



*National Institute for
Health and Clinical Excellence*

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Nutrition support in adults

Understanding NICE guidance –
information for people who need nutrition
support, their families and carers, and the public

Ordering information

You can download the following documents from www.nice.org.uk/CG032

- This booklet.
- The NICE guideline – all the recommendations on nutrition support
- A quick reference guide, which has been distributed to healthcare professionals working in the NHS in England
- The full guideline – all the recommendations, details of how they were developed, and summaries of the evidence on which they were based.

For printed copies of the quick reference guide or information for the public, phone the NHS Response Line on 0870 1555 455 and quote:

- N0977 (quick reference guide)
- N0978 (information for the public).

National Institute for Health and Clinical Excellence

MidCity Place
71 High Holborn
London
WC1V 6NA

www.nice.org.uk

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About this information

This information describes the guidance that the National Institute for Health and Clinical Excellence (called NICE for short) has issued to the NHS on nutrition support in adults. It is based on 'Nutrition support in adults: oral nutritional support, enteral tube feeding and parenteral nutrition' (NICE Clinical Guideline No. 32), which is a clinical guideline produced by NICE for doctors, nurses and others working in the NHS in England and Wales. Although this information has been written mainly for people who are malnourished, it may also be useful for family members, carers and anyone interested in nutrition or in healthcare in general.

Clinical guidelines

Clinical guidelines are recommendations for good practice. The recommendations in NICE guidelines are prepared by groups of healthcare professionals, people representing the views of those who have or care for someone with the condition, and scientists. The groups look at the evidence available on the best way of treating or managing the condition (in this case, the need for nutrition support) and make recommendations based on this evidence.

What the recommendations cover

NICE clinical guidelines can look at different areas of diagnosis, treatment, care, self-help or a combination of these. The areas that a guideline covers depend on the topic. They are laid out in a document called the scope at the start of guideline development.

This booklet tells you about the NICE guideline on nutrition support. It doesn't attempt to explain malnutrition or its treatments in detail. For suggestions of starting points to find out more, see page 16.

If you have questions about the specific treatments and options covered, you can talk to your doctor, nurse, dietitian, pharmacist or another healthcare professional involved in your care.

How guidelines are used in the NHS

In general, healthcare professionals in the NHS are expected to follow NICE's clinical guidelines. But there will be times when the recommendations won't be suitable for someone because of his or her specific medical condition, general health, wishes or a combination of these. If you think that the treatment or care you receive does not match the treatment or care described in the pages that follow, you should talk to your doctor, nurse or other healthcare professional involved in your treatment.

Your care

Your treatment and care should take into account your individual needs and preferences. You should have the opportunity to make informed decisions and choices throughout your care and treatment. Your needs may change and you should have the opportunity to reassess and revisit the decisions you have made.

The Department of Health has issued guidance on patient consent and competence – 'Reference guide to consent for examination or treatment' (2001) (available from www.dh.gov.uk). The General Medical Council has also issued advice on this subject (available from www.gmc-uk.org).

Good communication between you and your healthcare professionals is essential. It should be supported with evidence-based written information tailored to your needs. Treatment and care, and the information you are given about it, should be culturally appropriate. It should also be accessible to people with additional needs such as


physical, sensory or learning disabilities, and to people who do not speak or read English.

Carers and relatives should have the opportunity to be involved in decisions about the patient's care and treatment, if the patient agrees to this. Carers and relatives should also be given the information and support they need.

Recommendations in this guideline apply to all patients with malnutrition or at risk of malnutrition, whether they are in hospital or at home. Good coordination between the hospital and the home or community is needed when patients move from one place of care to another.

What is nutrition support?

In this booklet we use the term nutrition support to mean any method of feeding that aims to improve or maintain the level of nutrients in your body. Nutrition support includes the use of special nutrient-rich foods, nutritional supplements and fortified foods, as well as liquid feed given to you by a tube into your gut or blood.



**Gut – your gut
is made up of your
stomach and
intestines**

What is malnutrition?

Everyone needs food and water to stay alive and keep their body working normally. A balanced diet normally provides enough nutrients, such as calories, protein and vitamins, to keep you healthy.

Without an adequate balanced diet you may not be getting all the nutrients you need for a healthy body. Having an inadequate diet can lead to malnutrition. Being malnourished can make you ill.

If you are ill, having an adequate balanced diet is especially important. Your body needs sufficient nutrients to help you recover.

What causes malnutrition?

An inadequate diet

A healthy balanced diet is important for everyone. But sometimes it is difficult to maintain. For example, if you are depressed you may not feel like eating. Or if you are unwell, eating or swallowing food might be difficult.

You may have an inadequate diet for other reasons. Perhaps you have problems getting to the shops to buy food, or you are unable to prepare or cook food.

