NHS National Services Scotland

Food in Hospitals (2026) Specification

National Catering and Nutrition Specification for Food and Fluid Provision in Hospitals in Scotland

Scottish Health Facilities Note

SHFN 04-01

Version 3 - February 2026

Contents

Foreword

Nothing is more important than our health and the health of the people we love. We are fortunate in Scotland to have the NHS, providing high quality health and care to all who need it, free at the point of use. But when we are unwell a key part of our recovery comes from ensuring that we eat the right food with the right nutrition to help our body recover from illness. Scottish Government understands the importance of nutrition in hospital, and this is why we tasked NHS Scotland Assure with reviewing this Food in Hospitals Specification. This document supports the implementation of the Food Fluid and Nutritional Care Standards published by Healthcare Improvement Scotland (HIS). This updated Specification continues to carry the same mandatory status as it has in previous versions.

When we are in hospital, we should expect that the catering provision in our hospitals are exemplary, promoting a healthy balanced diet for patients, staff and visitors. This ought to be regardless of allergies, dietary preference through belief or obstacles presented through simply not being able to eat well. The meals need to be familiar and appealing to ensure that they are consumed and the nutritional value realised. On admission to hospital people can be considered nutritionally well or nutritionally vulnerable and the catering provided must recognise this and be able to provide a tailored diet for them to maximise their opportunity for recovery.

This specification is intended to assist the caterers, dietitians and nutritionists working in NHS Scotland to ensure that the nutritional needs of each patient in NHS Scotland is assessed and met. Given the breadth of different needs that may present in hospital admissions this is a challenging task. However, I am proud that our NHS is able to take this step and commit ourselves to delivering the optimum nutrition in our hospital meals.

NHS Scotland Assure will work closely with all NHS boards in Scotland to assess how well they are responding to this challenge. I expect this specification document to be given the same weight and to be treated in the same way as the above noted publication from HIS.

Welcoming people into an NHS Scotland hospital at a time that they are most vulnerable and accepting the challenge to provide them with the best nutritional care is no small undertaking. I am proud that our NHS is prepared to accept this challenge and deliver for all those who find themselves in our hospitals.

Neil Gray

Cabinet Secretary - Scottish Government

Acknowledgement

A note of thanks is given to the Chair and members of the Food in Hospitals (2026) Specification Short Life Working Group (SLWG), who have worked tirelessly on the review of the specification.

A special thanks is also given to all those NHS Scotland Subject Matter Experts (SMEs) and external parties who contributed to the previous 2009 and 2016 iterations of the specification. Their expertise and time taken to support these projects is greatly appreciated.

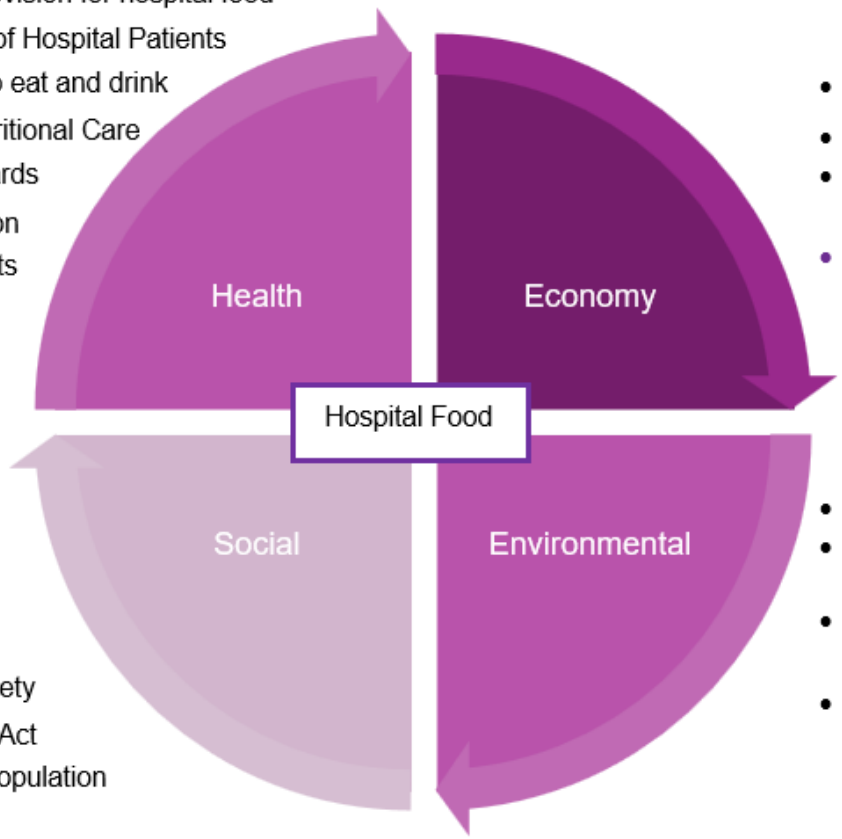
Figure 0.1 - Food in Hospitals Context in Scotland

Health

- The standard for Nutrient and Food provision for hospital food
- Food as part of the Clinical Treatment of Hospital Patients
- Maximising opportunities for patients to eat and drink
- Safe Effective and Person-centred Nutritional Care
- Food Fluid and Nutritional Care Standards
- Delivering appropriate food and Nutrition
- Delivering quality and choice for patients
- Complex Nutritional Care Standards
- Managing Risks of Undernutrition
- The Scottish Dietary Goals

Social

- Catering Skills and Training
- Community Planning Partnerships
- Improving local outcomes in the area
- Hospital Food as an exemplar for Society
- Community Empowerment (Scotland) Act
- Improving the Health of the Scottish Population



Economy

- Scotland 15 National Outcomes
- Procurement Reform (Scotland Act)
- Procurement that delivers Economic, Environmental and Social benefits
- Good Food Nation Act 2022 (Tackling Health, Education, Environment, Industry, Communities and Behaviours change)

Environmental

- Reducing Waste and $C0_2$
- Catering for change - buying food sustainably
- Public Bodies Duties Climate Change (Scotland) Act
- Reducing Food Waste and the Environmental impact of food

1. Introduction

1.1. Eating well and enjoying food is fundamentally important for every individual's health and wellbeing. In a hospital setting appealing food and good nutrition is more than this, here it is vitally important.

1.2. Catering provision in NHS hospitals should always be exemplary, promoting a healthy balanced diet for patients, staff and visitors. This is a complex task informed by many things as outlined in Figure 0.1. The challenge requires efficient service delivery, coordination, and excellent communication to share information, knowledge and understanding between caterers, procurement, suppliers and medical staff. Further, input from patients is pivotal to the success of 'Food in Hospitals'. In a diverse hospital population, food must meet the nutritional requirements of patients as well as providing food that is appropriate for different age groups, religious, cultural and social backgrounds across a range of medical conditions.

1.3. Food provided for patients needs to be familiar, appealing and available at appropriate times. Above all it needs to be eaten and enjoyed. Maximising opportunities for individuals to eat and drink and delivering quality and choice are fundamental to improving consumption.

1.4. For many patients who are assessed as 'nutritionally vulnerable', good nutrition means the provision of small, energy and nutrient-dense meals with frequent snacks to address problems of poor appetite and risk of malnutrition.

1.5. There is also a significant proportion of patients who may be classified as 'nutritionally well' whose nutritional needs do not differ from that of the general population. Nearly two-thirds of adults and a third of children in Scotland are living with overweight or obesity. Poor diet contributes significantly to high rates of non-communicable disease such as cancer, heart disease and type 2 diabetes in Scotland.

1.6. The advice for the 'nutritionally well' is a healthy balanced diet that is characterised by a higher proportion of lower fat, salt and sugar foods and the inclusion of at least five portions of fruit and vegetables a day plus a higher proportion of starchy foods including high fibre foods.

1.7. There are other important aspects which we expect will characterise food in hospitals including a focus on improving the social aspects of eating with encouragement from staff, visitors and volunteers and developing dining areas where these are present.

1.8. This Food in Hospitals Specification 2026 has been revised and updated to support NHS boards in implementing:

- the Healthcare Improvement Scotland (HIS) Food, Fluid and Nutritional Care Standards, specifically Standards 3, 4 and 5
- the delivery of a healthy balanced diet for patients who are 'nutritionally well' by demonstrating adherence to Eatwell Guide principles
- National Catering Strategy
- NHS Scotland Climate Emergency and Sustainability Strategy

1.9. Food in Hospitals provides information on standards for nutritional care, nutrient and food provision for patients within hospitals. It provides information on how the standards can be met, through assessment of the hospital population's dietary needs, menu planning, and practical suggestions on food choices suitable for different dietary needs, including special and therapeutic diets.

1.10. The Specification aims to ensure a common and accurate understanding about different patients' nutritional and dietary needs by everyone involved in food provision in hospital settings. It sets out how not only caterers, but all those involved in the provision of food and fluids to patients, including menu planning groups, Nurses, Dietitian, Speech and Language Therapists (SLTs) and Commodity Advisory Panels can help ensure appropriate food is procured, produced, available and provided to meet the varying dietary needs of such a diverse population.

1.11. Ultimately this document aims to support the current culture change surrounding hospital catering to one that recognises the fundamental importance of providing appropriate food provision for every patient as part of their treatment. This in turn will positively influence health and recovery.

1.12. Food service provision must reflect the needs of the local patient population. The size of the catering facility and also the method of food production, whether it is on-site, out-sourced, ready-prepared bought-in, cook-fresh, cook-chill or cook-freeze will impact on the scope of service that different establishments can provide.

1.13. Hospital catering and the food it provides, although previously viewed as a non-clinical service within the NHS, and grouped with facilities services such as portering and cleaning, is now widely accepted to play an essential clinical role in the treatment of hospital patients. Understanding of the importance of food and nutrition in the wellbeing of hospital patients has also increased and it is implicit that providing appropriate food and fluid for the patient population can be effective in cutting the length of hospital stay and cost of in-patient admissions.

Purpose

1.14. Nutritional care is more than the provision of food and fluid to patients and demands effective multi-disciplinary team working to ensure the dietary needs of all patients are met.

1.15. The purpose of this Food in Hospitals Catering and Nutrition Specification is to:

- set out nutrition and catering criteria to ensure that NHS boards support HIS Food, Fluid and Nutritional Care Standards
- provide guidance for the planning group responsible for the implementation of local protocols for the provision of food and fluid to patients
- act as a practical resource for catering and dietetic staff to ensure that the provision of patient catering across NHS Scotland is operating in line with Scottish Government and NHS policies
- define the nutritional and dietary requirements of hospital patients

Table 1.1 - HIS Food Fluid and Nutritional Care Standards

Standard	Definition
Standard 1: Policy and Strategy	Each NHS board has a policy, and a strategic and coordinated approach, to ensure that all patients receive safe, effective and person-centred nutritional care, irrespective of speciality and location (hospital or community.
Standard 2: Assessment, Screening and Care Planning	When a person is admitted to hospital, or to a community caseload, a nutritional care assessment is carried out. Screening for the risk of malnutrition is also carried out, both initially and on an ongoing basis. A person-centred care plan is developed, implemented and evaluated.
Standard 3: Planning and Delivery of Food and Fluid in Hospital	Formalised structures and processes are in place to plan the provision and delivery of food and fluid in hospitals, in line with Food in Hospitals.
Standard 4: Provision of Food and Fluid to Patients in Hospital	Food and fluid are provided in a way that is acceptable to all patients in hospital.
Standard 5: Patient Information and Communication	Patients have the opportunity to discuss, and are given information about, their food, fluid and nutritional care. Patient views are sought and inform decisions made about the food, fluid and nutritional care provided.

Standard	Definition
Standard 6: Education and Training for All Staff	Staff have the knowledge and skills required to meet patients' food, fluid and nutritional care needs, commensurate with their duties and responsibilities, and relevant to their professional discipline and area of practice.

1.16. It is intended that this document is used in conjunction with other key documents such as the Hospital Caterers Association (HCA) Good Practice Guide Healthcare Food and Beverage Service Standards, A Guide to Ward Level Services and The British Dietetic Association (BDA) Nutrition and Hydration Digest - 'Improving Outcomes through Food and Beverage Services' to support healthcare establishments achieve this specification.

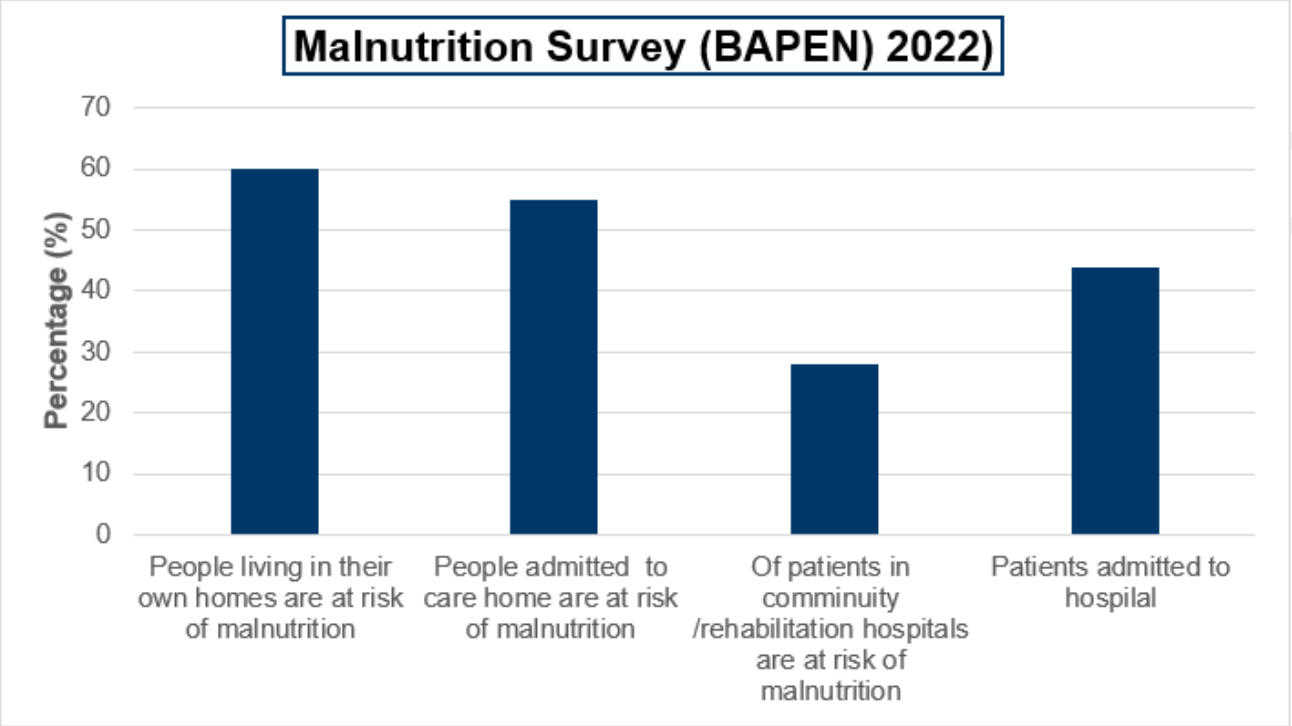
The hospital population

1.17. While the majority of patients depend on ordinary hospital food to improve or maintain their nutritional state to optimise their recovery from illness, many patients, who are ill in hospitals or other care settings have poor appetites or have an impaired ability to eat, with the resultant risk of developing malnutrition ResAP(2003)3 - Resolution on food and nutritional care in hospitals.

1.18. The provision of food is essential to the prevention and treatment of malnutrition. The World Health Organization (WHO) defines the term malnutrition as deficiencies, excesses or imbalances in a person's intake of energy and/ or nutrients. This can be either undernutrition (wasting, stunting, underweight) or overweight, obesity and diet-related noncommunicable diseases (NCDs).

1.19. Data from the Malnutrition Survey carried out by British Association for Parenteral and Enteral Nutrition (BAPEN) in 2022 found that out of 1543 adults from hospitals and a variety of community settings across the UK 45% of adults were at risk of malnutrition (12% medium and 33% high risk) using the 'Malnutrition Universal Screening Tool' (MUST).

Figure 1.1 - Malnutrition Survey (BAPEN) 2022 - Malnutrition and Nutritional Care Survey in Adults



1.20. This risk of malnutrition can increase in likelihood for older people. They are more likely to be undernourished when admitted to hospital and remain undernourished during their hospital stay. They also have longer periods of hospital stay. As a result, there may need to be additional considerations made for this client group based on changes in body composition, nutritional requirements, physical and mental health and length of stay.

1.21. The nutritional requirements of some people cannot be met by the usual oral route, even with extra help at mealtimes or by the prescription of simple oral nutritional supplements ONS). Under these circumstances additional help is sometimes required, either by feeding by a tube into the gut, or through a line placed into the vein. Techniques that involve tubes or lines constitute ‘complex nutritional care’. This form of nutritional therapy is not covered within this document.

1.22. As outlined above there are many factors that contribute to an individual’s nutritional status, and how these might impact on the considerations needed for planning hospital menus. Many of these elements are discussed in more detail later in this document and also within BDA Digest, section 9.4.

Policy background

1.23. Good nutrition, whether in hospital or not is a high priority in Scotland and can contribute to the success of a range of policies and legislation as part of Scotland's vision to be a Good

Food Nation. Scotland has one of the poorest diet related health records globally. We waste a fifth of the food we buy, and we remain disconnected from where our food comes from, how it is produced and the impact of food on the environment even though 30% of greenhouse gases relate to food production and consumption.

Some key policies and legislation are detailed below.

Good Food Nation (Scotland) Act 2022

1.24. The Scottish Government recognises its role to support a thriving and resilient food system in order to improve deep-seated poor dietary habits that are negatively impacting on human health, planetary health as well as the sustainability of our communities and our environmental habitat.

1.25. Their vision is for Scotland to be a Good Food Nation, *"where people from every walk of life take pride and pleasure in, and benefit from, the food they produce, buy, cook, serve, and eat each day."*.

1.26. The Good Food Nation (Scotland) Act 2022 provides the legislative framework as the foundation to realise this vision through policy, guidance and planning and places duties on Scottish Ministers, local authorities and NHS boards to produce Good Food Nation Plans. These plans will set out how the main outcomes in relation to food-related issues will be achieved, the policies needed to do this and the measures that will be used to assess progress.

1.27. Delivery of the hospital food system through the collaboratively produced and actioned 'local plan' will involve teams from procurement, facilities, sustainability, nutrition and dietetics with Public Health teams coordinating NHS board links to wider out reaching local community impacts.

Delivering the guidance set out in this document therefore contributes to achieving the vision of a National Good Food Nation Plan.

