

SCOPE

1 Guideline title

Nutrition support in adults: oral supplements, enteral and parenteral feeding.

1.1 Short title

Nutrition support

2 Background

- a) The National Institute for Clinical Excellence ('NICE' or 'the Institute') has commissioned the National Collaborating Centre for Acute Care to develop a clinical guideline on nutrition support in adults: oral supplements, enteral and parenteral feeding, for use in the NHS in England and Wales. This follows referral of the topic by the Department of Health and Welsh Assembly Government (see Appendix). The guideline will provide recommendations for good practice that are based on the best available evidence of clinical and cost effectiveness.
- b) The Institute's clinical guidelines will support the implementation of National Service Frameworks (NSFs) in those aspects of care where a Framework has been published. The statements in each NSF reflect the evidence that was used at the time the Framework was prepared. The clinical guidelines and technology appraisals published by the Institute after an NSF has been issued will have the effect of updating the Framework.

3 Clinical need for the guideline

- a) People who are ill in hospital or the community may have lack of appetite and/or difficulties accessing or absorbing sufficient food and fluid to maintain an adequate nutritional status. The consequence is malnutrition. There is no widely accepted definition for malnutrition,

because of varying assessment criteria, but the approximate prevalence is estimated at 10–40% of patients in the community (at home and in care homes) and in hospital. Significant deterioration of nutritional status during hospitalisation is common. Investigators identified that 60–100% of patients assessed at admission and then at discharge showed significant deterioration in nutritional status. The reported consequences of malnutrition include delayed wound healing, impaired respiratory and immune function, muscle weakness, depression, increased frequency and duration of hospitalisation, and premature death.

- b) The causes of malnutrition are multifactorial: poor appetite, physical disabilities, including swallowing impairments; increased metabolic demands for nutrients; and nutrient losses due to vomiting and diarrhoea, are some of the reasons. Inadequate nutritional knowledge among nursing and medical staff, partly because of the low emphasis given to nutrition education in undergraduate training, have led to a lack of awareness and recognition of malnutrition. This has diminished the importance of providing adequate and appropriate food and fluid to patients. Consequently, low referral rates to dietetic and specialist staff are not uncommon. One study reported that more than 80% of patients identified as malnourished on admission to hospital did not receive any nutrition intervention during their hospital stay.

- c) The type and severity of the patient's disease, disorder or medical condition, and his or her nutritional status, will determine the choice of nutrition support (such as specially formulated nutritional fluids). Nutrition support can be administered via the enteral route (orally or via a tube), which utilises the gastrointestinal tract, and/or the parenteral route – administered intravenously to bypass the gastrointestinal tract. The options for enteral and parenteral nutrition are numerous and the criteria for choosing either option may be complex and will vary depending on the individual patient and the clinical expertise available.

- d) Variable levels of nutritional knowledge among clinicians, the numerous options for nutrition support, and the lack of agreed national clinical guidelines (despite some agreed national standards) have led to a wide variation in practice. In 1992 it was estimated that if better systems were in place to recognise and treat patients with malnutrition, in addition to the obvious benefits for patients, the potential saving to the NHS would exceed £260 million per year.
- e) The objective is to provide a clinical guideline that will help clinicians to correctly identify patients in the community and hospital who require nutritional intervention, and help them to deliver the most appropriate form of nutrition support at the most appropriate time.

4 The guideline

- a) The guideline development process is described in detail in three booklets that are available from the NICE website (see 'Further information'). *The Guideline Development Process – Information for Stakeholders* describes how organisations can become involved in the development of a guideline.
- b) This document is the scope. It defines exactly what this guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health and Welsh Assembly Government (see Appendix).
- c) The areas that will be addressed by the guideline are described in the following sections.

4.1 Population

4.1.1 Groups that will be covered

- a) Adults (aged 18 years or older) in hospital and the community, with a disease, disorder or other condition, who are at risk of malnutrition or who have become malnourished.

- b) As far as is possible, recommendations for the general adult population will be made and specific recommendations may be made for certain clinical situations, conditions or groups (such as elderly people), although it will not be possible to do this for a large number of situations, conditions or groups.
- c) Patients receiving home parenteral nutrition.

4.1.2 Groups that will not be covered

- a) Patients requiring specific long-term therapeutic regimens for the treatment of diseases such as inborn errors of metabolism and chronic renal, liver, or cardiac disease.
- b) Pregnant women, since the nutritional demands on the mother and baby require specialist considerations.
- c) Patients with eating disorders, because the aims of intervention will differ significantly from those with malnutrition related to disease or social circumstances.