Nutrients are not absorbed

If your stomach or intestine is not working properly, all the nutrients in your food and drink might not be absorbed by the body. This can make you malnourished.

Another cause of malnourishment is the loss of nutrients. For example, if you are being sick or you have diarrhoea, your body won't be able to absorb all the nutrients in your food and you can become malnourished.

Your needs change

If you are ill, you may need different nutrients, or more nutrients, than normal to help you get better. Without a change in your diet you could become malnourished.

What are the signs of malnutrition?

Without a healthy amount of nutrients your body may slow down and not work as well. For example, if you don't have enough iron you may get anaemia, which can make you feel tired. Without enough protein and calories you might find it difficult to keep warm and you may take longer to recover from infections.

If you are malnourished you are likely to weigh less than the average person of your height. Your healthcare professional will use a scientific measure called body mass index (or BMI for short) to find out if you are underweight, a healthy weight or overweight. If you have lost a lot of weight over a short period of time you might also be malnourished. For example, if you weighed 10 stone a short time ago and you now weigh 9 stone and you haven't been trying to lose weight, you may be malnourished.

Body mass index is calculated using your weight and your height.¹

¹ BMI is calculated by dividing your weight in kilograms by your height in metres squared.

Recognising people who are malnourished

Your healthcare professional can help you manage your diet to ensure your body has enough nutrients. They will look for any signs that you are malnourished when you register at your GP surgery, attend routine check-ups or when you attend an appointment at the hospital. You should also be checked when you are admitted into hospital or a care home.

If you have suddenly lost a lot of weight or your general health has changed you may be checked again. Your healthcare professional should check whenever a change in your health indicates you are not getting enough nutrients.

Healthcare professionals should also be looking out for people who are at risk of becoming malnourished. For example, you could become malnourished if you have eaten little or nothing in the past 5 days or you are unlikely to eat very much in the next 5 days. This could be because you are very ill and unable to eat.

Making decisions

When starting or stopping nutrition support your healthcare professional should obtain your consent. If you are not able to give your consent, your healthcare professional must act in your best interest, following guidance issued by the General Medical Council and the Department of Health.

Healthcare professionals should be aware that the provision of nutrition support is not always appropriate. Ethical and legal principles need to be considered when making a decision on withholding or withdrawing nutrition support.

Giving nutrition support

A balanced diet

You should be considered for nutrition support if:

- your BMI is less than 18.5
- you have lost more than 10% of your weight in the past 3 to 6 months without trying
- your BMI is less than 20 and you have lost more than 5% of your weight over the past 3 to 6 months without trying.

If you can swallow safely and you need nutrition support, you may be offered nutrition support by mouth (orally). Your healthcare professional should work with you to ensure your diet contains varying amounts of the following nutrients to meet your needs:

- calories
- protein
- water
- minerals
- vitamins.

Your healthcare professional will help you make changes to your current diet. For example, you may need to eat more high calorie foods such as butter, milk and sugar. Or you may need to eat more regularly – for example, having three meals and three snacks every day. You may be offered fortified foods or special supplement drinks with added nutrients. If you have vitamin or mineral deficiencies your healthcare professional should offer you supplements.

Any changes in your diet will need to be gradually introduced. This is because your body will have started to slow down and will need time to readjust to having nutrients again.

Your oral nutrition support should be stopped when you can take in enough nutrients by eating normally.

Tube feeding

Into your gut

If you can't eat and drink normally or you are not able to take in enough nutrients you may be offered a liquid diet through a tube into your gut. This is called enteral feeding.

Usually a tube is inserted into your nose and is passed down into your stomach. This tube is called a nasogastric tube. It is connected to a container of liquid feed. This feed can be given continuously or in fixed doses depending on your needs. This liquid feed should contain all of the nutrients needed by your body. If your stomach isn't working properly the tube should be passed down into your small intestine instead.

If you need enteral feeding for more than 4 weeks you may be offered a different feeding tube; this is called a gastrostomy or a PEG (percutaneous endoscopic gastrostomy) tube or a jejunostomy tube. A PEG tube is inserted through your abdomen into your stomach and can make enteral feeding easier and more comfortable. A jejunostomy tube is inserted directly into the jejunum (which is part of your small intestine). This means the feed doesn't go into the stomach and is given directly into the small intestine.

Your enteral feeding should be stopped when you are able to take in your nutrition support orally.

Into your blood

If you can't be fed by a tube into your stomach or intestine you may be offered a sterile liquid feed through a tube into your blood. This is called parenteral feeding.