The Scottish Dietary Goals

1.28. The Scottish Dietary Goals (SDGs) revised in 2016, describe, in nutritional terms, the diet that will improve and support improvements in the health of the Scottish population, encompassing foods and nutrient intakes that assist policy development to reduce the burden of obesity and diet related disease in Scotland. As such, improvements in hospital food and the exemplary role of the Health Service in relation to food provision will support achievement of the SDGs.

1.29. The 'Eatwell guide' provides a pictorial representation of the proportions of foods we should eat to help meet the SDGs. The 'Eatwell guide' therefore describes the healthy diet for patients with no specific clinical dietary requirements.

Food Fluid and Nutritional Care Standards - Healthcare Improvement Scotland

1.30. In Scotland, NHS Quality Improvement Scotland published the clinical standards for Food, Fluid and Nutritional Care in Hospitals in 2003 (see Healthcare Improvement Scotland website).

The standards have been revised by HIS and published in 2014. The revised standards apply to the care of all patients, children and adult, in both community healthcare and hospital settings and have been developed in recognition of health and social care integration.

1.31. Two fundamental considerations that hospitals need to address in order to provide a service which is likely to meet the dietary and nutritional needs of its patients is: maximise opportunities for patients to eat and drink, the provision of substantial snacks, out-of-hours service provision, on-ward provisions; and also maximising the choice of suitable foods and fluids available.

1.32. Standards 3 and 4 only apply to the care of patients in hospital.

1.33. They encompass the planning, assessment, provision, delivery and education of nutrition care (refer to Table 1.1 above for overarching standards). This document supports the delivery of all of these standards; however, it gives further clarity and support in specifically achieving Standards 3, 4 and 5.

1.34. Strategies to meet HIS Food, Fluid and Nutritional Care Standards, and fulfil the Council of Europe Resolution must ensure respect and valuing of the diversity of patients' needs. This will be achieved by NHS boards and operational groups gathering information on the needs of the populations they are serving to ensue inclusive attitudes and practices for provision of food to meet individuals' needs.

The Council of Europe Produced Resolution Resa (2003) Food and Nutritional Care in Hospitals: How to Prevent Undernutrition

1.35. In November 2003, The Council of Europe produced resolution ResAP (2003) 3 'Food and Nutritional Care in Hospitals: How to Prevent Undernutrition', to which the UK is a signatory. It states that "All patients have the right to expect that their nutritional needs will be fulfilled during a hospitalisation".

This resolution acknowledges there are differences in nutritional care across Europe with improvements required in nutrition screening, food provision and education and training of staff. In November 2003, Audit Scotland audited all NHS boards in Scotland and showed similar findings (see Audit Scotland Reports).

1.36. Recommendations included that the Departmental Implementation Group should develop or commission national catering and nutrition specifications for NHS Scotland. Subsequent policies have built on this work.

The Procurement Reform (Scotland) Act

1.37. The role of NHS Scotland Procurement should be recognised for its contribution to improved purchasing practices across NHS Scotland and the development of sustainable supply chains. The Procurement Reform (Scotland) Act 2014 establishes a national legislative framework for sustainable public procurement, supporting Scotland's economic growth through enhanced procurement practices.

1.38. The Act places general duties on contracting authorities, including a Sustainable Procurement Duty. This duty requires authorities to consider how their procurement activities can improve economic, social, and environmental wellbeing; reduce inequality; promote innovation; and involve Subject Matter Experts (SMEs), the third sector, and supported businesses.

1.39. Additionally, the Act mandates that NHS Scotland publish procurement strategies. These strategies must include a statement outlining how the authority's approach to regulated food procurements will improve the health, wellbeing, and education of local communities, while also promoting the highest standards of animal welfare.

1.40. Building on this foundation, the Good Food Nation Act 2022 introduces a duty for all NHS Scotland bodies to clearly articulate the six national outcomes in their respective Good Food Nation Plans.

Food Safety incidents - The Public Sector Incident Protocol

1.41. The Public Sector Incident Protocol (PSIP) sets out the national arrangements for responding swiftly and effectively to food incidents that require coordinated action across the public sector.

1.42. In the event of an incident affecting hospitals, NHS National Services Scotland (NSS) Procurement will be the main link with the Food Standards Scotland (FSS), and you should communicate any issues to NHS NSS Procurement's Commodity Manager (Food), National Procurement (NP).

The Protocol defines the communication and coordination arrangements between Food Standard Scotland and the affected public sector organisations including hospitals.

Business continuity

1.43. Plans for ensuring safe delivery of food depend on local processes and patterns of providers. Catering and Facilities Managers (in consultation with Emergency Planning Officers) need to work together locally to produce, review and update robust plans for a range of emergencies for example disruption to all power supplies, water, food supplies, staffing shortages, equipment failure, loss of catering service, site lift failure, transportation, communications and so on (this indicative list is not exhaustive).

1.44. Any plans should be tested to ensure validity and that communication of these includes not only direct staff involved but other departments who are co-dependent on a catering service. Exercises in testing could be table-top or where appropriate live.

The Policy for NHS Scotland on the Global Climate Emergency and Sustainable Development DL (2021) 38

1.45. This policy states NHS Scotland commitment to become a Net Zero Health Service by 2040 - proposed actions to deliver on its aims and targets, are contained in 'The NHS Scotland Climate Emergency and Sustainability Strategy 2022-2026'.

1.46. Delivering the hospital food service, from procurement through to serving a meal to each patient, contributes to the impact of healthcare on the environment. Of particular focus is the minimisation of food waste, but consideration for more sustainable options and actions can be applied to all stages of delivery and are referred to within relevant sections throughout this document. Appendix D gives a summary to help identify how your role and responsibilities can have particular impact at the different steps in the process of delivering food in your hospital. Further detail can be found in Chapter 4 of the BDA Digest.

1.47. The policy mandates for a Sustainability Team in each NHS board to coordinate action to reduce carbon emissions, assess climate risks and prepare adaptation plans- these are integrated into local strategies, action plans and risk management. Collaboration with your local sustainability team is recommended, in their role to specifically support colleagues in delivering care that balances patient care and environmental sustainability.

2. Assessing the needs of the hospital population

Introduction

2.1. Hospitals provide for varied population groups and except for specialist centres such as children's hospitals, the food service is required to provide suitable food and fluid for babies to older adults.

2.2. This section lays out the nutrient requirements of a 'general' hospital population, which a hospital catering service is required to meet. The hospital population's nutritional and dietary needs are diverse due to a variety of their patients characteristics for example reason for admission, age, physical condition, and/ or illness and are different to the general healthy population. As such, information is required to inform caterers of the needs of the people they are providing good for. This will also allow for flexibility of menus regarding how many courses to serve, whether to have one larger meal and one lighter meal, meal timing and so on. This in turn can help to reduce food waste (plate waste and unserved or untouched meals). Additional information can be found in the NHS Scotland Waste Prevention and Re-Use Guide.

2.3. Each age group of the hospital population has different nutritional requirements, such as children have specific needs to facilitate growth and development whilst adult requirements are necessary to achieve or maintain good health. In terms of health, at one end of the scale there are short-term admissions where an individual's normal diet is not interrupted whilst at the other end of the scale long-term illness and/ or treatments can adversely affect a patient's food intake and have negative effects on their health.

2.4. Local assessment of the dietary needs of each hospital population is therefore fundamental for successful menu planning and appropriate food provision.

2.5. A large proportion of hospital patients, such as the acutely ill or undernourished, require diets that are more energy and nutrient dense. This means that the same amount of energy, protein, vitamins, minerals and trace elements must be provided in a smaller volume of food.

2.6. Patients may also require a therapeutic diet, such as patients with increased nutrient requirements, patients with kidney disease, patients requiring a texture-modified diet, critically ill patients or those requiring specialised nutrition care, in relation to their illness, all should continue to be assessed individually by the appropriate healthcare professionals. Specific dietary parameters of common therapeutic diets are covered in Section 5.

Assessment of patient population dietary needs

2.7. Before considering menu planning or development of a recipe database, or menu a multiprofessional menu planning group should be established (see Section 4) to consider the wider issues that can affect patient food choice and hence food intakes.

2.8. The first step for the multiprofessional group is to gather information about the dietary needs of the hospital population. If this is done robustly it ensures that menus that are developed meet the needs of the population, it is serving.

2.9. Individual requirements and the need for equipment to help with eating and drinking need to be considered in the menu and food service planning and delivery including individuals:

- likes and dislikes
- disabilities that may affect their ability to eat and drink
- social/ environmental mealtime requirements
- food allergies/ intolerances
- need for therapeutic diet
- cultural/ ethnic/ religious

2.10. Assessment of each patient's dietary needs should form part of their individual person centred medical and nursing care, in line with Healthcare Improvement Scotland (HIS) 'Food, Fluid and Nutritional Care Standards', criteria 2.1. An example of what data can be collected and where this might be found within NHS boards can be found in Appendix A.

2.11. To assess the dietary needs of different patient populations, within a person-centred approach, the following characteristics should be included:

- age
- gender
- cultural, ethnic, social and religious diversity
- physical and/ mental health needs
- food preferences
- length of stay - consider the structure of the patient's day and meal timings for the different patient groups like maternity and mental health
- nutritional risk - proportion of patients likely to be nutritionally vulnerable or nutritionally well
- requirements of clinical specialities - renal, oncology, cystic fibrosis, dysphagia, cognitive decline, dementia, stroke

2.12. This information can be collected from NHS health information departments, patient surveys, nutritional screening data, compliments and complaints. Collated food services

data such as menu item uptake and NHS board reports on Food Waste as required by the 'NHS Scotland Climate Emergency and Sustainability Programme' can also be extremely useful in the initial stages of menu planning.

'Nutritionally vulnerable' hospital patients

2.13. Studies have shown that a significant proportion of patients admitted to hospital are at risk of malnutrition or are malnourished (British Association for Parenteral and Enteral Nutrition (BAPEN) Malnutrition Week report) and that many of these patients' nutritional needs go unrecognised leading to preventable complications and an increase in length of stay (see Combating Malnutrition: Recommendations for Action). Older adults in long-stay care have been shown to be at particular nutritional risk.

2.14. The Excellence in Care assessment screens for nutritional vulnerability by nursing staff using a validated screening tool. Reasons for a Patient being 'nutritionally vulnerable' include:

- admission to hospital malnourished
- preceding unexplained or unintentional weight loss even if they are classed as overweight or obese
- physical difficulty eating and/ or drinking
- acute or chronic illness affecting appetite and food intake
- cognitive or communication difficulties
- increased nutritional requirements (such as due to trauma or burns)
- requiring the texture of food and/ or fluid to be modified
- increased length of stay

2.15. Research has shown that the actual dietary intakes of hospital patients may not necessarily meet energy and nutrient requirements, even when the hospital menu is designed to meet those needs (see Dietary intakes in geriatric orthopaedic rehabilitation patients: Need to look at food consumption not just provision).

2.16. Patient food/ meal choice/ selection can have a bearing on whether their nutritional intake is adequate. Increasing the availability of suitable food choices and the opportunities to eat will be critical in enabling patients to achieve their nutritional and dietary needs across the day (24-hour period). Providing suitable food choices can also contribute to minimising food waste (see High Food Wastage and Low Nutritional Intakes in Hospital Patients, Clinical Nutrition).

‘Nutritionally well’ hospital patients

2.17. A proportion of patients who are in hospital can be classified as ‘nutritionally well’ individuals, for example, patients who may be hospitalised due to a minor illness, maternity patients not experiencing complications and previously fit healthy people whose reason for admission does not/ will not affect their food and fluid intake, such as those having minor elective surgery.

2.18. It would be appropriate for these patients to be provided with a diet that is based on the ‘Eatwell Guide’ and is in line with the Scottish Dietary Goals (SDGs).

Nutritional requirements of hospital patients

2.19. Calculation of the requirements for hospital patients is complex as some patients will be healthy individuals, and some will have much higher needs. Therefore, this document has established its guidelines for nutritional provision using a combination of the Department of Health’s Government Dietary Recommendations for Energy and Nutrients (2016), along with guidance from the Parenteral and Enteral Nutrition Group (2018), as those who are sick or injured may have requirements that are lower, the same as or higher than the healthy population depending on condition and treatment.

Using this range for macronutrients as well as recommendations for food groups in the Eatwell Guide will ensure that micronutrient targets are achieved.

Nutrition targets

Table 2.1 - Nutritional requirements of hospital patients

Nutrient per day	Nutritionally Well	Nutritionally Vulnerable
Energy (kcal)	1840 - 2500	1840 - 2772
Protein (g) **at least**	45 - 56	79 - 92
Fat (g) **less than**	72 - 78 (35% of energy)	Not set
Carbohydrate (g) **at least**	245 - 333 (50% of energy)	Not set
Free Sugars (g) **less than** (NHS boards not presently measured against this due to missing data from suppliers)	25-33 (5% total energy)	Not set
Salt (g) **less than**	6	Not set

Nutrient per day	Nutritionally Well	Nutritionally Vulnerable
Sodium equivalent (mg) **less than**	2,400	Not set
Fibre (g) **at least**	30g	Not set

2.20. Calculation of the above energy and protein targets are explained fully in appendix B.

Summary

2.21. When assessing the nutrient requirements of the 'general' hospital population there are specific requirements that the catering service is required to meet:

- an assessment of the local needs of the general hospital population should be carried out to inform the hospital menus and appropriate food provision. It is essential that a hospital menu can meet the nutrient standards set out in Table 2.1
- the information collected needs to be representative of the hospital population being served. This data reflects but is not necessarily a replica of the numbers of characteristics that may be represented in local census data and should in fact represent hospital demographics
- menus that are designed to meet local needs of the general hospital population will contribute to the local NHS board food waste strategy and action to keep food waste to a minimum
- nutrient standards for adults are based on two groups, the 'nutritionally well' and the 'nutritionally vulnerable'. Hospital menus need to be able to provide for both groups. The 'nutritionally vulnerable' such as those with normal nutritional requirements but with poor appetites and/ or unable to eat normal quantities at mealtimes, or with increased nutritional needs. 'Nutritionally well' individuals with normal nutritional requirements and normal appetite or those with certain chronic condition require a diet that follows healthier eating principles
- the nutrient specification is based on evidence such as energy, carbohydrate and salt from the 'Government Dietary Recommendations - Government recommendations for energy and nutrients for males and females aged 1 - 18 years and 19+ years' (see Appendix 5: Regulation 14 of the CQC (Meeting Nutritional and Hydration Needs), The following is an overview of the optimal evidence required by NHS boards to meet compliance against the requirements of the specification

Table 2.2 - Example of evidence requirement for self-assessment

Example of Evidence
• Local populations needs assessment for example: in-patient information from NHS health information departments of relevant hospital population information, patient surveys, nutritional screening data, compliments and complaints. Collated food services data such as menu item uptake and NHS board reports on Food Waste information. • Evidence that this data is considered at key meetings where menus are developed and agreed such as at Food Fluid and Nutritional Care Groups (on agenda, in meeting notes and so on). • Overview document demonstrating how Nutritional Targets as set out in Table 2.1 are met within overall meal provision.

3. Nutritional targets and food-based criteria

Introduction - menu planning criteria

3.1. Healthcare Improvement Scotland's (HIS) Food, Fluid and Nutritional Care Standards, Standard 3 states:

'Formalised structures and processes are in place to plan the provision and delivery of food and fluid in hospitals, in line with Food in Hospitals.'

3.2. Menu requirements need to be informed by assessment of local patient population needs, as outlined in chapter 2 which should be reviewed at least every 5 years unless significant changes indicate earlier review.

3.3. When considering sustainability and food, it is good practice to consider local cultures, regional speciality dishes and local food supplies - liaison with the procurement team is recommended.

3.4. HIS's Food, Fluid and Nutritional Care Standards Standard 3 has set the following rationale in relation to planning and delivery of food and fluid in hospital:

- to plan menus effectively, multidisciplinary input is required, together with comprehensive knowledge of the hospital population
- effective multidisciplinary communication is vital for the efficient provision of food and fluid in hospital to ensure that patients' nutritional requirements are met, and to help minimise waste
- the nutritional content of dishes needs to be analysed to ensure their nutritional adequacy
- meals need to be distributed to the wards and served without delay, to ensure nutritional content, temperature and quality are maintained

3.5. More detail on good practice about menu planning is available in chapter 4.

3.6. To meet energy and nutrient requirements it is essential that nutritional analysis is based on the standard portion served. If smaller portions are chosen due to small appetites, there may be a requirement to offer more frequent between meal snacks. If this is the case the nutritional analysis should demonstrate how food provision has been adapted to meet the specification. Consideration of portion sizes is important in order to prevent overwhelming those with smaller appetites, which can result in less food being consumed, but can also be a contributing factor to food waste (see Measuring success with standardized recipes).

3.7. The following Table 3.1 combines total daily energy and protein contributions from main meals, milk, and snacks, based on the Nutrition and Hydration Digest (3rd Edition). It reflects targets for both nutritionally well (healthier eating) and nutritionally vulnerable (higher energy) adults.

Table 3.1 - Adult Nutrition targets for menu planning

Menu component	Approx. % of daily nutrition	Nutritionally well (healthier eating minimum provision)	Nutritionally vulnerable (minimal provision)
Breakfast	Not applicable	400kcal (10g protein)	545kcal (18g protein)
Milk throughout the day (excluding that used in cooking) - **minimum** 400ml/ day • nutritionally well (semi skimmed) • nutritionally vulnerable (whole milk) - additional milk can be offered to support any increased requirements.	Not applicable	190kcal (14g protein)	260kcal (14g protein)
Snacks - providing a minimum of 2 snacks daily but timing of these could be flexible	Not applicable	Combination of two snacks providing a total 200kcal (2g protein)	Combination of two snacks providing total 370kcal (10g protein)
Total (fixed items above)	**40%**	**780kcal (26g protein)**	**1175kcal (42g protein)**

Menu component	Approx. % of daily nutrition	Nutritionally well (healthier eating minimum provision)	Nutritionally vulnerable (minimal provision)
Lunch main meal - complete meal nutrition targets (could be made up from a combination of several courses). As a minimum hospital menus should have systems in place to be able to provide the following options (based on needs assessment): • healthier eating (must fulfil criteria as specified in Table 5.2) • energy/ nutrient dense (must fulfil criteria as specified in Table 5.1) • vegetarian option at each eating occasion • Regular Easy to chew (International Dysphagia Diet Standardisation Initiative (IDDSI) level 7a) option	Not applicable	550kcal (15g protein)	800kcal (27g protein)
Total for lunch meal	**30%**	**550kcal (15g protein)**	**800kcal (27g protein)**

Menu component	Approx. % of daily nutrition	Nutritionally well (healthier eating minimum provision)	Nutritionally vulnerable (minimal provision)
Dinner Main Meal - complete meal nutrition targets (could be made up from a combination of several courses). As a minimum hospital menus should have systems in place to be able to provide the following options (based on needs assessment): • healthier eating (must fulfil criteria as specified in Table 5.2) • energy/ nutrient dense (must fulfil criteria as specified in Table 5.1) • vegetarian option at each eating occasion • Regular Easy to chew (IDDSI level 7a) option	Not applicable	Not applicable	Not applicable
Total for dinner meal	**30%**	**550kcal (15g protein)**	**800kcal (27g protein)**
Total (variable) for both main meals	60%	1100kcal (30g protein)	1600kcal (54g protein)
Daily Total (40% fixed + 60% variable)	100%	1880kcal (56g protein)	2775kcal (96g protein)
Daily Targets as set in Table 2.1 above	Not Applicable	1840kcal (45-56g protein)	2772kcal (79-96g protein)

Food-based Criteria

3.8. The following food-based criteria are known to contribute to a diet of good nutritional quality and have been set to assist hospitals achieve the nutrient criteria detailed in Section 2 for 'nutritionally vulnerable' and 'nutritionally well' patients.

