DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Experts selected for their detailed knowledge and experience in a chosen niche reviewed the primary literature, synthesized and summarized it, and formulated the guideline statements.

In situations where evidence-based recommendations could not be made because of a lack of relevant clinical studies, recommendations are classified as being based on class C data (see the "Rating Scheme for the Strength of Evidence" field) and reflect an attempt to make the best recommendations possible within the context of the available data and expert clinical experience.

#### Issues Considered During Recommendation Formulation

- A thread running throughout many of the disease-specific guidelines is the rationale for choosing enteral over parenteral specialized nutrition support (SNS) or alternatively parenteral over enteral when a decision to use SNS has been made.
- Another fundamental issue that influenced many of the discussions and recommendations is the relationship between nutrition assessment, nutrition status, malnutrition, and severity of disease.

Refer to the companion document: Guidelines for the use of parenteral and enteral nutrition in adult and pediatric patients. Section I: Introduction. JPEN J Parenter Enteral Nutr 2002 Jan-Feb; 26(1 Suppl): 1SA-6SA.

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

#### COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

## METHOD OF GUIDELINE VALIDATION

External Peer Review  
Internal Peer Review

## DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Completed drafts were reviewed by the section editors (the members of the Clinical Guidelines Task Force [CGTF]), edited and/or rewritten, and then reviewed twice by the members of the CGTF as a group. The entire document was then reedited by the CGTF Chair. This four-times–edited draft was submitted to the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Board of Directors and more than 180 experts in the field of nutrition support including experts and organizations outside of A.S.P.E.N.) for content, format, and style review. These reviewers were also specifically asked to check each guideline statement for appropriateness, accuracy, and strength of evidence. This review phase stimulated a final cycle of editing by the CGTF and the CGTF Chair. The final document was then approved by the A.S.P.E.N. Board of Directors and submitted to the Journal of Parenteral and Enteral Nutrition for publication.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

The strength of the evidence supporting each guideline statement is coded A, B, or C. Definitions of these classifications is provided at the end of the "Major Recommendations" field.

#### Nutrition Screening

1. A nutrition screening incorporating objective data such as height, weight, weight change, primary diagnosis, and presence of comorbidities should be a component of the initial evaluation of all patients in ambulatory, hospital, home, or alternate site care settings. (C)
2. The health care organization should determine who will perform the screen and the elements to be included in the screen. (C)
3. A procedure for periodic nutrition rescreening should be implemented. (C)

#### Nutrition Assessment

1. A formal nutrition assessment should be carried out in any patient, independent of the care setting, who is identified by a nutrition screen as nutritionally at risk. (C)
2. In the absence of an outcomes validated approach to nutrition assessment, a combination of clinical (history and physical exam) and biochemical parameters should be used to assess the presence of malnutrition. (C)
3. A written summary should be created and made available to the patient's care providers which includes the following: The objective and subjective data

collected for the nutrition assessment; the explicit nutrition risk stratification; and the specific recommendations to be incorporated into the nutrition care plan (protein, calorie, and micronutrient requirements, route of administration, and treatment goals and monitoring parameters). (C)

Definitions:

Rating Scheme

- A. There is good research-based evidence to support the guideline (prospective, randomized trials).
- B. There is fair research-based evidence to support the guideline (well-designed studies without randomization).
- C. The guideline is based on expert opinion and editorial consensus.

CLINICAL ALGORITHM(S)

Clinical algorithms of the Nutrition Care Process and Route of Administration of Specialized Nutrition Support are provided in the companion document: Nutrition care process. Section II: Nutrition Care Process. JPEN J Parenter Enteral Nutr 2002 Jan-Feb;26(1 Suppl): 7SA-8SA.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting the recommendations is not explicitly stated.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Nutrition Screening

- Effective nutrition screening can be used to efficiently identify those patients that may benefit from a more extensive formal nutrition assessment. It may be particularly important to aggressively screen elderly patients, because the elderly may experience eating or swallowing difficulties, adverse drug-nutrient interactions, alcohol abuse, depression, reduced appetite, functional disabilities, impaired taste and smell, and/or effects of polypharmacy.

Nutrition Assessment

- The goals of a formal nutrition assessment are to identify patients who are malnourished or who are at risk for malnutrition; to collect the information necessary to create a nutrition care plan; and to monitor the adequacy of nutrition therapy.
- Because of the relationship between malnutrition and severity of illness and the fact that tools of nutrition assessment reflect both nutrition status and severity of underlying disease, an assessed state of malnutrition or the

presence of specific indicators of malnutrition in fact refers to the consequences of a combination of both an underlying illness and associated nutritional changes.

- The Prognostic Nutrition Index (PNI), Prognostic Inflammatory and Nutritional Index (PINI), and Nutritional Risk Index (NRI) all reliably predict morbidity in perioperative patients.
- The only clinical method that has been validated as reproducible and that evaluates nutrition status (and severity of illness) by encompassing patient history and physical parameters is the subjective global assessment (SGA). The SGA has been found to be a good predictor of complications in patients undergoing gastrointestinal surgery, liver transplantation, and dialysis.

#### POTENTIAL HARMS

The use of the subjective global assessment is more specific than sensitive and may miss some patients with mild degrees of malnutrition.

### QUALIFYING STATEMENTS

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These American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Clinical Guidelines are general statements. They are based upon general conclusion of health professionals who, in developing such guidelines, have balanced potential benefits to be derived from a particular mode of medical therapy against certain risks inherent with such therapy. However, the professional judgment of the attending health professional is the primary component of quality medical care. The underlying judgment regarding the propriety of any specific procedure must be made by the attending health professional in light of all of the circumstances presented by the individual patient and the needs and resources particular to the locality. These guidelines are not a substitute for the exercise of such judgment by the health professional, but rather are a tool to be used by the health professional in the exercise of such judgment. These guidelines are voluntary and should not be deemed inclusive of all proper methods of care, or exclusive of methods of care reasonably directed toward obtaining the same results.

### IMPLEMENTATION OF THE GUIDELINE

#### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

### INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

#### IOM CARE NEED

Staying Healthy

#### IOM DOMAIN

Effectiveness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Nutrition assessment - adults. JPEN J Parenter Enteral Nutr 2002 Jan-Feb; 26(1 Suppl): 9SA-12SA. [26 references]

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2002 Jan-Feb

### GUIDELINE DEVELOPER(S)

American Society for Parenteral and Enteral Nutrition - Professional Association

### SOURCE(S) OF FUNDING

Not stated

### GUIDELINE COMMITTEE

Clinical Guidelines Task Force

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

### GUIDELINE STATUS

This is the current release of the guideline.

### GUIDELINE AVAILABILITY

Electronic copies: Not available at this time.

Print copies: Available from the American Society for Parenteral and Enteral Nutrition (ASPEN), 8630 Fenton St, Suite 412, Silver Spring, MD 20910-3805; (800) 741-8972. For details, please see the [ASPEN Web site](#).

## AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Guidelines for the use of parenteral and enteral nutrition in adult and pediatric patients. JPEN J Parenter Enteral Nutr 2002 Jan-Feb;26(1 Suppl): 1SA-6SA.
- Nutrition care process. JPEN J Parenter Enteral Nutr 2002 Jan-Feb;26(1 Suppl): 7SA-8SA.

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## PATIENT RESOURCES

None available

## NGC STATUS

This summary was completed by ECRI on May 5, 2004.

## COPYRIGHT STATEMENT

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