A narrow tube known as a catheter is placed in a vein. This is connected to a container of sterile liquid feed. This sterile liquid feed should contain all of the nutrients needed by your body. The standard mixture of nutrients should be adjusted to suit your needs. For example, you may need additional vitamins to be added. The feed should be introduced gradually. It can be given continuously or in cycles depending on your needs.

Your healthcare professional should check improvements in your nutrition regularly. Once you are able to absorb nutrients and be fed by a tube into your gut, or eat normally, parenteral feeding should be gradually stopped. Your healthcare professional should check your progress daily.

Regular checks

Any changes to your diet should be checked regularly by your healthcare professional. This is called monitoring. These checks are to ensure that your diet is safe, and that the changes in your diet are improving your nutrition. Your diet might need to be adjusted to make it more effective. The NICE guideline gives details on how your diet should be monitored. For example, your healthcare professional may need to test your blood to check the levels of nutrients. Monitoring could also involve taking your temperature regularly and checking your pulse and weight, as well as checking that your tube or catheter is working properly.

Your intake of nutrients should be checked at least twice a week until stable. If you need long-term nutrition support your needs should be reviewed every 3 to 6 months.

If you have problems eating

You may be malnourished because you find it difficult or painful to eat, chew, drink or swallow (the medical word for this is dysphagia). Sometimes this happens because you are ill. For example, if you have had a stroke, or have dementia or have had an operation on your throat, you may find it difficult to eat or swallow normally.

You should be referred to a healthcare professional who specialises in dysphagia. He or she will work with you to make sure that you are able to take in enough nutrients. For example, changing the consistency, temperature and/or taste of drinks and food may help you swallow them. Any changes made to your diet should be reviewed regularly by your healthcare professional until your nutrition has improved.

Food supplements, drinks or changes in the way food and drink are prepared and served don't help everyone. If you are not able to eat enough food despite these changes, or if it is not safe for you to swallow, you should be offered liquid feed through a tube. This is called enteral feeding and is described in more detail on page 11.

If you are taking medicines and you have dysphagia, your healthcare professional should check the type of medicines you take and the way they are given.

If you are having an operation

If you are in hospital to have an operation and you are malnourished you may be offered different foods and drinks to improve your diet. For example, you may need to eat more high calorie foods, such as butter, milk and sugar, or you may need vitamin or mineral supplements. You should have nutrition support before and after your operation in line with the requirements of your operation.

If you are malnourished and you are having an operation on your gut – that is, your stomach or intestine – you may be given a liquid feed through a tube before your operation. This type of feeding is called enteral feeding and is described in more detail on page 11.

If you are not malnourished and you have had an operation and are expected to be eating a normal diet within 5 days you should not be offered enteral tube feeding within 48 hours of your operation.

If you are at home

If you need long-term nutrition support, you and your carer should be trained to recognise any problems with your health so that any changes needed can be made to your diet.

Feeding at home

If you are having enteral or parenteral feeding at home, you should be supported by a team of healthcare professionals. This team could be made up of your GP, district nurses or other types of homecare nurses, dietitians, and specialists such as speech and language therapists. They should work with you and your carer to make a care plan suited to your needs. This plan should cover how much feed you need, what it should be made up of, when you should receive it and how your nutrition will be monitored.

Regular checks

Members of your healthcare team should check regularly how you are. The NICE guideline has more details on the specific checks that may need to be carried out, as well as how often they should be done. For example, your temperature should be checked daily in the beginning. You, or your carer, could carry out some of the daily checks.

If you are having parenteral feeding you should also have check-ups at a specialist hospital clinic every 3 to 6 months. Your check-ups could be more frequent during the early months.

Training and information

Special equipment will need to be set up in your home. You and your carer should be given training on how to use it and an instruction manual. You should be given details about delivery of the equipment, the feed, and anything else you might need, including contact details for the company supplying it.

You and your carer should also be given information on:

- your feeding regimen
- procedures for the feed
- common problems and how to deal with them
- how to use the equipment.

You should also be given telephone numbers to ring if you have any questions, as well as numbers to call in an emergency.

You should be given the opportunity to discuss your needs and your care with your healthcare professional. This includes any physical, psychological and social issues that may be associated with your care. You should also be given contact details for relevant support groups, charities and voluntary organisations in your area.

Where you can find more information

If you need further information about any aspects of nutrition support or the care that you are receiving, ask your doctor, nurse or other member of your healthcare team. You can talk to them about the NICE guideline on nutrition support, or information in this booklet.

If you want to read the other versions of this guideline

There are four versions of this guideline:

- this one
- the full guideline, which contains all the recommendations on nutrition support, details of how they were developed, and summaries of the evidence on which they were based
- a version called the NICE guideline, which lists all the recommendations on nutrition support
- the quick reference guide, which is a summary of the NICE guideline for healthcare professionals.