Table 3.2 - Food based criteria

Food based Criteria
Potatoes, bread, rice, pasta and other starchy carbohydrates

• 5 portions of starchy food items should be provided servings across the course of the day, including provision of higher fibre options.
• A selection of wholegrain breakfast cereals (fibre >3g/100g) must be available at breakfast time. This may also include porridge.
• A selection of extra breads, including brown and wholemeal, must be available as an accompaniment to all meals.
• Provision of a range of other starchy foods should also be available including:
  ○ all bread - white, wholemeal, granary, bagels, chapattis, naan, pita bread and tortilla
  ○ potatoes and sweet potatoes, rice, couscous and semolina, noodles and pasta (including wholegrain varieties)

Fruit and vegetables
The menu must provide the opportunity for patients to choose at least five servings of fruit and vegetables preferably seasonal (80g per portion) across a day's menu providing as wide a variety as possible. This provision can be provided as fruit and vegetables within a dish as well as separate elements of a meal/ menu item.
Beans, pulses, fish, eggs and other protein foods
Hospital menus must offer opportunities to choose meat free alternatives to support healthy eating goals. Hospital menus must offer the choice of fish a minimum of twice a week, one choice of which should be an oily fish variety.

Food based Criteria
Milk, dairy and dairy alternatives
There should be provision of 2 portions of milk/ dairy alternatives per day. There must be a provision for a minimum of 400ml of milk or milk alternatives for each patient for drinks and cereal every day. • A choice of whole milk and lower fat milk (semi-skimmed or skimmed) must be available. • When dairy alternatives are used, they should be unsweetened and must be fortified with calcium and B12 as a minimum but ideally also with iodine.
Foods containing fats, foods and drinks containing sugar
• Offer a choice of spreads including those low in fat, at all meals where a spreading fat is offered. • Spreads should be rich in polyunsaturated fatty acid (PUFA) or monounsaturated fats (MUFA). • Only spreads and oils that are rich in polyunsaturated and monounsaturated fats should be used in cooking.
Fluids
There must be a provision of water and other beverages, including lower sugar alternatives. This supports good hydration in line with local procedures.

Summary

3.9. There are many aspects of menu planning including the HIS Food Fluid and Nutritional Standards set out standards that support the requirements to meet Nutritional targets and food-based criteria:

- any hospital menu aims to ensure that differing dietary needs are catered for and thus maximising opportunities to ensure nutritional needs can be achieved. Initial data to inform the menu planning group about the needs of the hospital population will have already been collected as part of your needs assessment (See chapter 2)
- the standard portion offered to patients is what should be nutritionally analysed. Patient choice may determine a smaller portion size
- serving a portion size greater than indicated by a patient's individual requirements or appetite, can have a negative impact in terms of food waste and sustainability
- the hospital menu provides for breakfast, lunch, and evening meal and at a minimum will include two additional substantial snacks throughout the day
- it will enable the range of energy and protein requirements of patients to be met such as 'nutritionally well' and 'nutritionally vulnerable'

- ensure that the dietary needs of individuals who follow diets for cultural or religious reasons are met such as vegetarian diet, vegan diet, Halal or Kosher
- the following menu planning and food-based criteria have been set to assist hospitals achieve the nutrient criteria detailed in Section 2 and also a number of the standards set in HIS Food, Fluid and Nutritional Care Standards

3.10. These menu planning and food-based criteria also aim to ensure that patients' differing dietary needs are catered for and thus maximise opportunities to ensure nutritional needs can be correctly met, and food waste minimised.

The following is an overview of the optimal evidence required by NHS boards to meet compliance against the requirements of the specification.

Table 3.3 - Example of evidence requirement for self-assessment

Example of Evidence

• Evidence of the population needs assessment.
• Evidence of multiprofessional involvement within the menu planning process e.g. minutes of meetings.
• Menus, snack ordering process/ form.
• Ward provisions list, details of ward ordering process.
• Demonstration that recommendations in Table 3.1 are met such as:
  ○ patient menus or patient information detailing wholegrain cereal options [bread cereals] or protein elements [meat, fish alternatives]. Patient menus or supplementary information detailing the availability of all required bread options [extra bread]. Patient menus, snack provisions list [5 serving of fruits] and/ or how portions of fruit and vegetables are incorporated within meal/ menu item or snack
  ○ evidence of the milk supply process, milk delivery notes/ schedules and top up process [milk]. Ward provisions list [butters and spread] MUFA/ PUFA Product information [see information from supplier]

4. Menu planning guidance

Introduction

4.1. This chapter focusses on menu planning. Effective menu planning is essential to meet the dietary and nutritional needs of the hospital population and begins with a multiprofessional approach involving representation from key groups involved in food provision to ensure that all stakeholders are involved from the beginning and that all requirements are met.

4.2. To be able to demonstrate that menus created meet the dietary needs of the population being served, it is essential to collect a wide range of information and input from numerous groups within a hospital a list of useful data to be collected is outlined in Appendix A . Healthcare Improvement Scotland's (HIS) Food, Fluid and Nutritional Care Standards - Standard 3 has set the following rationale in relation to planning and delivery of food and fluid in hospital:

- to plan menus effectively, multidisciplinary input is required, together with comprehensive knowledge of the hospital population
- effective multidisciplinary communication is vital for the efficient provision of food and fluid in hospital to ensure that patients' nutritional requirements are met, and to help minimise waste
- the nutritional content of dishes needs to be analysed to ensure their nutritional adequacy
- meals need to be distributed to the wards and served without delay, to ensure nutritional content, temperature and quality are maintained

4.3. Whilst the hospital menu should be designed to meet nutritional requirements it is important to remember that those the menu is designed to feed are unwell and may have a suppressed appetite resulting in individuals not consuming enough to meet their nutritional needs British Dietetic Association (BDA) Digest. It is important to remember that the menu should be reviewed and updated regularly to continue to meet the dietary needs of a potentially changing hospital population.

The planning process

4.4. The following Table 4.1 (reproduced from BDA Nutrition and Hydration Digest with permission) provides an overview of the menu planning process. The entire process should have a focus on nutrition, taste, and appeal to patients. Cost is an important consideration within the process; unappetising food won't be eaten.

Table 4.1 - Overview of the menu planning process

Key points	Process
Establish a menu planning group	The process starts with the establishment of a multidisciplinary menu planning group. Key representatives may include catering manager, food service dietitian, chef, nurses, food safety specialist, food service staff, patient representative/ champion/ groups, specialist dietitians, patient experience team, Speech and Language Therapists (SLTs), sustainability lead, and communication team. Group members will keep clinical staff informed of changes as process unfolds.
Assess patient groups	This is a key stage of menu planning as it will determine the content of your menu and ensure that you meet the needs of that population and ensures that NHS boards have clear rationale why they have provided the menus that they use, and any exceptions that may arise. Using this data acknowledges diversity across NHS boards, and even differences across different hospitals within each NHS board: • patient demographics - age, gender, cultural background • length of stay - acute (generally short stay), community (generally longer stay), rehabilitation, mental health settings. Consider the structure of the patients' day and meal timings for the different patient groups like maternity and mental health • groups of people - children, older adults, maternity, mental health, learning disabilities and teenagers • requirements of clinical specialities - for example: emergency medicine, renal, oncology, cystic fibrosis, dysphagia, cognitive decline, dementia and stroke • dietary needs - nutritional requirements, proportion of nutritionally well versus nutritionally vulnerable, therapeutic diets, religious, cultural and personal needs such as halal, vegan, notifiable allergies and modified texture diets • assess the requirement for out of hours/ flexible meal provision and create suitable processes

Key points	Process
Review national standards and local influences and service user feedback	• Review National Standards - see Chapter 3 for further information on key national food legislation and standards. • Review the NHS board Food and Drink Policy or Strategy. • Review any local food or dietetic policies. • Review any additional food safety policies. • Local influences will include obtaining patient feedback on what they usually eat, and what they might like to see on a menu.

Consider budget and resources	Links/ issues with procurement - not just what is wanted but also what is able to be supplied as a result of procurement limitations/ cost limitations:
	• type of contract and overall catering and nutritional specification
	• total budget per patient meal/ day/ week
	• what are the systems in place that link procurement of food and service specifications
	• ensure menu items/ingredients are able to be supplied within existing procurement systems and cost limitations
	• staff resources and staff skill level
	• site logistics/ facilities and infrastructure (locations, storage, chiller and freezer capacity)
	• food system such as:
	  ○ cook fresh - traditional; central production onsite or off site
	  ○ cook - freeze/ cook - chill
	  ○ hybrid

Key points	Process
	• food service equipment availability • method of distribution and style of service • availability of kitchen space and food storage facilities • meal ordering system - such as electronic, paper ordering • budget for printed menus, ward resources and any menu related staff training materials
Consider sustainability	• See Chapter 4 Environmental Sustainability in the BDA Digest for further information. • Link to Eatwell Guide and Good Food Nation guidance on sustainability. • Link to local food waste strategy. • Note the amount and type of food. • Take into consideration local population's eating pattern, and cultural food and eating/dietary habits when considering menu design and content. • Link to sustainability principles in realistic medicine and value-based care as followed by clinical teams.

Key points	Process
Decide on menu type	• Link back to patient needs assessment, and patient feedback support decisions on type of menu - such as cyclical, à la carte or hybrid. • Consider the take up of current meal order volumes and popular/ unpopular dishes. • Obtain feedback from ward-based food service staff in relation to any operational considerations. • Consider lifestyle food trends in the UK and globally and weigh up in conjunction with population needs assessment. • Review food wastage and patient satisfaction surveys. • Use relevant data from audits or electronic meal ordering systems to inform menu choices. • Ensure patient and staff feedback is considered during menu compilation.
Decide on menu structure (number of courses) and content	• Consider style of menu such as cyclical/ a la carte. Need to ensure that this works with patient groups and length of stay. If a la carte menu is used additional procedures may need to be in place for patients with longer admissions. • Consider the structure of breakfast, lunch and dinner menus. • Review the most suitable meal service times for different wards. • Menu content to meet recommendations as in chapter 3 (table). • Ensure a variety of snacks are provided which meet patient needs, and nutritional parameters. This may mean smaller meals and more snacks to meet nutritional needs of patients and ward routine (see Chapter 5). • Ensure patients are offered regular hot and cold drinks (at least seven drinks a day and access to chilled water 24 hours a day).

Key points	Process
	• Identify key diets as identified in needs assessment that are routine on the standard menu (healthier eating, higher energy, easy to chew and vegetarian). Additional optional coding may be considered, for example, vegan, higher protein, or halal. In some settings not all menu coding may be necessary or appropriate, such as children's menu or in mental health settings having identified requirements of patient group as part of needs assessment.
Plan the menu	• Review new, delisted and amended supplier products and/ or chef recipes. • Review meals that have negative feedback (audit results and patient feedback) or low uptake numbers. • Plan the menu, thinking how best to incorporate what is required as well as what is wanted using as an example (Appendix 1 BDA Nutrition and Health Digest - Qualitative Menu Assessment Checklist) and chapters 2 and 3 of this document. • Ensure the agreed menu codes are available at each meal service. • Review the menu against nutritional standards. • Analyse recipes to be used to ensure that they individually meet suitable specifications.
Conduct a menu tasting, ideally with the client groups to be served	• Assess the product range, quality, taste, texture, aroma and appearance of the food. • Consider suitable portion sizes, nutritional value and menu coding. • SLTs are encouraged to be involved to review the modified texture main meals and snacks. • Edit the menu draft to reflect the tasting results. • Patients/ service users/ patient experience groups/ patient advocates ideally involved.

Key points	Process
Analyse menu capacity	• Conduct a menu capacity analysis of the draft menu to ensure that it meets all relevant nutrition standards (see BDA Digest Chapter 11) and/or group identified as per needs assessment). • If the nutrition standards are not met - make the necessary changes to the menu to ensure compliance. • Send the final version of the menu to the menu planning group for final approval. • Start liaising with the back of house catering team to ensure operations are ready for the menu changes (such as purchasing of new ingredients/ products, running down old stock, updating meal ordering systems).
Introduce menu	• Publish menus in an agreed format which could be paper or electronic. Consider a design that best supports patients in deciding what to order. • Provide training to food service staff, covering key updates on the menu and any operational changes. • Ensure any old menus are disposed of and that new menus and allergen information are available on the wards.

4.5. HIS Food, Fluid and Nutritional Care Standards, recommend that mealtimes are appropriate for patient groups. There should be sufficient time between each meal to allow for in-between snacks that are critical for enabling patients to meet their nutrient requirements.

Between meal snacks

4.6. Snacks provide an essential addition to the menu by adding flexibility, interest and variety. Also, several 'nutritionally vulnerable' patient groups can easily improve their nutritional intake by the consumption of snacks in this way. In order to meet the nutritional needs of many patient groups it will be necessary to supplement the energy consumed from meals with that from snacks (see Measuring success with standardized recipes). In addition, the provision of fruit, preferably seasonal, as a snack can help patients achieve the five a day fruit and vegetable target:

- snacks must be provided at a minimum twice per day to all patients, one of which should be in the evening. Exact timings of snacks will depend on mealtimes in each area
- two snacks combined must be capable of providing a minimum of:
    - 200 kilocalorie (kcal) and 2g protein per day for nutritionally well patients per snack
    - 370kcal and 10g protein per day for nutritionally vulnerable patients
- snacks can be comprised of ward provision supplies
- a choice of fruit, where possible seasonal and locally sourced, must also be provided

4.7. The types of foods that are made available should be guided by the local patient population group and cater to their specific dietary needs.

4.8. When possible, consider sourcing snacks that use environmentally sustainable packaging. Individually wrapped items are a preferred option for reducing risk of avoidance of cross contamination in terms of food allergy or intolerances, and specific diets for certain religious practices.

Outwith main meal/ missed mealtime provision

4.9. HIS Food, Fluid and Nutritional Care Standards (Standard 3) - Planning and Delivery of Food and Fluid in hospitals - criteria 3.2 (h) states the operational group is responsible for "Ensuring there is appropriate food and fluid available outwith main mealtimes". In some circumstances patients may be away from their bedside during mealtimes, for instance to attend therapy sessions, have tests or x-rays and provision must be made for all patients who do not have the opportunity to have a meal at the normal mealtime. The appropriate meal or meal replacement will depend on the patient group and on the type of food service system available. For some patients a sandwich and yoghurt may be sufficient until the next

mealtime, whilst for others, for example, those on texture-modified food, caterers will need to work with SLTs and dietitians to ensure that there is a choice of suitable options available to meet the dietary needs of the patients. Outwith main mealtime food provision must supply the minimum 500kcal and 15g protein. Local procedures on how patients and/ or nursing staff can access out of hours foods and fluids need to be developed and communicated to the patients.

Adaptation of nutrient content

4.10. Some patients will need the nutritional content of menu items adjusting to meet their nutritional requirements such as healthy eating or energy dense options. Suggestions for these items might include the following.

Higher energy

4.11. Higher energy items include:

- providing a wide choice of breakfast items, including a choice of higher calorie breakfast cereals, such as sweetened muesli, porridge made with milk or a cooked option
- using whole milk and full-fat milk products, such as yoghurts
- adding spreading fat or butter to sandwiches, mashed vegetables and baked potatoes
- providing milk-based sauces to accompany vegetables or meats, such as white sauce or cheese sauce
- adding cream to milk puddings and soups
- offering cream or ice cream to accompany dessert
- making cream-based sauces for use with pasta or rice
- adding gravy and sauce enriched with a protein powder to meat dishes
- enriching milk with milk powder
- adding sugar to stewed fruit

Healthier eating

4.12. Healthier breakfast items include:

- high-fibre breakfast cereals >6g fibre per 100g, such as porridge, unsweetened muesli, fruit and fibre, shredded wheat or bran flakes
- scrambled eggs, grilled mushrooms, tomatoes and baked beans (ideally lower salt varieties)

4.13. Use a variety of low fat or no-added fat cooking methods as often as practical:

- discard poultry skin and trim visible fat from meat
- drain visible fat from cooked meat dishes as production allows
- braise, steam or bake as production allows
- use thick-cut chips when deep-frying
- strong cheese, such as parmesan adds flavour to cheese dishes and sauces in smaller amounts
- don't add butter or spread to vegetables before service

4.14. Use appropriate lower fat options in place of standard products where palatable, such as:

- tomato-based sauces for pasta dishes
- yoghurt, milk and cheese
- bakery products, such as tea breads, plain/ fruit scones and oatcakes
- low fat mayonnaise and salad dressings

4.15. Healthier sandwiches should consist of lower fat filling and high-fibre bread and/ or salad or vegetables.

4.16. Use salt sparingly:

- if stock or bouillon is used, salt should not be added
- try to source lower salt-content bouillon

4.17. Use a variety of no-added sugar cooking methods as often as practical:

- add alternative flavours to stewed fruit in place of sugar, such as cinnamon to apple
- offer a higher proportion of fruit-based puddings to jam or syrup-based puddings

4.18. Use appropriate low sugar options in place of standard products where palatable, such as:

- sugar-free jelly
- sugar-free diluting juice and other drinks
- fruit canned in natural juice

4.19. Artificial sweeteners must be available at ward level for those patients choosing to use them.

4.20. Healthier eating snacks should be provided twice per day and meet the recommendation that both snacks combined provide 200kcal and 2g protein. They should also aim to comply with Eatwell guide for fat, sugar and salt.

Note 1: Dietitians may decide to exercise clinical judgement about whether to code some dishes as healthier eating. For example, battered fish may meet the criteria, but it may be felt that this provides a confusing or contradictory dietary advice to patients.

Standard recipes

4.21. HIS Food, Fluid and Nutritional Care Standards (Standard 3) - Planning and Delivery of Food and Fluid in hospitals criteria 3.3 states:

"All dishes and menus are analysed for nutritional content in line with Food in Hospitals".