4.2 Healthcare setting

- a) This guideline will be relevant to patients and their carers in the community (home and care homes) and hospital (all departments).
- b) The guideline will be relevant to a range of disciplines involved in the care of adult patients in the hospital and community, including doctors, nurses, dietitians, pharmacists, speech therapists, occupational therapists and clinical psychologists.

4.3 Clinical management

- a) The guideline will include evidence on the prevalence of malnutrition in the community and in hospital settings, the causes contributing to the problem and the physiological and functional consequences of malnutrition and its effects on the cost to the NHS.

4.3.1 The guideline will include recommendations on the following:

- a) Nutritional screening and assessment of nutritional status – choosing the most appropriate assessment tool to determine those patients who are nutritionally at risk and highlight those who require nutritional intervention. The timing and frequency of the assessment and the most appropriate methods of documenting the outcomes of the screening process will be included.
- b) Assessment of nutritional status – what are the optimum measures for determining a patient’s nutritional status in the hospital and community setting.
- c) The types of support that can be provided to those who need support with, and can benefit from, conventional feeding, in order to prevent or delay the need to start enteral or parenteral feeding where possible.
- d) Indications for nutrition support – indications for initiating and stopping enteral and parenteral nutrition. Criteria for determining this will include severity of nutritional status, disease status, and duration of inadequate and adequate intake.
- e) Administration of nutrition support.
 - i) Indications for type of access for delivering nutrition support to the patient, including indications for the most appropriate types of access for enteral nutrition (such as nasogastric, nasoduodenal, nasojejunal tubes, gastrostomy and jejunostomy) and parenteral nutrition (peripheral, central line access).
 - ii) Indications for type of nutrition support, including what type (but not specific brand) of nutritional supplement to provide, such as indications for a polymeric feed, polymeric feed with fibre, hydrolysed preparations or parenteral nutrition solutions.

- iii) Mode of administration – including optimum modes of delivering the nutritional supplement such as oral, bolus, continuous, or intermittent continuous administration.
 - iv) Prescription or recommendation of nutrition support – where and how to derive the correct prescription of nutritional requirements.
 - v) Individual tolerances to difference types and modes of administering nutrition support.
- f) Monitoring – optimum parameters and frequency of monitoring for patients receiving nutritional interventions (either enteral or parenteral). This will include: type and frequency of appropriate biochemical tests (such as anaemia, vitamin status, metabolic status), physiological tests (including nutritional status; weight, body mass index), frequency of observing access sites used for enteral and parenteral administration, acceptability of nutrition support and support structures required for the prevention of infections or complications.
- g) The need to consider patient preference, cultural and lifestyle issues when assessing for and providing nutritional supplements.
- h) The need for education for patients and/or carers, for example, to inform patient choice and promote self-care.
- i) The need for consideration of ethical issues in:
- i) the provision or withdrawal of nutrition support
 - ii) the preservation of dignity and maximising independence.

4.3.2 The guideline will not include recommendations on the following:

- a) The suitability of individually named oral, enteral (including oral supplements) and parenteral solutions.
- b) The use of novel substrates such as glutamine or arginine.

- c) Appropriate types of tubing or receptacles for enteral and parenteral administration.
- d) Management of infection, including infection control for feeding solutions and receptacles, however the existing NICE guidance on Infection Control will be referred to where appropriate.
- e) Primary prevention of malnutrition in healthy individuals in the general population.

4.4 Audit support within guideline

- a) The guideline will include key review criteria for audit, which will enable objective measurements to be made of the extent and nature of local implementation of this guidance, particularly its impact upon practice and outcomes for patients.

4.5 Status

4.5.1 Scope

This is the scope, which has been through a 4-week period of consultation with stakeholders and reviewed by the Guidelines Review Panel and the Institute's Guidance Executive.

4.5.2 Guideline

The development of the guideline recommendations will begin in September 2003.

5 Further information

Information on the guideline development process is provided in:

- *The Guideline Development Process – Information for the Public and the NHS*
- *The Guideline Development Process – Information for Stakeholders*

- *The Guideline Development Process – Information for National Collaborating Centres and Guideline Development Groups*

These booklets are available as PDF files from the NICE website (www.nice.org.uk). Information on the progress of the guideline will also be available from the website.

Appendix – Referral from the Department of Health and Welsh Assembly Government

The Department of Health and Welsh Assembly Government asked the Institute:

“to develop a guideline on appropriate methods of feeding for patients who

- A) are still capable of deriving at least some of their nutritional requirements by conventional feeding and/or
- B) have difficulty in swallowing

including the use of nutritional supplements and enteral and parenteral feeding methods.”