All versions of the guideline are available from the NICE website (www.nice.org.uk/CG032). Printed copies of this booklet and the quick reference guide are also available. Phone the NHS Response Line on 0870 1555 455 and quote N0977 (quick reference guide), N0978 (information for the public).

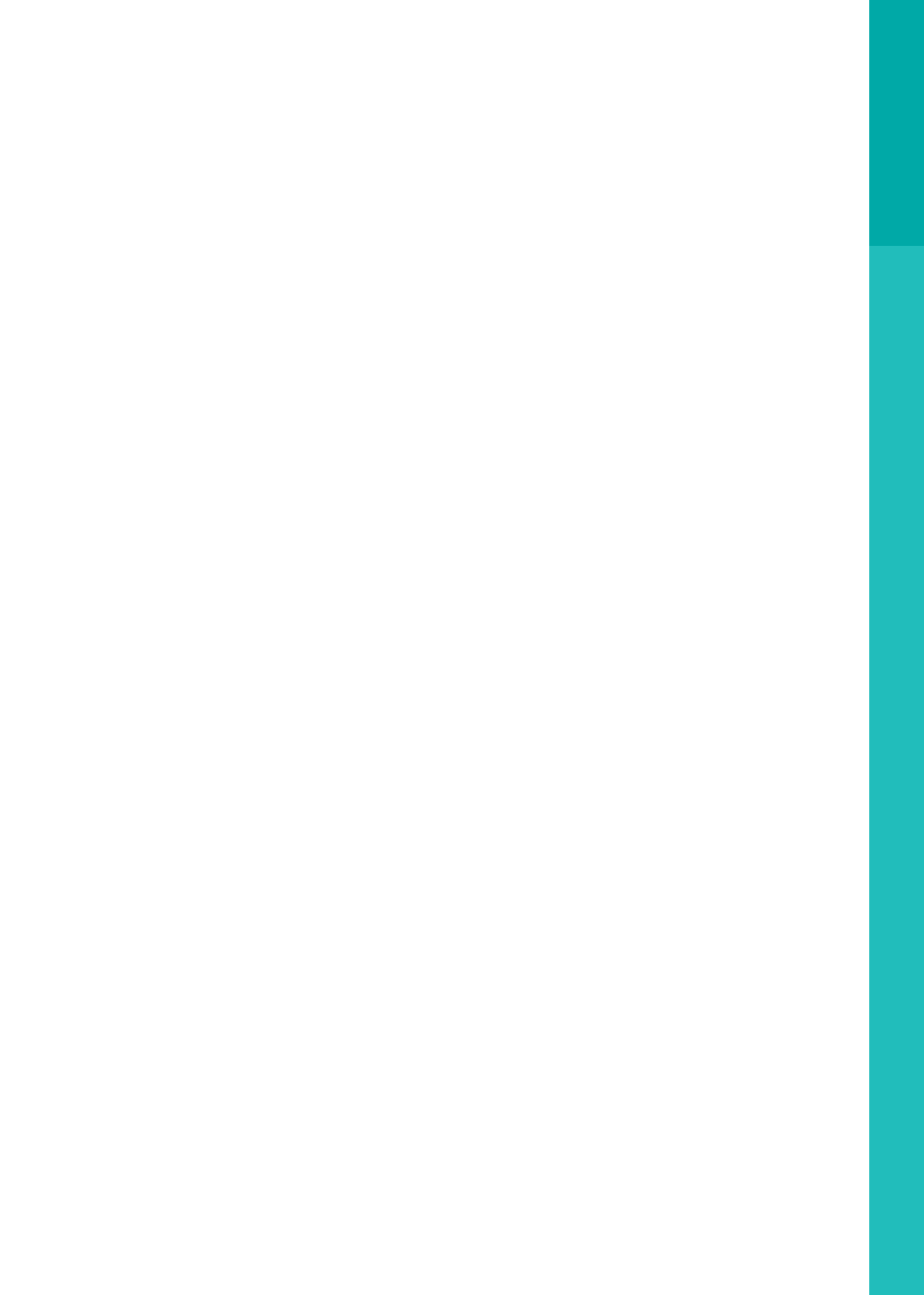
If you want more information about nutrition support

NHS Direct may be a good starting point for finding out more about nutrition support. You can call NHS Direct on 0845 46 47 or visit the website (www.nhsdirect.nhs.uk).

If you want to know more about NICE

There is more about NICE and the way that the NICE guidelines are developed on the NICE website (www.nice.org.uk). You can download the booklet 'The guideline development process – an overview for stakeholders, the public and the NHS' from the website, or you can order a copy by phoning the NHS Response Line on 0870 1555 455 (quote reference number N0472).





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MidCity Place
71 High Holborn
London
WC1V 6NA

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