4.22. It is essential to follow a standard recipe in NHS catering; their use can help to ensure consistent:

- **quality** - a dish prepared with the same ingredients using the same method should produce the same end product each time
- **nutritional value** - to ensure that meals meet the nutritional specification
- **safe provision of therapeutic diets** - coding for therapeutic diets must always be reliable
- **allergen content** - dishes with an allergen profile that matches the information provided to patients, staff and visitors
- **budgetary control** - clearer planning for budgets and costing of menus
- **portion control** - to meet person centred needs and preference along with limiting food waste as part of local food waste and sustainability strategies

4.23. There are significant patient health and safety risks associated with not following standard recipes. Following a standard recipe is especially important for the safe provision of therapeutic diets. Nutrient profile and allergen content of a dish will be affected by non-compliance with standard recipes such as missed or incorrect quantities of ingredients and alteration to cooking methods. The level of clinical risk is highest to patients requiring a therapeutic diet, in particular a texture-modified diet or for those who have allergies/ intolerances. The importance of the need to follow standard recipes for the food provided in the hospital setting cannot be overemphasised.

Creating a standard recipe

4.24. Creating a standard recipe involves developing, testing, adapting the recipe according to need, and testing again to ensure a consistent product is being produced, no matter who cooks it. Measuring success with standardized recipes allow a product to be made to the same specification every time. Table 4.2 details the criteria to be included in a standard recipe.

Table 4.2 - Essential information to be included in a standard recipe

Standard recipes	
1.	A title which describes the recipe content.
2.	All ingredients of the recipe, including water and seasoning; and all quantities in metric units.
3.	Ingredients clearly stating name and brand of product, product type/ form (fresh, frozen, canned), and any preparation technique(s) (peeled, grated, minced, diced). Size for preparation techniques should also be specified. This information is key to identifying the allergen content.
4.	Detailed methodology, with: • directions listed in the order the recipe is prepared • equipment and utensils used for preparing, cooking and serving food The yield and portion capacity of cooking equipment can change with length, width, and depth of pans: • cooking temperature and approximate cooking time • critical control points as part of Hazard Analysis Critical Control Point (HACCP), such as safe thawing, internal cooking, holding, serving and storage temperatures
5.	Recipe yields, for instance the amount of the product available for service at the completion of production in weight or volume and number of servings.
6.	Volume and/ or weight of a single portion and the equipment used to serve this portion. Portion size and weight/ volume should be based on how the product fits with a full meal, how it looks on a plate and nutritional content. It may be useful for certain dishes to add details of possible different portion sizes and therefore recipe yield.

Recipe development

4.25. The amount of time needed for this review process will differ depending on the source of the recipe. National recipes can be shared between NHS boards where processes are similar to allow for good practice to be shared and duplication of effort reduced. However, the time required should not be underestimated to ensure it is right for your setting. When developing a standard recipe the following process should be followed:

1. **recipe review** - existing format/ content against the required information above
2. **recipe preparation** - once the recipe is reviewed, it can be prepared (it is recommended the first version is made to yield 25 servings). During this process keep careful and specific notes on:

   a. any variations made to the original recipe - record onto the working recipe
   b. information noted as missing during the review process

3. **determination of recipe yield** - involves several steps to ensure accurate measurements and planning:
   a. weighing the final product or measuring its volume will determine the yield
   b. ingredient quality, preparation techniques, cooking times and temperatures affect yields, so observations to be noted if needed
4. **portion size** - determine the portion size or weight by taking the weight of the total final product and dividing by the number of servings the recipe makes. The portion must be checked to ensure it:
   a. is appropriate for the patient group being served
   b. fits well with the rest of the meal
   c. meets the nutritional specification for that menu item
   d. does not result in food waste
5. **recipe evaluation -** once the recipe has been trialled it must be tasted and evaluated for its suitability. This should involve the catering manager, dietitian, cook(s) and patients where possible. It is important to consider:
   a. appearance on the plate and in bulk form as appropriate
   b. taste and taste suitability to patient/consumer group
   c. texture
   d. suitability to catering production and distribution type
6. **yield -** this refers to the amount of food a recipe produces including weight, volume, pan size, or the number of portions:
   a. if a different yield is needed the recipe will require quantity adjustment and need to be prepared again
   b. notes of any changes or concerns should be recorded on the recipe sheet during the preparation phase and taken into account during evaluation

Recipe analysis

4.26. Standard recipes as defined above must be in place and in use within a kitchen for the reasons outlined above, but also so that both recipes and menus can be nutritionally analysed.

4.27. Nutritional analysis of standard recipes should only be undertaken or supervised by registered, experienced dietitians who can appropriately interpret both the input data and the results produced by software programmes.

4.28. As part of the Nutritional analysis cooking losses and gains must also be included within calculations. An assessment of losses/ gains is given in 'The Composition of Foods' Volume 7 Appendix, Section 4.3. Most software programmes can account for these losses or gains. Small losses such as water loss during chill and frozen storage need not be accounted for, but larger losses such as fluid lost during baking of sponges, or open cooking of meat or fish dishes should be included. Assessing cooking losses or gains can be done either by test weighing the finished product before and after cooking or by using data from Composition of foods. It is important to remember that variations in finished weight are inherent in traditional catering practices.

Menu capacity analysis

4.29. Dietitians are required to analyse the menus capability to deliver the nutrients in accordance with the levels detailed in this specification, both for a general menu and any therapeutic menus offered.

4.30. Methodologies for analysing menu capacity are described in the BDA's 'The Nutrition and Hydration Digest: Improving Outcomes through Food and Beverage Services'.

Portion sizes

4.31. HIS Food, Fluid and Nutritional Care Standards (Standard 4) - Provision of food and fluid to patients in hospital criteria 4.3 states:

"Patients are given a choice for all food and fluid options provided, including therapeutic and texture-modified diets. There is a choice of portion size for all main courses".

4.32. A portion size indicates the weight of food from a particular recipe, which would be served within a meal for example, casserole, potato, or rice. This is generally reported as a weight (grams) or volume (ml) and may also be described in terms of household or serving units.

4.33. Whilst offering a range of portion sizes is good practice, it can be difficult to carry out and can drive food waste. Information gathered as part of the hospital population needs assessment will ensure that portion sizes are appropriate for the client group.

Essential criteria

4.34. When defining portion sizes from a recipe it is important to consider patient appetites. There is evidence that patients in some hospital settings do not eat all the food they are served so determination of portion sizes should also be informed by patient outcomes (see Measuring success with standardized recipes).

4.35. Increasing the energy and nutrient-density of meals can encourage nutritional intake for patients with decreased appetite. Small increases in standard portion sizes have been shown to result in improved energy and protein intake. However excessively increasing the standard meal size may overwhelm the patient and potentially result in an increased amount of food waste.

4.36. Meal portions must be set in order that they can deliver the required nutrition as specified in this document to the relevant patient population in a size that is visually appealing, is of a portion size that is suitable for the client group, and with meal components in proportion to the size of the plate bearing in mind that not all food offered will always be consumed.

4.37. Therefore, the appropriate portion sizes for individual meal items must:

- be set locally taking account of patient outcomes and in agreement between dietitian(s) and catering including any relevant stakeholders
- meet the nutrient requirements as set in these Food in Hospital Specification and balance this against annual food wastage figures (see Planning Menus to Prevent Food Waste)
- be supported by guidance and training at the local level including which utensils/ crockery should be used for serving different recipes, dishes and food items is necessary
- NHS boards with in-house production should be working towards a single recipe across all local sites. It is understood that localised production methods may differ due to kitchen size or layout and so may require more than one recipe for the same dish. This should be kept to a minimum and a brief explanation given as to why there is more than one recipe. This supports consistency with nutritional analysis and allergen listings

Meal presentation

4.38. The quality of the presentation of the final dish presented to the patient is extremely important. If the dish does not look appealing, it will not encourage an individual to eat hence it may not be eaten and thus its nutritional value will be nil, and food waste volume will increase.

Summary

4.39. To support effective menu planning, it is essential that dietary and nutritional needs of the hospital population are met. This begins with a multiprofessional approach involving representation from key groups involved in food provision additionally there are other factors including:

- effective menu planning is essential to meet the dietary and nutritional needs of the hospital population and requires the collection of a wide range of information and input from numerous groups, consideration of the wider issues that can affect patient food choice and hence food intakes. Gathering of information about the differing dietary needs of different hospital patient groups can help menu planners develop an appropriate food service that is in a form that is familiar to patients, to meet the nutritional needs of patients and promote food enjoyment
- menu planning groups need to recognise the often-complex needs of specific patient populations to be cared for including 'nutritionally vulnerable' patients and those on specialised therapeutic diets
- the menu structure also needs to consider the dietary needs of the population group and needs to provide choice for all patients in order to help patients improve their intakes
- it is essential to follow a standard recipe in NHS catering to ensure consistent quality, consistent nutritional value and consistent budgetary control
- in addition to meals, snacks provide an essential addition to the menu by adding flexibility and interest
- it is important to remember that the menu should be reviewed and updated regularly in order to continue to meet the dietary needs of a potentially changing hospital

4.40. The following is an overview of the optimal evidence required by NHS boards to meet compliance against the requirements of the specification.

Table 4.3 - Example of evidence requirement for self-assessment

Example of evidence
• Evidence of discussions around menu planning involving key staff groups including clinical/ nursing input (agenda, meeting notes and so on) [multidisciplinary approach]. • Provision of all menus across the NHS board. • Provision of all menus across the NHS board showing the choices clearly labelled [choices such as 'healthier'] or demonstration of other ways these are provided if not on core menu. • Snack lists for all sites across the NHS board, patient information showing how snacks are made available to patients [snacks]. • Nutritional data on the in-between meals provision/out of hours meal provision across the NHS board. • Details on the provision of fruit as part of menus, ward provisions and snacks. snack menus, ward provisions and menus. • Examples of standardised recipes in use across the NHS board presented as outlined in Table 4.2. • Evidence of how flexibility with portion sizes has been considered as part of the menu planning process such as use of smaller portions, but increased number of snacks. • Evidence of nutritional analysis of both recipes and menu capacity for all styles of menus. • Demonstration that menu capacity analysis meets the needs of nutritionally well and nutritionally vulnerable adults provision of nutritional analysis on the current menu provision in the NHS board for both nutritionally well and nutritionally vulnerable patients as outlined in Table 2.1.

5. Person centred care in the provision of therapeutic, special and personal diets

Introduction

5.1. This chapter is advice for many of the most required types of therapeutic diets, but there are many more that may be required on an ad hoc basis such as low Fermentable oligo-saccharides, di-saccharides, mono-saccharides, and polyols (FODMAP), avoidant/ restrictive food intake disorder (ARFID), and carbohydrate counting to mention a few. These are most likely to be best managed on a patient-by-patient basis using local expertise. Some information is available in British Dietetic Association (BDA) Nutrition and Hydration Digest - Chapter 12.

5.2. Food is complex, personal and elicits strong emotional responses at any time. This becomes more acute when someone is in hospital and may feel that it is more challenging to eat the types of foods that are usually consumed at home, particularly if there may be a lack of understanding about what foods are required. We need to be mindful that food practices and preferences are highly individual choices - there is no 'one size fits all' solution.

5.3. In hospitals, we often talk about 'Therapeutic diets', 'Special diets' and 'Personal diets'.

5.4. A therapeutic diet is modified from a 'normal' diet and is prescribed to meet a medical or special nutritional need. It is part of a clinical treatment and in some cases can be the principal treatment of a condition.

5.5. Special diets refer to those meeting cultural or religious needs, while personal diets are those meeting personal preferences.

5.6. In reality all food has the possibility of being therapeutic, special and personal, so we have limited the use of those terms in this document. However we frame these different diets; NHS boards need to ensure that "patients have access to food and drink that reasonably meets their personal preferences and their religious or cultural background." (see Appendix 5: Regulation 14 of the CQC (Meeting Nutritional and Hydration Needs). This needs to be achieved whilst balancing the need to reduce waste, improve sustainability and set realistic expectations as outlined in 'Delivering Value Based Health and Care: A Vision for Scotland (2022)'.

5.7. A more realistic approach is to use the information gathered in the hospital population needs assessment to support patient centred care and ensures menus meet the nutritional

needs of most patients. This will need to be supported by protocols and processes which allow for individual dietary needs to be met as required.

5.8. Person centred care is defined in Excellence in Care as "the philosophy that considers patients' needs, wants, perspective and individual experiences" but it needs to be balanced against what is possible and provides best value for money. Similarly sustainable food principles and how the hospital food system contributes to NHS boards net zero strategy need to be included however, this needs to balance with the patient needs as the defining priority.

5.9. The Healthcare Improvement Scotland (HIS) Food, Fluid and Nutritional Care Standards - Standard 3 criteria 3.6 states "There are protocols, which are implemented and monitored, for the provision of: (a) all therapeutic diets, for example texture-modified diets, gluten-free diets, low potassium diets, oral nutritional supplements, high-energy and high-protein food and fluid, and (b) any requirement outwith the planned menu, such as nut allergy or vegan meals.".

5.10. HIS Food, Fluid and Nutritional Care Standards - Standard 4 criteria 4.3 states "Patients are given a choice for all food and fluid options provided, including therapeutic and texture modified diets".

Criteria

5.11. Menus should reflect local population needs and healthcare organisations need to develop their own protocol for the requirement and provision of all diets for their population:

- there must be a hospital protocol for the provision of all diets. It is strongly recommended to seek the patient views when planning menus as part of the menu planning process
- patients must be given choice for all food and fluid options provided
- hospitals whose populations require certain diets irregularly and in minimal numbers need to ensure that protocols are in place for the provision of these diets in the event they are required. This may be through discussion with individual patients or by having additional menus such as an a la carte menu
- all meals provided must be capable of meeting the nutritional and dietary requirements of patients using them (see Malnutrition and Nutritional Care Survey in Adults - National survey of malnutrition and nutritional care 2022)
- where relevant, catering service contracts must be sufficiently detailed and cover the provision for all types of diets
- preparing and serving meals for diets such as food allergy and to people of different faiths will require staff training to high food service standards to avoid unacceptable and potentially dangerous cross-contamination

- robust processes and appropriate labelling of food in hospital is vital to help patients feel confident that whatever they choose does not contain any inappropriate ingredients
- consider local food culture and traditions, seasonal foods and regional dishes that may be familiar to a large proportion of your local population. Liaison with procurement will be necessary in these considerations

The types of diets that caterers are asked to provide is constantly changing. This section provides some guidance for diets that are commonly requested in hospital settings at time of writing and comments on some practical implications for planners and caterers in putting together meals and menus incorporating diverse patient needs. It has been acknowledged that it is not possible to outline every type of diet that will be requested, some diets may also be covered in the BDA Nutrition and Hydration Digest but there will be the need to seek local expertise for some types of diet.

Dietary coding

5.12. Dietary coding provides information for patients, carers and staff to enable them to make an informed food choice whilst in hospital. It is important when coding a menu that:

- there is up-to-date nutritional and content analysis of the menu item
- a standard recipe is followed each time the dish is made (refer to standard recipe information in previous chapter 4)
- menus are kept as easy to read as possible. Minimise overuse of too many letters/ codes on a menu as these can appear confusing to a patient and can be irrelevant to most of the hospital population
- suitable patient information accompanies menus to support patients in making the best meal choice. This may include description of menu coding, and dish descriptors to ensure that those reading the menu understand the dish to be ordered
- nutrition education for nursing and catering staff must accompany dietetic codes so that patients receive consistent messages
- suitability of every dish need is considered in the context of the whole diet
- consideration be given to ways to support those with reading or communication difficulties to understand the menus. One example of this might be the use of pictorial menus

5.13. The key dietetic codes displayed on a hospital menu should be relevant to the population that is being served as per local hospital population needs assessment data.

5.14. Dietitians may deem it appropriate for other therapeutic diets to be coded on the hospital menu; this needs to be determined at the local level with consideration of the above points noted.

5.15. While some patients may be interested in information about the sustainability of their food, including too much detail on menu cards could create clutter and make meal choices more difficult. Instead, NHS boards might consider developing a local statement or directing patients to where they can access information about the hospital's approach to sustainable food such as a Sustainability Policy, Vision Statement, or relevant sections of their Net Zero Strategy.

5.16. An à la carte menu can be useful in the effective delivery of any additional therapeutic diets required by a hospital, as it will enable caterers to provide patients with more choice. Not all dishes will necessarily be coded.

Kitchen space and equipment

5.17. When planning any facilities and purchasing contracts, health facilities and catering departments should consider what might be required to provide a range of dietary requirements and set targets to ensure the environment allows them to be met (see Healthy Eating, Active Living: An action plan to improve diet, increase physical activity and tackle obesity).

5.18. There are many types of diets that require additional preparation, storage or distribution space and equipment, especially if isolation from production of other diets is required, such as in the case of allergen-aware diets and risk of cross-contamination of food items. The presence of even the smallest amount of allergenic food is a risk for an individual who has a food allergy and can have serious consequences. Minimising the risk of cross-contamination is as vital as ensuring intentional ingredients do not include the allergen(s). The Food Standards Scotland (FSS) advice is to:

- clean all work surfaces and equipment thoroughly using hot, soapy water before you start to prepare food. This is to remove traces of anything you might have cooked before
- keep any allergens separate from other foods and follow advice for avoiding cross-contact in the kitchen. This may be allergens as part of the 14 named allergens as named in Regulation (EU) No 1169/2011 of the European Parliament and of the Council also known as "Natasha's Law"
- double check ingredients listed on pre-packed foods such as sauces for potential allergens
- keep a note of the ingredients used in your dish so you can answer any questions your guests may have about the food
- keep allergens separate from other foods and follow advice for avoiding cross-contact in the kitchen
- double check ingredients listed on pre-packed foods such as sauces for allergens

- whilst being aware of excess packaging contributing to waste and impacting net zero targets, an exception may need to be made here such as single packaged items may be required, to prevent cross contamination

5.19. Food hygiene practices, with respect to cross-contamination of different food groups are also an important part of several different dietary practices. Ensuring these practices are respected and adhered to, including how different foods need to be prepared, ensuring separate storage, and that separate cooking utensils and equipment are used for particular foods needs to be considered in the planning stages. This includes such diets as vegetarian/ vegan diets and diets for different faiths as well as food hypersensitivities.

Higher energy and nutrient-dense diet

5.20. Energy and nutrient-dense diets are indicated for a range of patient groups which is likely to include:

- patients with a reduced appetite who find it difficult to eat sufficient foods to meet their energy and nutrient requirements (see Nutrition guidelines for hospital catering)
- patients with increased energy and protein requirements, for example those who have had major trauma such as:
    - head injury
    - burns patients
    - cancer patients

5.21. These individuals require additional energy, protein, vitamins and minerals to meet their increased needs or to enable them to replace lost body weight and improve their nutritional status.

5.22. A diet higher in energy should also be nutrient dense and be able to at least meet the minimum protein target for nutritionally well patients (15g/ meal). Criteria to support this are outlined below.

Food provision criteria

Table 5.1 - Criteria for higher energy code (per portion)

Option	Energy (kcal)	Protein (g)	Rationale/ guidance notes
Higher energy snacks (2 per day)	≥370	≥10	Provides meaningful nutritional support between meals. Two per day contribute ~600 kilocalorie (kcal) and ≥14g protein, critical for patients with reduced appetite or elevated needs.
High energy soup	≥150	≥6	Enables patients to meet energy/ protein targets in small portions. Suitable as a starter or light option.
Protein such as meat/ fish/ chicken/ alternative	~300	12 - 14	Delivers the primary protein source for the meal. Must support both energy and protein density.
Total meal such as protein + vegetables + starch + condiments	≥500	≥15	Not applicable

Ref: Nutrition and Hydration Digest (3rd Edition) specifically tables 10.2 (page 182), 10.3 (page 183), and 12.5 (page 216):

- to support those with poor appetites it is considered good practice to provide eating opportunities outwith regular mealtimes. This is usually achieved by providing between meal snacks
- additional milk, or suitable milk alternatives over and above the 400ml provided as standard should be made available those patients who require it

Catering guidelines

5.23. If a hospital menu is to provide a diet that is higher in energy and more nutrient dense then there must be provision at each eating occasion of a 'higher energy and nutrient-dense' choice that meets the specific criteria outlined in Table 5.8. Caterers and dietitians need to work together to meet this requirement and must ensure that the overall weekly menu has the capacity to meet the nutrient standards for the higher energy and nutrient-dense diet, detailed in Section 4.

Healthier eating

5.24. Healthier eating is recommended for the general population and following the 'Eat Well Guide' advice aligns with environmental sustainability of eating more food from plants than animal sources. The healthier eating diet is also recommended for the dietary management of a number of medical conditions and in such situations, it can be interpreted as a therapeutic diet, for example:

- patients with Type 1 or Type 2 diabetes
- patients with dyslipidaemia and cardiovascular risk
- patients who are managing their weight
- patients with hypertension
- patients suffering from constipation or irregular bowel movements

5.25. As outlined in Section 2, the healthy eating diet is designed to meet specific nutrient criteria with reference to levels of fats, sugar and salt as well as overall dietary balance over a week. This is to account for the day-to-day variation in individual's food intakes and recognition that these targets are unlikely to be met on a daily basis (see Nutrition and Hydration Digest (3rd Edition)).

5.26. As indicated in Section 5, dietary coding of menu choices is primarily used to support patients and staff to make informed choices in their food selection and specification for this is outlined in Table 6.1.

5.27. In some instances, a healthy eating diet may be inappropriate for individuals within this group due a separate condition, associated co-morbidities or additional factors affecting their overall nutrition requirements. The assessment of individual patient's dietary needs within 24 hours of their admission to hospital should ensure that these individuals' needs are identified and thus can be met.

Food provision criteria healthy eating

5.28. A standard main meal must provide a minimum of 500kcal and 15g protein per meal; this is inclusive of potatoes, pasta and vegetables Some of the provision criteria has already been covered in table 3 (chapter 3) but more detail of how this provision should look is in Table 5.2.

5.29. Table 5.2 provides the per-portion nutrient standards for hospital meals under the Healthier Eating Code, based on the Nutrition and Hydration Digest (3rd Edition). It includes the individual criteria for starters, main meals, and desserts, as well as a combined 'Total Meal' row showing example nutrient totals for a full meal.

Table 5.2 - Healthier Eating Code (Per Portion) with Total Meal Summary

Meal Component	Energy (kilocalories (kcals))	Protein (g)	Fat (g)	Added Sugar (g)	Rationale
Starter	~100 (if soup)	≥3 (if nourishing)	≤5.3g (≤1.3g saturated)	≤8	Light and low-fat; contributes modest protein and energy, especially if soup based.
Main meal (protein + vegetables + starch + condiments)	≥300	≥15	≤16g (≤5g saturated)	≤15	Main protein and energy sources align with balanced dietary goals for healthier eating.
Dessert (such as sponge and custard)	~200–250	≥3 (with custard)	≤5.3g (≤1.7g saturated)	≤15 (total sugar proxy)	Moderate fat and sugar levels with added protein if dairy-based; suitable for a balanced meal.
Total meal (starter + main + dessert)	~600–700	≥24 (≥24g supports Reference Nutrient Intake (RNI) for a typical adult meal	≤26.6g (≤8g saturated)	≤38 (total sugar proxy)	Cumulative profile ensures nutrient adequacy and moderation; meets total meal-level targets for energy, protein, fat, and sugar.

Protein rationale - reference nutrient intake

5.30. Providing ≥24g protein per main meal supports menu capacity to meet the RNI of 45–56g/ day for nutritionally well adults. This value reflects a balanced distribution of protein across two main meals and allows flexibility for individual needs or when snack intake is low. The BDA Nutrition and Hydration Digest (3rd Edition) recommends a minimum of 15g protein per main meal, but planning for ≥24g offers greater assurance that the total daily requirement will be met.

5.31. Table 5.3 compares the nutritional standards per portion for both Higher Energy and Healthier Eating menu codes, as outlined in the Nutrition and Hydration Digest (3rd Edition). It includes individual meal components and the combined total meal values.

Table 5.3 - Combined Table - Higher Energy vs Healthier Eating Codes (Per Portion)

Meal Component	Energy (kcal)	Protein (g)	Fat (g)	Added Sugar (g)	Menu Code
Starter	≥150	≥6	≤5.3g (fortified)	≤8	Higher Energy
Starter	~100	≥3 (if nourishing)	≤5.3g (≤1.3g sat)	≤8	Healthier Eating
Main meal	≥500	≥18	≤16g (≤5g sat)	≤15	Higher Energy
Main meal	≥300	≥18	≤16g (≤5g sat)	≤15	Healthier Eating
Dessert	≥300	≥5	≤5.3g (≤1.7g sat)	≤15	Higher Energy
Dessert	~200–250	≥3 (with custard)	≤5.3g (≤1.7g sat)	≤15	Healthier Eating
Total meal (starter + main + dessert)	~950+	≥29	≤26.6g+	≤38	Higher Energy
Total meal (starter + main + dessert)	~600–700	≥24	≤26.6g	≤38	Healthier Eating

5.32. Overall, total fat, salt and added sugar (g) (Minimise added sugars; aim for <15g where measurable. Use natural sweeteners (fruit, cinnamon) where possible and limit syrups, sweetened sauces, and jams) should be low and fats added should be polyunsaturated and monounsaturated rather than saturated.

Note 2: It may be necessary for Dietitians and caterers to exercise clinical judgement when deciding which dishes are given a healthier eating code. For example, battered fish may meet the above criteria, but in some settings, it may be felt that this provides a confusing message to patients who are being given contradictory dietary advice.

Catering guidelines

5.33. Catering and dietetic departments must work together to offer a balanced menu that incorporates a healthier eating option if this is identified as a need for the hospital population, but with the backdrop of an individual being able to choose a healthy balanced diet overall. It is the responsibility of the dietitian and catering department to ensure all food items coded as a healthier eating option continue to meet the criteria. Ultimately, they must ensure that the overall weekly menu has the capacity to meet the nutrient and food-based criteria for the healthy balanced diet, as detailed in previous chapters.

Food hypersensitivity

5.34. Not everyone is able to eat all types of foods safely. Some people experience an adverse reaction when exposed to certain foods. This reproducible reaction can either be called a food allergy, when the immune system is involved, or a food intolerance, when the immune system is not involved.

Food allergy

5.35. A food allergy occurs when the body's immune system reacts unusually to specific foods. The body reacts to certain allergens in food by producing antibodies, which can cause immediate and severe symptoms such as swollen lips or eyes, vomiting, skin hives and in most extreme cases difficulties breathing (which requires emergency treatment). Therefore, there are significant risks to patients if diets free from relevant allergens are not provided when required.

5.36. The incidence of food allergies is increasing, with the UK having some of the highest prevalence rates of allergic conditions in the world. Incidence of hospital admission due to food anaphylaxis has increased from 1.23 to 4.04 per 100,000 population per year during the period of 1998-2018 (see Food Anaphylaxis in the United Kingdom: Analysis of National Date, 1998-2018). In addition, about 1:100 of the UK population has coeliac disease and needs to avoid gluten (see About Coeliac Disease website).

5.37. Anybody can develop a food allergy at any time in their life irrespective of whether they have consumed the food previously. A person with an allergy is at risk even if they consume a small amount of the food allergen. In addition, the impact of cofactors such as stress are likely to exacerbate allergic disease, increasing the likelihood of severe reaction in the presence of an allergen.

Food intolerance

5.38. In addition, a large percentage of the population have a food intolerance. Food intolerance differs from food allergy in that it does not involve the immune system and can be used to describe many different conditions where food causes unpleasant symptoms such as bloating and stomach pains that happen each time that food is eaten. Reactions due to food intolerance may be severe but they are not generally life-threatening. They can, however, affect long-term health and do represent a health risk if not considered when required and thus these patients' dietary needs should be catered for in the hospital setting.

Allergen management

5.39. It is vital that information related to people's food allergies is collected as early as possible, documented in patients medical record and communicated quickly and effectively to hospital caterers, ward staff and hospital dietitians. Having a food hypersensitivity policy would support good practice.

UK food law

5.40. Food allergies can be life threatening for individuals and must be taken seriously by food services. Scottish legislation (The Food Labelling (Declaration of Allergens) (Scotland) Regulations 2011) requires all food services, including hospitals, to provide information about the presence of any of the 14 specified allergens in any of the food they serve.

5.41. Caterers must be able to evidence the exact ingredients used, including the brand names and pack sizes where applicable (this also includes any alternative ingredients used) (see Food Information to Consumers - Legislation), They must also take note of any precautionary 'may contain' labels on packaging.

5.42. The guidelines below outline the role that caterers play in food allergen management, but all members of staff are responsible for safe mealtime procedures to protect patients.

Catering guidelines

5.43. Minimising the risk of adverse reactions to food is essential for caterers. This can be done through following robust food safety protocols such as Hazard Analysis Critical Control Point (HACCP). Hospitals must be able to provide suitable meals for those with food hypersensitivity. These diets may be provided for by having robust food preparation processes that ensure that there will not be cross contamination of these diets with potential allergens. If this is not possible due to kitchen layout or equipment, consideration should be given to purchasing specialist meals that allow the provision of an allergen aware menu that is free from all of the 14 allergens governed by UK food law.

5.44. Food service staff should be proficient in allergen management, including the provision of allergen information, the risks of cross-contamination and cleaning methods. Information including online training can be obtained from Food Standards Scotland (FSS), to support food service staff (see Allergens Matrix). Food provision criteria for these diets remain the same as for all other diets.

Coeliac disease

5.45. Coeliac disease is an autoimmune disease caused by adverse reaction to gluten which causes the lining of the small intestine to become damaged. A gluten free (GF) diet is the only treatment for patients with coeliac disease and dermatitis herpetiformis. Some patients may choose to follow a GF diet for other health reasons such as gluten sensitivity, irritable bowel syndrome or due to undiagnosed coeliac disease.

5.46. The term 'gluten-free' is covered by legislation that was introduced in 2012 for the labelling of gluten-free foods (see Commission Regulation (EC) No 41/2009 concerning the composition and labelling of foodstuffs suitable for people intolerant to gluten) and includes not only food ingredients, but how they are handled and prepared. This law is based on the revised international Codex Alimentarius standard for gluten free, published in 2008.

Gluten-free diet

5.47. Gluten is a protein that is found in certain cereals, namely wheat, barley, and rye. Some individuals with coeliac disease also need to avoid oats. Consumption of even a minute quantity of gluten by someone with coeliac disease can result in gut inflammation presenting as symptoms of malabsorption such as diarrhoea, weight loss, reflux, constipation, and fatigue.

5.48. A menu item should never claim to be gluten-free unless this has been confirmed. Coeliac UK (the charity of people with coeliac disease and dermatitis herpetiformis) has an up-to-date database of manufactured foods free from gluten and publishes an annual handbook for its members, Food and Drink Directory. Becoming a member of this organisation is free for those working in healthcare and can provide useful information for Dietitians and Caterers.

Figure 5.1 - The Crossed Grain symbol

5.49. Only foods that contain gluten in amounts that are 20 parts per million (ppm) or less can be labelled as 'gluten-free'. The gluten-free label may also be used for uncontaminated oat products. For oat products labelled gluten-free the oats themselves must also contain no more than 20ppm of gluten.

Oats

5.50. Until recently oats were thought to have the same harmful effect as other gluten-containing cereals and therefore have traditionally been excluded from a gluten-free diet.

5.51. Although some people with coeliac disease can include GF oats in their diet, oat products are at high risk of contamination from other gluten-containing cereals including wheat and barley, so care needs to be taken when offering these products.

5.52. Coeliac UK provide further information regarding the use of oat-based products and recommend only using those labelled as 'gluten-free' for people with Coeliac Disease', - online refer to 'Oats and the Gluten Free Diet' November 2024.

Catering guidelines

5.53. With the correct processes in place to ensure the correct ingredients are used and processes in place to avoid cross contamination, gluten-free catering in a hospital kitchen environment may be possible. A risk assessment should be carried out to look at the feasibility of producing gluten-free meals on site and if not possible then pre-packed meals can be used as an alternative.

5.54. Identifying individual meals as having ‘No Gluten Containing Ingredients’ (NGCI) on menus or using the ‘NGCI’ coding is not permitted. However, it is acceptable to produce a separate menu listing dishes that do not contain any gluten containing ingredients and where controls are in place to avoid cross contamination with gluten containing ingredients.

5.55. A Gluten Free diet needs to exclude all dietary sources of gluten. Caterers need to ensure that gluten- containing foods are substituted with a suitable alternative, whilst still maintaining dietary balance to meet the nutrient specifications as outlined in chapter 2. This will require caterers to be aware of any ingredient changes in relation to non-gluten containing menu items and the importance of communicating this information and ensuring any necessary meal modifications are undertaken.

Texture-modified diets

5.56. Texture-modified diets are essential for individuals experiencing dysphagia due to conditions affecting chewing or swallowing, such as neurological issues, certain cancers, severe infections, or post-surgical conditions. Dysphagia is particularly challenging in older adults, where reduced saliva production, poor tongue control, and inadequate lip seal can impair the ability to manipulate food safely, significantly increasing the risk of aspiration.

5.57. For further information please refer to BDA Digest page 234 - Dysphagia - Clinical information for Speech and Language Therapists (SLTs), Royal College of Speech and Language Therapists (RCSLT) on International Dysphagia Diet Standardisation Initiative (IDDSI) website.

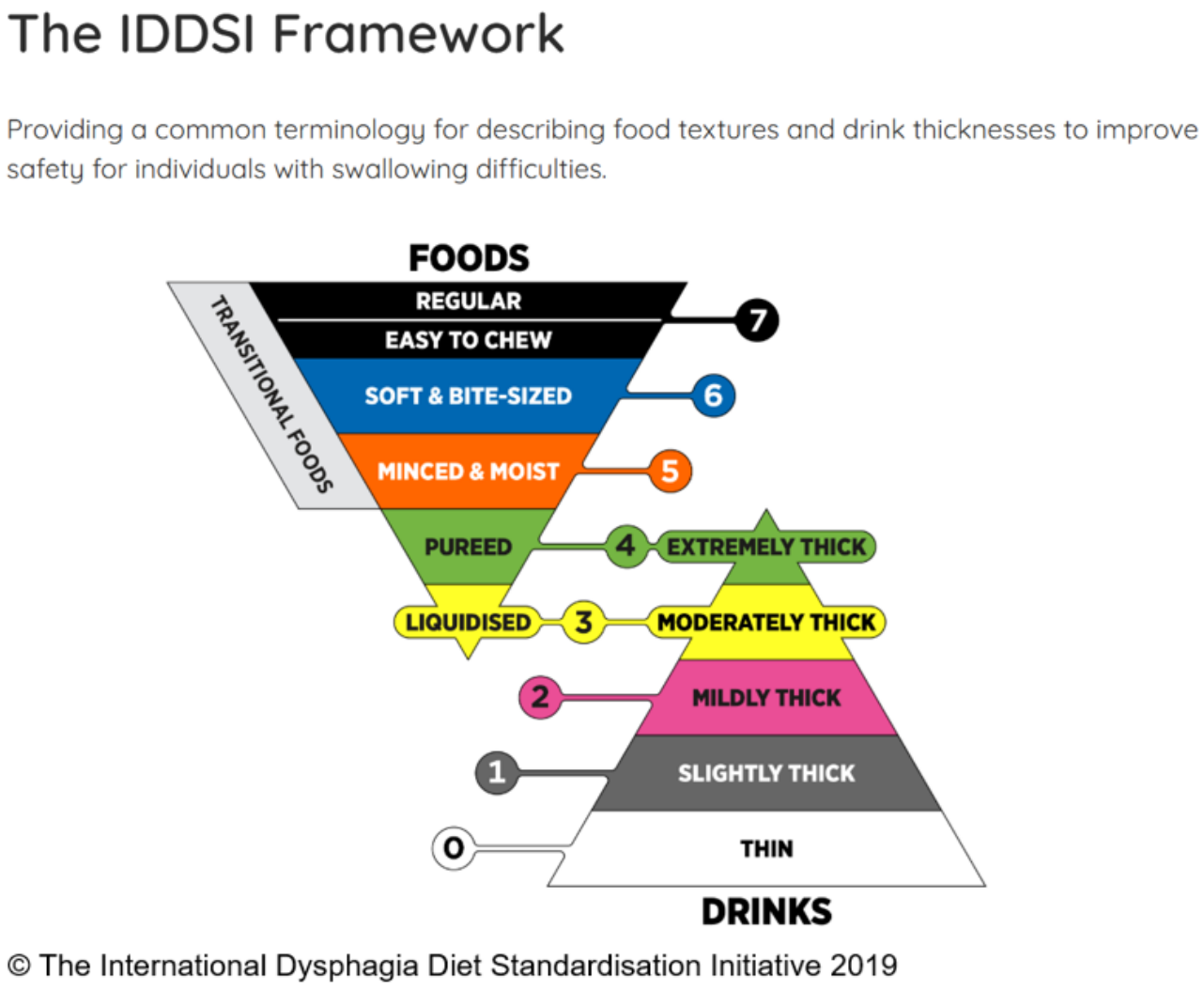
Criteria

5.58. The IDDSI framework standardises the textures for patients with dysphagia.

Table 5.4 - Key criteria under the IDDSI and the Food, Fluid and Nutritional Care Standards (2014)

Requirement	Details
Patient Assessment	Patients admitted to hospital must have any difficulties with eating/ drinking identified and have nutritional screening tool completed and recorded within 24 hrs of admission and relevant actions completed (see HIS Food Fluid and Nutritional Care Standards (2014))
Nutrient Specification	The menu must meet the nutrient specification for all levels (4, 5 and 6) except level 3. The standard menu should contain regular level 7 foods with an adequate amount of easy to chew options.
Correct Texture	Food and fluid will be provided at the correct texture.
Patient Choice	Patients are given a choice for all food and fluid, including therapeutic and texture modified diets.

Figure 5.2 - Complete IDDSI Framework Detailed definitions 2.0 (2019)



5.59. The framework applies for both adults and children but there are slight differences. Always refer to the official IDDSI website for the most up to date framework, level descriptions, testing methods and resources (see The IDDSI Framework (the Standard)).

5.60. Special consideration should be given to menus for paediatrics as choking hazards in children differ to adults due to their smaller trachea size. Again, IDDSI have provided detailed guidance on their website.

Transitional foods

5.61. Transitional foods which are foods that change texture in the mouth may not be suitable for people on a texture modified diet. These can include ice cream, jelly, mousse and cream, whilst on thickened fluids.

Diets for kidney disease

5.62. Many patients with kidney disease will be in the 'nutritionally vulnerable' group due to the nature of their illness and compounded by the specific dietary modifications this patient group may require adhering to. Some dietary restrictions may be more critical than others depending on the patient's medical condition and stage of kidney disease.

5.63. Modification of any or all the following may be required:

- protein
- potassium
- phosphorus (phosphate)
- sodium (salt)
- fluid

5.64. Patients on dietary restrictions for kidney disease may need alternative and/ or additional snacks to meet their energy and protein requirements.

5.65. Reaching the desired protein intake when combined with a potassium or phosphate restriction may be outside the capacity of the standard menu. Requirements may be best met by offering an à la carte menu which will also help avoid menu fatigue amongst long stay patients, or items could be coded as Renal Suitable (RS) on the standard menu. Input from a specialist renal dietitian who has a good understanding of these patients' dietary needs is essential.

Coding criteria

5.66. The following table demonstrates the total amount of potassium in the full meal. This can be broken down into meal components: Entrée <10 millimoles (mmol), vegetable side <8mmol, carbohydrate side <10mmol. NW: Nutritionally Well or NV: Nutritionally Vulnerable.

Table 5.5 - Criteria for diets for renal diseases: BDA Nutrition and Hydration Digest

Course	Energy (kcal)	Protein (g)	Sodium (mg)	Potassium (mg)	Potassium (mmol)
Main Course	• 300 (NW) • 500 (NV)	• 21 (NW) • 12 (NV)	644	1092	28
Dessert	• 20 (NW • 300 (NV)	• 6 (NW) • 3 (NV)	161	312	8

Course	Energy (kcal)	Protein (g)	Sodium (mg)	Potassium (mg)	Potassium (mmol)
Total	• **300 (NW)** • **500 (NV)**	• **21 (NW)** • **12 (NV)**	**805**	**1404**	**36**

5.67. The specifications above assume an option of two cooked meals every day. If this is not offered, amounts for the 'main meal' may be increased and those for the 'snack' meal decreased accordingly to meet overall requirements.

5.68. The provision of energy-dense snacks and high-protein desserts will be necessary to ensure protein and energy requirements are met. Additional protein items may need to be provided for vegetarian and vegan diets, those on a fluid restriction and on dialysis.

5.69. 40% of the protein requirements of the nutritionally vulnerable group are typically met by breakfast, snacks and milk (approximately 1 pint or 550ml in total = 20g protein). However, for patients requiring dietary restrictions (such as potassium, phosphate or fluid), milk allowance may be limited to ½ pint or 275mls/ day which causes a deficit of 10g protein. This deficit must be replaced and is best achieved by increasing the protein portion of the main meals (see BDA Nutrition and Hydration Digest (3rd Edition)). If this is not possible, where appropriate, higher protein snacks or including milky puddings such as yogurts, or the option of a cooked breakfast should be considered.

Catering guidelines

5.70. Caterers must work with dietitians to provide and maintain a nutritionally balanced menu which meets the very specific criteria set by the Renal Nutrition Group of the BDA. If a hospital menu item is coded as RS, it is the responsibility of caterers to ensure these menu choices always meet the criteria. Catering guidance is provided in Table 5.6 below.

Table 5.6 - Practical Guidance for Food and Fluids in Kidney Disease

Aims/ essential criteria	Practical advice
Meet the increased energy requirements of patients with renal disease.	Meals, snacks and nourishing drinks provision should be adequate in meeting renal patients' daily requirements for calories and protein. Ensure suitable additional snack provision for both inpatients and patients visiting dialysis units. See suitable snack items listed above.
Identify food and fluids high in potassium which may need to be limited	**Fruit and vegetables**: • fruit may need to be reduced to two-three portions per day. Reduce intake of higher potassium fruits such as bananas, avocados, dried fruits and fruit juices • vegetables should be cooked by boiling instead of steaming to help reduce their potassium content. High potassium vegetables which may need to be limited are beetroot, tomatoes (including tomato puree), and mushrooms • beans and pulses (such as lentils, chickpeas, kidney beans), are high in potassium but can be used as a meat alternative protein source for vegetarian and vegan dishes • limit salads to one small portion per day **Starchy foods**: • as with vegetables, boiling potatoes will reduce their potassium content • boiled potatoes should always be available as an alternative to steamed, roast or baked potatoes for renal patients • 1 serving daily of (3 egg-sized equivalent) potatoes that are boiled, mashed or parboiled chips or roast potatoes can be included in a menu • rice, pasta and noodles provide a good low potassium alternative to potatoes

Aims/ essential criteria	Practical advice
	• breakfast cereals containing lots of dried fruit, nuts or chocolate should be limited such as muesli, fruit and fibre and chocolate-based cereals • high bran breakfast cereals should also be limited such as bran flakes. Rice or corn-based cereals are good alternatives **Snacks**: • Limit potato crisps, chocolate, nuts, cakes/ biscuits containing lots of dried fruit, nuts or chocolate **Fluids**: • Coffee and coffee flavoured products, hot chocolate and cocoa, malted milk drinks, fruit juices and smoothies. Milk may also need to be limited Note 3: Information in this table adapted from Renal Nutrition Group of the BDA 'First line lower potassium diet advice' and Kidney Care UK 'Lowering your potassium levels'.
Identify food and fluid high in phosphate which may need to be limited.	Phosphate is found in many food additives and is very readily absorbed by the body in this form. It can be difficult to get the precise amount of phosphate in foods from manufacturers nutritional information so other sources for the data will need to be consulted. Processed meats (including ham and sausages), cake and batter mixes and processed cheese may all contain additives rich in phosphate. The following foods high in phosphate may need to be limited: • hard and processed cheese spreads • milk and yoghurts • malted milk drinks

Aims/ essential criteria	Practical advice
	• kidney, liver, processed meats - such as ham or corned beef • chocolate, fudge and toffee • nuts and peanut butter • foods containing baking powder such as scones
Ensure patients can adhere to a diet with no more than 6g salt per day in line with general guidance for sodium (salt) intake.	If a higher salt option is on the menu, such as traditional curries, meat pies, sausage, ham, or processed items, it should be balanced by also offering menu choices lower in salt. Salt substitutes can be high in potassium and should not be used. Herbs, spices, and pepper are all suitable alternatives to salt (see Water UK website).

Note 4: Few manufacturers provide data on phosphate content and values obtained will need to be calculated from Composition of Foods integrated Data Set (commonly referred to as Composition of Foods Integrated Data Set (also known as McCance and Widdowson). Alternative specifications and arrangements will need to be made at a local level for the provision of vegetarian and vegan meals for renal patients.

Diet suitable for people with neutropenia

5.71. This type of diet is used for some patients who are immuno-suppressed and therefore at increased risk of infection for example:

- haematology patients
- some cancer patients
- organ transplant patients
- bone marrow transplant (haematopoietic stem cell transplantation)
- patients with acquired immunodeficiency syndrome (AIDS)

5.72. Following food safety advice is the current recommendation for patients that have been previously advised to follow a neutropenic, clean or low microbial diet.

Catering guidelines

5.73. The same attention to food safety applies to this diet as for all other meal preparation to protect all patients from pathogenic bacteria and the risk of food poisoning. All healthcare caterers should have up to date local HACCP protocols and follow general food safety advice, including:

- relevant food safety training
- effective cleaning of trays, cutlery and crockery
- procedures to ensure hot food is thoroughly cooked and at appropriate temperature'

Some more specific advice may be applied to patients with a neutrophil count of <1.0.

Table 5.7 - Food safety advice for neutropenic patients (neutrophils<0.1)

Suitable foods to eat	Foods to avoid
Milk and other dairy products: • pasteurised milk, soya milk, Jersey milk or Ultra-High Temperature (UHT) milk • yoghurt • cream and ice cream • Kefir	**Milk and other dairy products:** • probiotic drinks and yogurts or supplements such as Yakult, Actimel or Proviva (check label on yogurts)

Suitable foods to eat	Foods to avoid
Cheese • all hard pasteurised cheeses such as cheddar, Stilton (if pasteurised) and parmesan • soft pasteurised cheeses such as Cottage Cheese, Mozzarella, Feta, Cream Cheese, Paneer, Labneh, Ricotta, Halloumi, and processed cheese spreads • thoroughly cooked, soft blue cheeses (until steaming hot)	**Cheese** • mould-ripened soft cheeses with a white coating on the outside, such as Brie or Camembert and Chèvre (unless cooked until steaming hot) • soft blue cheeses such as Danish Blue, Gorgonzola and Roquefort (unless cooked until steaming hot) • any foods made from unpasteurised milk, such as soft goats' cheese
Eggs • raw, partially cooked and fully cooked British Lion eggs (eggs with a lion stamp on them) • supermarket brands such as mousse and mayonnaise • eggs that are not British Lion, if the whites and yolks are cooked thoroughly until solid	**Eggs** • raw or partially cooked eggs that are not British Lion
Vegetables/ Fruit • ensure all fruit/ vegetables and salads are washed (including prepacked ready washed salad)	**Vegetables/ Fruit** • damaged bruised fruit and vegetables

Monoamine Oxidase Inhibitors diet

5.74. Monoamine Oxidase Inhibitors (MAOIs) are a set of drugs that are used in the management of chronic depression and patients with severe phobias. However, their use has declined significantly over the past few decades due to the development of newer generation antidepressants that do not have the same drug-food interactions and have fewer side effects (see Joint Formulary Committee, British National Formulary (BNF) 70).

5.75. MAOI drugs compromise the body's normal metabolism of a substance called tyramine which is found in several foods. Build-up of tyramine levels in the blood can result in significant rises in individuals' blood pressure to dangerously high levels. In the past a long list of foods to avoid was suggested. However, due to improvements of food hygiene and testing methods for tyramine there are now fewer foods than previously thought that cause

issues. Cheese is the only food that has, in the past, been associated with documented fatalities from hypertension, and now almost all 'supermarket' cheeses are perfectly safe in healthy-sized portions of approximately 25g.

5.76. Most recent research on dietary restrictions when taking MAOI drugs suggests that there are very few foods that need to be avoided in normal quantities. The foods to moderate or avoid if they are used in hospital menus are in Table 5.8.

Table 5.8 - Dietary recommendations for individuals taking MAOI drugs (adapted)

Moderation (g per individual meal/ portion)	Avoid
Cheeses • mature Cheddar (25g) • mature Edam (25g) • consider the amount of cheese within cheese sauces	**Cheeses** • quantities of any cheese more than 25g portions • Parmesan/ Pecorino cheese
Meat and meat substitutes • Pepperoni (30g) • Pastrami (30g) • Quorn/ texture vegetable protein/ soya 'meat' (70g)	**Meat and meat substitutes** All other aged/ fermented meats including Chorizo and Salami
Miscellaneous • Soy Sauce (10ml)	**Miscellaneous** • fermented fish/ fish sauce/ sauces containing fermented fish such as Worcestershire Sauce • yeast extracts such as Marmite/ Vegemite • fermented soybean condiments such as Miso • brewers/ nutritional yeast products

Diet and mental health/ intellectual disabilities

5.77. Patients with mental health conditions, like all hospital patients, come from diverse backgrounds and can present with the same cultural, ethnic and therapeutic dietary needs as the general population and their dietary needs should be supported using the most appropriate sections of this document.

5.78. Those with severe and enduring mental illness and/ or intellectual disabilities can have unique needs, which if not catered for can significantly impair their ability to achieve a varied and balanced nutritional intake.

5.79. Common mental health conditions include schizophrenia, dementia, eating disorders, depression, anxiety, mania paranoia and may exist with or without associated intellectual disabilities.

Specific nutritional challenges

5.80. This client group may require some additional considerations when planning menus. More information about this can also be found in the Nutrition and Hydration in Mental Health and Learning Disability Inpatient Settings: Supplement to the BDA Nutrition and Hydration Digest.

Over or under eating

5.81. Symptoms associated with mental health conditions can result in patients over or under eating. Examples include:

- symptoms of low mood, anxiety and mania can lead to either over or under eating
- delusional beliefs or impaired decision making around food and nutrition can result in food refusal or overeating
- individuals with dementia may forget to eat, and as their condition progresses struggle to feed themselves or even recognise food and fluid
- additionally, medications used can lead to taste changes, hunger, or poor appetite, constipation and nausea. Side effects need to be managed on an individual basis

5.82. For all of the above dietitians are key to supporting nursing and catering teams to manage the impact on nutrition.

Food avoidance and selective eating

5.83. This is common within this patient group and can lead to poor nutrition and physical health complications such as weight loss, constipation or specific vitamin and mineral deficiencies leading to ailments, sore gums and teeth, hair loss, poor wound healing, lack of concentration and or lethargy around eating.

Increased length of stay

5.84. When patients with long term mental health conditions are admitted to hospital, they often have longer admissions than those with other physical health conditions. Length of stay can range from months to years and includes those in secure hospitals. This can result in 'menu fatigue' whereby patients get bored with repetitive menu options.

Increased need for healthy eating

5.85. This patient group is more likely to be living with overweight or obesity and as a result they also have higher rates of diseases such as diabetes, dyslipidaemia and cardiovascular disease. This is because patients tend to choose foods higher in sugar and fat and lower in fibre and is combined with a lack of physical activity. In addition, for many of these patients the hospital menu may not be their only source of nutrition, with takeaways and other convenience foods being eaten instead of, or over and above the hospital provision.

Swallowing issues

5.86. Swallowing difficulties are more common in those with intellectual disabilities - often linked to eating too quickly or not chewing adequately rather than secondary to physical conditions such as stroke. Many patients with dementia will also have trouble swallowing and may require texture modification.

5.87. Other conditions that may be seen more often in mental health settings include Huntington's Disease, Motor Neuron Disease and Parkinson's. Modified consistency meals are defined under IDDSI guidelines.

Eating disorders

5.88. Eating disorders present very specific challenges to caterers and dietitians. Individual diet plans may be required, and guidance should be sought from those with special expertise in this area as there may need to be different approaches to both mealtime options and snacks.

Catering guidelines

5.89. The above considerations highlight the need for NHS boards to ensure that menu design is meeting the needs of the hospital population by collecting relevant data as per appendix A as it may be necessary to adopt a menu which reflects healthy eating practices.

5.90. Flexibility around timing and the options available for meals and snacks can help improve intakes. If patients can be supported by the clinical team to make their own meals and/ or snacks this can also improve intakes and encourage better food choices.

5.91. Due to longer hospital admissions in these units, strategies to prevent menu fatigue are helpful. These may include such things as seasonal menus, theme nights, ‘fakeaways’ or buffet nights.

5.92. Individuals with food phobias, those who have delusional beliefs around food and/ or sensory issues can find that plates of food that have a variety of textures, colours, temperatures and tastes are difficult. Consideration may be required on different ways to present meals, or to present meals in sealed packaging.

5.93. Finally, to support patients in understanding the menus, the use of pictures or pictorial menus, preferably in colour, can be a useful aid when making choices which coincide with menu picking.

Religious and cultural diets

5.94. As previously mentioned, the role of food is complex and varies amongst individuals and communities. These highly individual preferences can also vary between people of the same faith. Scotland is an increasingly diverse country whose population is made up of a range of religions and cultures.

5.95. As a result, there are likely to be several special diets that our hospitals will be asked to cater for. The requirement for these diets will be informed by the population needs assessment. However, two of the most requested religious diets in hospitals are Halal and Kosher.

Halal

5.96. A Halal diet is followed by people of the Muslim faith. Halal food refers to a food that is lawful to consume, while Haram refers to foods which are unlawful.

5.97. Foods that are forbidden to consume under Islamic dietary laws include (see Halal Certification for Businesses Seeking Global Reach website):

- food and food products from the pig such as ham, bacon, lard, gelatine products and certain food additives
- meat not slaughtered by proper Halal methods
- blood and its by-products
- alcohol both for consumption as a drink and in foods

5.98. Food and cooking hygiene is an important part of Islamic dietary laws, and Haram and Halal foods must follow good HACCP controls. A patient may refuse to eat a food if they are not fully confident that the food has been produced in the correct way.

5.99. Halal menus should contain main meals sourced from an approved Halal food supplier who can provide Halal certified labels. There may be elements of the main meal service that will be suitable for a Halal diet including:

- pre-packed dairy products like cheese, milk and yoghurt
- most vegetarian or vegan dishes
- most fish or seafood dishes

Festivals and fasting

5.100. Muslims are required to fast from sunrise to sunset during the month of Ramadan, this is known as sawm. This involves abstinence from all food and drink during daylight, with the intake of a substantial meal before sunrise and one again after sunset. Caterers should be aware of this and have protocols to cater for meals during this month as they may occur outwith normal mealtimes.

5.101. Some patient groups may choose not to fast such as The Shap Working Party on World Religions in Education Mission Statement:

- older people and children under 12 years old
- pregnant, breastfeeding or menstruating women
- chronically ill people where fast is physically harmful to them, such as people with diabetes
- acutely unwell people

5.102. In addition, some devout Muslims may fast once or twice a week in addition to Ramadan.

5.103. Several resources have been produced by the National Diet and Nutrition Resource Initiative (Nutrition and Diet Resource UK (ndr-UK)) for example the 'Eatwell guide' model that has been tailored to represent the dietary practices of South Asian ethnic minority groups and are also produced in languages other than English.

Kosher

5.104. The term Kosher means that food is fit to consume and follows Kashrut dietary laws for Jewish consumers who observe these laws (see The Kashrut Division of the London Beth Din website). Again, the degree to which individuals adhere to food laws will vary. It is important not to assume what individuals' dietary needs are.

Kosher dietary laws

5.105. Kosher dietary laws are complex. Probably the strictest Kashrut law is keeping meat and milk separate. This requires the processing, handling and storage of all materials and products to fall into being a meat product, a milk product or a neutral product (which doesn't carry either milk or meat characteristics). Neutral products can be eaten directly before or after both meat and milk, and include:

- fruits and vegetables
- salt and other non-organic foodstuffs
- fish
- eggs

In addition, utensils, crockery, pots and pans used for milk or meat must be kept separate, this includes storage, washing and drying.

5.106. There are variations in the length of time needed between the consumption of meat and milk products depending on the individual's origin. For most Anglo-Jewish individuals this is between three and six hours.

5.107. Food permitted includes:

- meat from ruminant animals with split hooves that chew their cud, such as cattle, goats, sheep, and deer
- traditional domestic birds, such as domestic chicken, duck, turkey and goose
- animals and birds slaughtered by the Jewish method, by a trained professional
- fish with fins and removable scales, such as tuna, salmon, cod and plaice
- eggs from Kosher birds
- honey
- unprocessed cereals and grains
- fruit and vegetables that have been thoroughly cleaned and free from insects, although fruit from a tree less than three years old is not Kosher
- processed products with a Kosher label
- milk and milk-derived products from Kosher animals

- Certified bread and cakes
- margarines certified as being produced under rabbinical supervision

5.108. Food not permitted includes:

- meat from pigs
- the following seafood: Monkfish, shark and shellfish
- cheese made with rennet from a non-kosher animal

5.109. Due to the very strict dietary laws, it is not possible to source kosher ingredients and fresh cook in a hospital kitchen. As a result, individual kosher meals will need to be purchased from a certified kosher meal provider with the required credentials and where food production must be overseen to ensure strict compliance to the Jewish dietary laws.

Festivals and fasting

5.110. The Sabbath begins at sundown on Friday and ends when the first star is visible on Saturday night. Food is not permitted to be prepared on the Sabbath, but food can be prepared in advance to be eaten during this time.

5.111. The Day of Atonement in September is a fast day; no food or drink is to be consumed for 25 hours, sundown until sunset.

5.112. Passover is over eight days during April and during this time Jews are forbidden to eat any leavened product, or any product made from wheat, rye, barley, oats or spelt. Observant Jews use separate sets of cutlery, dishes and pots for Passover in addition to those used for meat and milk products.

5.113. For further diets followed by people identifying with a specific religion see the BDA digest; Chapter 12, Section 2.

Personal diets

5.114. People follow different diets for many reasons. The most well know personal diets are vegetarian and vegan diets. The current UK population is approximately 69 million. Recent statistics indicate that approximately 4.5% of adults and children are vegetarian (not eating meat or fish), this amounts to over 3 million individuals. In addition, 3% of the Scottish population self-reported as being vegan in data collected by FSS in 2023. People from a variety of backgrounds adopt meat free dietary practices for many reasons including:

- religion and culture
- moral or ethical beliefs
- health

- environmental sustainability
- economical concerns

5.115. Whether individuals choose to be vegetarian or vegan all the time, or choose to regularly eat vegetarian dishes, hospital menus are likely to require provision of suitable choices to meet individuals' dietary and nutritional needs and follow national goals for healthy eating. The number of people choosing these options will be informed by your population needs assessment.

5.116. More emphasis has been put on following a diet that is lower in meat products and higher in fruits and vegetables to promote significant health benefits and to support sustainability targets. Following recommendations as set out in the Eatwell guide is beneficial for health and can have a lower environmental impact than the current UK diet.

Vegetarianism

5.117. Hospital menus most often provide a vegetarian option for patients that includes dairy foods and eggs. This means that all meat, poultry, fish, shellfish, crustaceans and ingredients or products derived from these, for example gelatine and rennet are excluded.

5.118. When providing a vegetarian diet provision of adequate protein is important. Good vegetarian protein sources include:

- beans, legumes and lentils
- peas
- nuts
- tofu and tempeh
- meat substitutes such as soya protein and mycoprotein
- eggs
- dairy products
- wholemeal cereal products, such as wholemeal pasta, rice, quinoa, bread and breakfast cereals

5.119. The nutritional profile of vegetarian options on the menu must also comply with the specifications laid out in chapters 2 and 3 for calories and protein provision. Sources of protein should be varied from the suggestions above to ensure not only adequate protein intake but also provision of other vitamins and minerals.

Veganism

5.120. Veganism seeks to exclude all products derived wholly or partly from animals. This is a characteristic that is protected by the Human Rights Act 1998 and the Equality Act 2010 in England, Wales and Scotland.

5.121. As with the vegetarian diet, provision of adequate protein is important and can be achieve with provision of the following:

- bean, peas, legumes and pulses
- fortified dairy alternative products, particularly B12, calcium and iodine, also, ideally unsweetened or can contribute significantly to free sugar intake
- soya mince
- tofu and tempeh
- vegan mycoprotein
- wholemeal cereal products, such as wholemeal pasta, rice, quinoa, bread and breakfast cereals

5.122. As mentioned, good food production systems must be in place to prevent cross-contamination with non-vegan foods during storage, preparation, cooking or serving is avoided as far as is reasonably practicable.

5.123. Recognition needs to be made that patients should not rely on vegan menu options if they have milk, fish, crustacean, mollusc and/ or egg food allergies and should refer to allergen aware menus or protocols.

5.124. This chapter has outlined the diets most encountered in Scottish hospitals, but it is not exhaustive. More information on other diets can be found in BDA Nutrition and Hydration Digest. However, advice from local experts and patients will also need to be sought to provide for some individual dietary preferences.

Maternity

5.125. Most patients in maternity units will be in-patients for a short period of time and have normal deliveries with few complications. However, there will be a small number of patients whose admissions will be longer. Patients in this group requiring special consideration include:

- prenatal admissions - some women may require to be hospitalised during their pregnancy due to complications. The advice of the Food Standards Agency regarding safe foods must be adhered to Healthy eating and pregnancy, FSS
- lactating women - to support women breastfeeding their babies the catering service must be flexible in meeting their needs. Consideration should be given to more flexible

mealtimes, snack availability, and suitable meal replacements for mothers who may miss a meal whilst feeding their baby

- the standard hospital menu should be adequate to provide for most pregnant women but may need supplementing, in terms of additional snacks or provision of additional food items at mealtimes, for example bread and milk in order to meet the increased nutritional requirements of lactating women (see Dietary Reference Values for Energy). The Eatwell Guide model for healthy eating should be core.

5.126. Organisations working to meet the United Nations Children's Fund (UNICEF) Baby Friendly Standards must be able to provide meals for breastfeeding mothers whether it is the mother or the child who is the patient. Breastfeeding mothers may have extended hospital stays because of looking after a sick baby and as such suitable meal provision must be made for them.

Summary

5.127. There are a number of factors that should be taken into consideration when adopting a person-centred care approach in the provision of therapeutic, special and personal diets' including:

- menus should reflect local population needs and healthcare organisations need to develop their own protocol for the requirement and provision of suitable diets for their population
- dietary coding provides information for patients, carers and staff to enable them to make an informed food choice whilst in hospital
- when planning any facilities and purchasing contracts, health facilities and catering departments should consider the provision of any therapeutic diets and set targets to ensure the environment allows them to be met
- sustainable food principles should be considered in line with local net zero policy and strategy/ actions/ plans but always balanced with the proviso that patient requirements are a priority over planetary impact
- this section provides the rationale for dietary modification in commonly requested diets and catering guidance to meet these dietary requirements. Diets covered in this section are:
    - higher energy and nutrient-dense diet
    - healthy eating
    - food hypersensitivity diets including food allergies, food intolerance and coeliac disease
    - texture-modified diets
    - diets for kidney disease
    - diet suitable for people with neutropenia

- MAOI diet
- diets for those with mental health and intellectual disabilities
- diets for cultural religious or personal choice
- considerations for maternity units and breast-feeding mothers

5.128. The following is an overview of the optimal evidence required by NHS boards to meet compliance against the requirements of the specification.

Table 5.9 - Example of evidence requirement for self-assessment

Example of Evidence
• Provision of current protocols for provision of therapeutic, personal and personal diets. such as menus or patient information (or Standard Operating Procedure (SOP)) of how this choice is offered to patients. • Allergen listings, SOP for the management of allergen listing for patients and process for maintaining currency of information. • Nutritional analysis of products and specialist menus in line with evidence requirements for section 4 such as texture modified diets menus, Halal or Kosher menus or renal menus where applicable. • Examples of patient information available to support the meal ordering process.

6. Catering and nutritional guidance for children and young people

Introduction

6.1. Eating well is fundamental for proper growth and development in childhood and essential for good health and wellbeing in later life (see Scientific Advisory Committee on Nutrition (SACN) Report: Feeding young children aged 1 to 5 years). When unwell, children can become nutritionally compromised more quickly than adults as they have fewer nutrient stores and this can result in decreased immune function leading to infections and increased length of stay.

6.2. As for adults, the Eatwell Guide demonstrates how to balance the five food groups throughout the day and applies from around 2 years of age. Between age 1-2, children should gradually move to eating the same foods as the rest of the family, in the proportions shown on the Eatwell Guide. How quickly this is done depends on the age and stage of the individual child.

6.3. Children's diets must be tailored to meet their nutritional needs and stage of development, whilst still including a variety of flavours and textures. This recommendation includes those under one, whether breast fed or formula fed, who are introducing solids to their diet. During the weaning process consideration should also be given to provision of suitable equipment such as free flow cups, small bowls and softer spoons. More detailed guidance on provision of suitable food and drinks for children under 1 can be found in 'Setting the Table: Nutritional Guidance for Early Learning and childcare'.

6.4. For children in hospital, following the Eatwell Guide may not always appropriate. They may require a higher proportion of energy dense foods and snacks, for example, foods higher in fat and/ or sugar to meet their nutritional requirements.

6.5. Menu planning groups should use data from the hospital population needs assessment, and work closely with children, parents and carers in planning the menu for children. This will ensure that likes and dislikes are considered and that suitable choices are available for the different ages and stages of development of the children being catered for. Menu planning groups and hospitals must produce a specially designed menu for children which ensures that food that is appealing to children is provided. It is good practice for caterers to consider ways to offer flexibility to meal provision to maximise choice, for example, additional options or snacks that can be ordered in addition to the core menu.

Food-based and group planning guidance

6.6. The basic principles for healthy eating as indicated in the Eatwell Guide should be followed for children except those under the age of two. It is recommended that menus for children in hospital should be designed to ensure that nutritional requirements as set out below are met.

6.7. Some consideration may also need to be given to specific elements of the menu for this patient group such as foods that might pose a choking risk. Always serve food appropriate to the age and stage of the child and never leave children unattended while eating. Guidance on prevention and management of choking in babies and children can be found in Good practice guidance: prevention and management of choking episodes in babies and children (December 2019), Care Inspectorate.

Portion sizes

6.8. Due to the wide range of ages within children's services portion sizes are difficult to determine. A variety of portion sizes should be provided to accommodate different ages and appetites.

Nutrient criteria for children and young people

6.9. This guidance provides a framework of nutritional parameters to support effective menu planning and nutritional analysis for children and young people in a hospital setting. The parameters outlined in this document are intended to assist caterers and service providers in meeting the basic nutritional needs of nutritionally well children across a range of age groups.

6.10. The nutrient criteria presented applies to breakfast, lunch, evening meals, and snacks. They are based on current UK dietary recommendations. This guidance focuses specifically on the needs of well children. Like adult care, paediatric dietitians will calculate nutritional requirements on an individual basis accounting for any additional needs for nutritionally vulnerable children.

6.11. To ensure clarity and relevance, the nutritional parameters are based on a combination of genders and organised into the following age groups:

- 1 - 4 years
- 5 - 11 years
- 12 - 18 years

Guidance for children aged 1 - 4 years

6.12. The nutrient standards for children aged 1 - 4 years are based on UK dietary recommendations and follow the methodology used in Setting the Table (2024) for nursery-aged children. Due to the rapid growth and development characteristic of this age group, the nutritional requirements presented reflect the upper range of needs within the 1 - 4 year age bracket.

Guidance for children aged 5 - 11 years

6.13. For children aged 5 - 11 years, the methodology outlined in Healthy Eating in Schools (2020): Primary School Guidance has been applied. Energy standards for this group are calculated using the Estimated Average Requirement (EAR) for boys and girls combined.

Guidance for young people aged 12 - 18 years

6.14. For young people aged 12 - 18 years, the nutrient standards are informed by the methodology set out in Healthy Eating in Schools (2020): Secondary School Guidance. The energy requirements are calculated using combined average values for boys and girls Nutrient standards have been developed using these combined averages to provide a balanced approach suitable for secondary-aged pupils.

6.15. In line with recommendations for adults, hospital menus for children should offer five portions of fruits and vegetables a day and at least one serving of oily fish a week.

6.16. A day parts model for meal provision in hospital is outlined below.

Table 6.1 - Nutrient provision guidelines for children

Nutrient provision	Breakfast	Lunch	Snacks & Drinks	Evening Meal
Energy and nutrients	20%	30%	20%	30%

6.17. Table 6.2 and Table 6.3 sets out the energy and nutrient standards for children aged 1 - 4.

Table 6.2 - 30% Nutrient requirements for 1 - 4 years

Nutrient	Min/ max	Based on highest requirement of 1 - 4 year olds
Energy (kilocalorie/ day (kcals/d))	Not applicable	369
Total Fat (g)	Max	14.4
Saturated Fat (g)	Max	4.1
Total Carbohydrate (g)	Min	49.2
Free sugars (g)	Max	4.9
Protein (g)	Min	5.1
Fibre Association of Official Analytical Chemists (AOAC) (g)	Min	4.5
Salt (g)	Max	0.75
Sodium (mg)	Max	300

Table 6.3 - 20% Nutrient requirements for 1 - 4 years

Nutrient	Min/ max	Based on highest requirements of 1 - 4 year olds
Energy (kcals/d)	Not applicable	246
Total Fat (g)	Max	9.6
Saturated Fat (g)	Max	2.7
Total Carbohydrate (g)	Min	32.8
Free sugars (g)	Max	3.3
Protein (g)	Min	3.4
Fibre AOAC (g)	Min	3
Salt (g)	Max	0.50
Sodium (mg)	Max	200

6.18. Table 6.4 and Table 6.5 set out the energy and nutrient standards for children 5 - 11.

Table 6.4 - 30% Nutrient requirements for 5 - 11 years

Nutrient	Min/ max	Based on average requirements of 5 - 11 year olds
Energy (kcals/d)	Not Applicable	518
Total Fat (g)	Max	20.1
Saturated Fat (g)	Max	6.3
Total Carbohydrate (g)	Min	69.1
Free sugars (g)	Max	7.2
Protein (g)	Min	19.4
Fibre AOAC (g)	Min	6
Salt (g)	Max	1.7
Sodium (mg)	Max	686

Table 6.5 - 20% Nutrient requirements for 5 - 11 years

Nutrient	Min / Max	Based on average requirements of 5 - 11 year olds
Energy (kcals/d)	Not Applicable	345
Total Fat (g)	Max	13.4
Saturated Fat (g)	Max	4.2
Total Carbohydrate (g)	Min	46
Free sugars (g)	Max	4.8
Protein (g)	Min	12.9
Fibre AOAC (g)	Min	4
Salt (g)	Max	1.1
Sodium (mg)	Max	457

6.19. Table 6.6 and Table 6.7 set out the energy and nutrient standards for children 12 - 18.

Table 6.6 - 30% Nutrient requirements for 12 - 18 years

Nutrient	Min/ max	Based on average requirements for 12 - 18 year olds
Energy (kcals/d)	Not Applicable	745
Total Fat (g)	Max	29.0
Saturated Fat (g)	Max	9.1
Total Carbohydrate (g)	Min	99.3
Free sugars (g)	Max	9.0
Protein (g)	Min	27.9
Fibre AOAC (g)	Min	9.0
Salt (g)	Max	2.1
Sodium (mg)	Max	842

Table 6.7 - 20% Nutrient requirements for 12 - 18 years

Nutrient	Min/ max	Based on average requirements for 12 - 18 year olds
Energy (kcals/d)	Not Applicable	497
Total Fat (g)	Max	19.3
Saturated Fat (g)	Max	6.0
Total Carbohydrate (g)	Min	66.2
Free sugars (g)	Max	6.0
Protein (g)	Min	18.6
Fibre AOAC (g)	Min	6.0
Salt (g)	Max	1.41
Sodium (mg)	Max	561

6.20. The nutrient standards in Table 6.3 to Table 6.7 have been taken from the 'Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations 2008' which makes recommendations based on 30% of a primary and secondary school age child's daily intake.

6.21. It must be remembered that these nutrient standards are applicable for healthy groups of children and may not necessarily be appropriate for individual nutritionally vulnerable children.

Summary

6.22. Childhood is a time of rapid growth and development. As a result of the extra energy requirements for such growth, children are particularly vulnerable to poor nutrition:

- the menu planning process for children's menus should be similar to that for adults and include information from the hospital population needs assessment as well as feedback from patients and carers to reflect the needs of the patient group being served
- flexibility will be required to provide a variety of portion sizes to satisfy different age groups and appetites

6.23. The following is an overview of the optimal evidence required by NHS boards to meet compliance against the requirements of the specification.

Table 6.8 - Example of evidence requirement for self-assessment

Example of Evidence

• Evidence of food provision for weaning diets in those 6 - 12 months such as menus/ standard operating procedures (SOPs) for how this provision takes place.
• Children's menus.
• Relevant elements of evidence as outlined in Table 4.3 as pertinent to provision of children's meals.
• Nutritional analysis of children's menu capacity broken down into age groups as listed above for example:
  ○ 1 - 4 years
  ○ 5 - 11 years
  ○ 12 - 18 years

Note 5: NHS boards who do not provide a service for paediatric menus are exempt.

7. Audit and monitoring (self-assessment process)

Introduction

7.1. Use of measures and monitoring practices are vital in ensuring that the standards and guidance outlined within this Specification are adhered to. Given the multidisciplinary nature of nutritional care across the hospital environment, it is important to have robust monitoring processes in place.

7.2. Monitoring and evaluation provide a means for NHS boards to demonstrate good practice in food and fluid provision, provide an assurance framework and identify areas for improvement.

7.3. In addition to ongoing local monitoring activities, a national self-assessment programme is managed by NHS Scotland Assure which takes place on a periodical basis, supporting boards to assess their own services and get support and independent review from their peers.

Background

7.4. The Food in Hospitals Catering and Nutrition Specification (the 'Specification') provides information for NHS boards on standards for nutritional care, and nutrient and food provision for patients within hospitals.

7.5. The Specification has been in place since 2008, (with a revision in 2016), and requires NHS boards to report their levels of compliance with the criteria as set out within the Specification. In 2017, the Scottish Government requested the development of a more robust framework. NHS Scotland Assure (previously Health Facilities Scotland (HFS)) worked with NHS board representatives and other key stakeholders to develop a robust question set and digital submission process to support the measurement and assessment of the quality-of-service provision and compliance against the criteria.

7.6. Since the development of the assessment framework there have been two reviews; the first in 2020-21 when a full self-assessment and review process of all NHS boards was implemented. This first detailed self-assessment identified potential challenges or areas for improvement and enabled the sharing of best practice nationally. The second assessment in 2024 undertook a review of the actions identified in 2020, assessing the NHS boards progress towards the completion of those actions.

7.7. Additional information on the assessment process can be found within the 'National Food in Hospital Report' (FAC404-002).

Key elements for measuring food and fluid provision

7.8. The following elements are considered key to measuring food and fluid provision against the Specification:

- gathering evidence-based data from a range of sources
- monitoring activity involving a range of multidisciplinary stakeholders/ staff, patients, carers and public partners/ volunteers
- monitoring should form part of a continuous quality improvement culture
- data collected should be used to inform patient food and fluid provision, linked to local nutritional care policy and be included in governance reporting systems
- mechanisms should be in place for supporting and sharing good practice

NHS boards should be prepared to use a combination of the above information sources to demonstrate that they can provide appropriate nutritional care for patients under their care. Evidence from these information sources should be presented in a standardised way demonstrating that it is routinely captured and used to provide appropriate meal provision. This may be an extract from an electronic system, or data provided by a supplier where these are sufficient.

Appendix A Sample population needs assessment data demographic information

A.1 Demographic information required:

- age
- gender
- culture
- length of stay
- nutritional risk - may include nutritional screening, data, or audit data on % patients overweight

A.2 Catering Data (snapshot data per week)

- special dietary requests such as:
  - vegetarian
  - vegan
  - cultural diets
  - Temporomandibular Disorder (TMD)
  - allergen free
  - specific diets

A.3 Catering costs:

- food cost per patient per day/ week or budget
- staffing costs per day for patient meals
- cost of additional meals per month such as Halal, International Dysphagia Diet Standardisation Initiative (IDDSI), allergen, finger food and so on
- method of production
- kitchen equipment budget
- kitchen equipment
- number of ovens
- hobs
- boilers and so on as this will dictate some items on menu. For example, if only one boiler may only be able to cook either soup or custard for that mealtime
- patient questions and relative feedback
- evidence that multiprofessional group has planned menus

Appendix B Calculation of energy and protein requirements in adults

B.1 The calculations below outline how both energy and protein requirements for hospital menus were calculated as per Table 2.1 in section 2.

B.2 We have used the Public Health England Government Dietary recommendations for energy and nutrients (2016) and the Parenteral and Enteral Nutrition Group (PENG) calculations to devise the range of energy and protein requirements for hospital patients.

B.3 The following information below explains the requirements for energy and protein targets (extracted and adapted with thanks from Nutrition and Hydration Digest (British Dietetic Association (BDA)):

- Energy targets explained:
  - **Nutritionally Well patients**:
    - Dihydroergotamine (DHE) lowest target is for females 75+ years = 1840kcals
    - DHE highest target is for males 19-24 years = 2500kcals
    - therefore, target range for Nutritionally well patients is 1840 - 2500kcals/ day in healthy adults
  - **Nutritionally Vulnerable patients**:
    - following recommendations of PENG:
      - 20-30kcal/ kg body weight/ day:
      - assuming a body weight range of 66-77kg
      - assuming a Physical Activity Level (PAL) of 1.2 for limited mobility
      - maximum figure obtained by 77kg x 30kcal/kg = 2310 x 1.2 PAL = 2772kcals
      - therefore, Nutritionally Vulnerable energy range is between 1840 - 2772kcal/ day

B.4 Protein targets explained:

- **Nutritionally Well Patients**:
  - DHE lowest targes is for females 19-64 = 45g/ day
  - DHE highest targes is for males 19-64 = 56g/ day
  - Therefore, Nutritionally well protein range is between 45 - 56g protein/ day in healthy adults

- **Nutritionally Vulnerable Patients**:
  - protein recommendations for those over the age of 65 years are between 1.0-1.5g protein/ kg/ day (see A review of nutritional requirements for adults aged ≥65y in the UK)
  - an assumption has been made that those requiring more than 1.2g/ protein/ day will require specialist Dietetic intervention in addition to hospital meals. As such hospital meals should be capable of providing 1.2g/ protein/ kg body weight/ day which will meet the needs of most patients in hospital including those over 65
- This is calculated by:
  - assuming a weight range of 66 - 77kg (as above)
  - average 1.2g protein/ kg
  - maximum average: 77 x1.2 = 92.4g protein/ day
  - therefore, the Nutritionally Vulnerable protein range is between 56 - 92g protein/ day

Appendix C Calculation of energy and protein requirements in children

Nutritional standards and evidence base for paediatric inpatient menu provision

Purpose

C.1 This appendix sets out the evidence base, reference standards and underpinning rationale used to inform the nutritional requirements applied to paediatric inpatient menu provision. It supports transparency, consistency and assurance in relation to menu planning, nutritional analysis and compliance with national guidance.

C.2 The standards described within Section 6 are intended to support catering services, food service dietitians and other stakeholders involved in the provision of food to children in hospital. They provide population-level reference values for nutritionally well children and are not intended to replace individualised clinical nutritional assessment or intervention.

Scope

C.3 This appendix applies to all paediatric inpatient food provision within the organisation and supports the development, nutritional analysis and review of menus for children aged 1 - 18 years.

Principles for determining nutritional requirements

C.4 The determination of nutritional requirements for children in hospital settings is complex due to variation in:

- age and stage of growth and development
- health and nutritional status
- clinical condition and treatment requirements

C.5 For the purposes of menu planning and nutritional analysis, nutritional requirements have been grouped into defined age ranges that reflect key developmental stages. Nutritional values are based on combined male and female reference requirements to provide a practical and standardised framework for food provision.

C.6 The standards outlined represent reference values for nutritionally well children. Clinical teams remain responsible for assessing and managing individual patient requirements using recognised paediatric nutritional assessment methods that consider age, sex, height, weight and clinical condition. Adjustments for increased or altered nutritional needs should be made as clinically indicated.

Nutritional standards by age group

Children aged 1 - 4 years

C.7 Nutritional requirements for children aged 1 - 4 years are derived from Setting the Table: Nutritional Guidance and Food Standards for Early Years Childcare Providers in Scotland (2024), published by the Scottish Government. This national standard supports the nutritional needs of nursery-aged children.

C.8 Setting the Table is based on the highest nutritional requirements of children aged 1 - 2 years and 3 - 4 years, reflecting the rapid rate of growth and development during early childhood. The standard is designed to provide approximately 90% of daily nutritional requirements within early years childcare settings.

C.9 For application within hospital settings, these values have been extrapolated to represent 100% of daily nutritional requirements. This reflects the role of hospital food provision as a primary source of nutrition for paediatric inpatients during admission.

Children aged 5 - 11 years and 12 - 18 years

C.10 Nutritional requirements for children aged 5 - 11 years and 12 - 18 years are based on the Healthy School Meals Guidance (2020), published by the Scottish Government, which provides national standards for food provision to school-aged children.

C.11 The Healthy School Meals guidance is structured to provide approximately 30% of total daily energy and nutrient requirements, reflecting the provision of a main meal during the school day. For hospital use, these values have been extrapolated to represent 100% of daily nutritional requirements to reflect continuous food provision in inpatient settings.

C.12 Free sugars values within the Healthy School Meals guidance reflect a target of 7.5% of total energy intake. For hospital application, adjustments have been made to align with recommendations from the Scientific Advisory Committee on Nutrition (SACN), which advises that free sugars should provide no more than 5% of total daily energy intake.

C.13 Nutritional values for these age groups are calculated using a weighted male and female average (51% male, 49% female), based on estimated average requirements (EARs)

across the age range. This reflects a more stable pattern of growth and development compared with early childhood.

Application in menu planning and nutritional analysis

C.14 It is recognised that practical menu planning and nutritional analysis require a degree of flexibility due to factors such as portion size variation, product availability and menu structure.

C.15 Unlike adult menu analysis, where a range is provided for nutritionally well and nutritionally vulnerable individuals, paediatric guidance is presented as a single reference value. For the purposes of menu analysis, an energy tolerance of ±10% above or below the stated recommendation is considered acceptable. This tolerance supports practical implementation while maintaining alignment with nutritional standards. Specific nutrient targets should continue to be met wherever reasonably achievable.

C.16 Minimum and maximum values for macronutrients and micronutrients are detailed within Table 6.2 - Table 6.7 to support nutritional analysis and compliance monitoring.

Governance and review

C.17 Nutritional standards for paediatric inpatient food provision are subject to continuous improvement. The guidance and reference sources outlined within this appendix will be reviewed in line with updates to national guidance or emerging evidence, and as part of scheduled policy review processes.

Appendix D Points to consider within the sustainability and food process

D.1 Awareness of the provision of Food in Hospitals can contribute to your NHS board's carbon reduction and wider sustainability goals.

D.2 The table below indicates steps within the provision of food in your hospital, where your role and responsibility can have an impact on sustainability. The main focus is practical actions to reduce food waste - each health board has a Waste Manager and a Food Waste Reduction Action Plan to provide local guidance.

Note 6: There is no requirement within the auditing and monitoring of Food in Hospitals in your self-assessment to provide feedback on aspects of food sustainability. These aspects, including Food waste are reported by your NHS board Sustainability Team reporting on progress against the aims and targets set out in 'A Policy for NHS Scotland on the Climate Emergency and Sustainable Development' (Director Letter (DL)) (2021) 38).

Table D.1 - Roles and responsibilites to support reducing food waste

If your role involves	Consider the following
Menu planning	• The needs assessment of your hospital patient population (see chapter 2). • Inclusion of seasonal foods (see chapter 4). • Inclusion of local or regional dishes (see chapter 4). • Inclusion of cultural food (see chapter 4). • Use of the Eat Well Plate for the nutritionally well (see chapter 2, 3 and 4).
Meal ordering	• Ensure the system at your hospital is understood and used correctly (see chapter 2). • Order the correct number of meals for each ward (see chapter 2).
Procurement of food items and ingredients	• Use local sources for food ingredients and products (see chapter 4). • Order pack sizes that mean less packaging is used (see chapter 4).
Meal Preparation	• Ensure food quality is optimal (see chapter 4). • Prepare the correct quantity according to meals ordered (see chapter 4).

If your role involves	Consider the following
Delivery of food to the wards	• Ensure procedures for transporting food operate correctly such as correct temperatures are maintained and recorded (see chapter 3).
Mealtime Serving	• Ensure each patient receives the meal they ordered (see chapter 2). • Ensure the mealtime atmosphere is as pleasant as it can be (see chapter 2 and 5).
Clearing away/ food disposal	• Plate waste and unserved food waste is collected and processed correctly (see chapter 2). • Total waste accurately recorded as weight (see chapter 2 and 4). • Record items and dishes that are wasted and feedback this information so that appropriate improvements can be made (see chapter 2 and 4).

Appendix E Food in Hospital (2026) specification review SLWG membership

E.1 The membership of the current Food in Hospital (2026) Specification Review Short Life Working Group (SLWG) have evolved throughout the duration of the review process.

Table E.1 - SLWG Membership

Name	Designation	NHS board /Stakeholder Group
Tara Hargreaves	Food Services Dietitian/ Chair	NHS Lothian
Abigail Cork-Griffiths	Head of Facilities/ Senior Responsible Officer (SRO)	NHS Scotland Assure
Steven Fenocchi	Programme Manager	NHS Scotland Assure
Lisa Woodward	Project Support	NHS Scotland Assure
Tracy Glen	Information Officer	NHS Scotland Assure
Janice Gillan	Head of Clinical Support Services - East	NHS Ayrshire and Arran
Ruth Barclay Paterson	Project Dietitian	NHS Ayrshire and Arran
Lucy Hastings	Renal Dietitian	NHS Ayrshire and Arran
Deborah Nelson	Catering Dietitian	NHS Dumfries and Galloway
Yvonne Batehup	Catering Lead	NHS Fife
Michellle MacDonald	Catering Dietitian	NHS Fife
Michelle Gray	Catering Strategy Dietitian	NHS Greater Glasgow & Clyde
Ameyovi Agbotse	Renal Dietitian	NHS Greater Glasgow & Clyde
Elinor McCann	Head of Catering	NHS Grampian
Arlene Kempton	Community Dietitian	NHS Grampian
Sarah Bowyer	Mental Health Dietitian, Energy, Environment and Sustainability Officer	NHS Highland
Caroline McKenzie	Head of Catering	NHS Tayside
Nicola Dewar	Catering Dietitian	NHS Tayside

Name	Designation	NHS board /Stakeholder Group
Jacklyn Jones	Dietetic Lecturer	Queen Margaret University, Glasgow
Claire Hislop	Organisational Lead - Food and Physical Activity	Public Health Scotland
Claire Matthews	Inspector	Healthcare Improvement Scotland (HIS)
Laura Wilson	Head of Public Health Nutrition	Food Standard Scotland
Ruth Innes	Sustainability Manager (Waste and Resource Efficiency)	NHS Scotland Assure

Abbreviations

AIDS: Acquired immunodeficiency syndrome

AOAC: Association of Official Analytical Chemists

ARFID: Avoidant/ restrictive food intake disorder

BAPEN: British Association for Parenteral and Enteral Nutrition

BDA: British Dietetic Association

BMI: Body Mass Index

BPI: Best Procurement Implementation

CAD: Coronary Artery Disease

CAP: Commodity Advisory Panel

CO_2: Carbon Dioxide

DHE: Dihydroergotamine

DL: Director Letter

EAR: Estimated Average Requirement

FODMAP: Fermentable Oligo-saccharides Di-saccharides Mono-saccharides and Polyols

FSS: Food Standards Scotland

GF: Gluten Free

HACCP: Hazard Analysis Critical Control Point

HCA: Hospital Caterers Association

HIS: Healthcare Improvement Scotland

HFS: Health Facilities Scotland

IDDSI: Internal Dysphasia Diet Standardisation

kcal: kilocalorie

kcal/d: kilocalorie per day

MAOI: Monoamine Oxidase Inhibitors

mmol: millimoles

mg: milligram

MUFA: Monounsaturated Fatty Acids

MUST: Malnutrition Universal Screening Tool

NCD: Noncommunicable Disease

NDR-UK: Nutrition and Diet Resources UK

NGCI: No gluten containing ingredients

NICE: National Institute for Clinical Excellence

NSS: National Services Scotland

NV: Nutritional Vulnerable

NW: Nutritional Well

ONS: Oral Nutritional Supplements

PAL: Physical Activity Level

PENG: Parenteral and Enteral Nutrition Group

PPM: Parts per Million

PUFA: Polyunsaturated Fatty Acid

PSIP: Public Sector Incident Protocol

RCSLT: Royal College of Speech and Language Therapists

RNI: Reference Nutrient Intake

RS: Renal Suitable

SDG: Scottish Dietary Goals

SHS: Scottish Healthcare Supplies

SLT: Speech and Language Therapist

SLWG: Short Life Working Group

SME: Subject Matter Expert

SOP: Standard Operating Procedure

SRO: Senior Responsible Owner

TMD: Temporomandibular Disorder

UHT: Ultra-High Temperature

UNICEF: United Nations International Children's Fund

WHO: World Health Organization

Glossary

Acute Sector - Hospital-based health services which are provided on an in-patient or out-patient basis.

Aids to eating - Dishes, cups and cutlery that have been specifically adapted to allow individuals who have difficulty eating.

À la carte menus - Dishes prepared individually outwith the normal set menu.

Anaphylaxis - A severe, potentially life-threatening allergic reaction.

Artificial Nutrition Support - Provided to patients who cannot consume sufficient foods to meet their nutritional requirements. This is maybe in the form of a liquid oral supplement or a specially formulated liquid feed that is provided via a feeding tube either into the stomach or via a vein and is prescribed by a dietitian or doctor.

Assessment - The process of measuring patients' needs and/ or the quality of an activity, service or organisation.

Audit - Systematic review of the procedures used for diagnosis, care, treatment, and rehabilitation, examining how associated resources are used and investigating the effect care has on the outcome and quality of life for the patient.

Audit Scotland - Audit Scotland is an independent public body that audits most of Scotland's public organisations, such as the Scottish Government, local councils and NHS Scotland.

British Association for Parenteral and Enteral Nutrition (BAPEN) - is a charitable association that raises awareness of malnutrition and works to advance the nutritional care of patients and those at risk from malnutrition in the wider community.

British Dietetic Association (BDA) - The professional association for dietitians in the UK.

Coeliac disease - Coeliac disease is a common digestive condition where a person has an adverse reaction to gluten.

Commodity Advisory Panel - Commodity Advisory Panels (CAPs) are advisory groups who have clinical, technical or commercial expertise in the goods or services under consideration. CAPs are formed for each major area of expenditure, including food and fluids, to help to ensure that the goods or services meet the needs of those who use them and offer best value for money. They advise National Procurement (NP) on the clinical, technical or commercial aspects of the goods and services to be purchased.

Composite dish - A composite dish should consist of a protein containing food, vegetables and a carbohydrate/ starchy item.

Core Nutritional Pathway - Incorporates the 'Malnutrition Universal Screening Tool' (MUST) and is intended to clarify what patients should expect in terms of effective nutritional care. It defines six critical points in the patient's journey from Admission to Discharge.

Cross-contamination - This can refer to the transfer of either bacteria or allergen traces from one product to another via surface contact or the use of the same equipment.

Dietary coding - Dietary coding provides information to patients, carers and staff to enable them to make an informed food choice whilst in hospital. Hospital menus should be coded for healthier eating and higher-energy nutrient-dense meal options. Vegetarian options should also be coded. Foods that are not coded may still be suitable for patients to choose but are perhaps not the preferred choice.

Dietary needs - Individuals' dietary needs include their eating and drinking likes and dislikes; food allergies/ intolerances and need for therapeutic diet; cultural/ ethnic/ religious requirements; social/ environmental mealtime requirements; physical difficulties with eating and drinking; and also, whether there is a need for equipment to help with eating and drinking.

Dietary needs assessment - The process of assessing the specific dietary needs of individual patients (see 'dietary needs'). The findings of the dietary needs assessment should be considered in the patient's nutrition care plan (see 'nutrition care plan').

Dietitian - A qualified and regulated health professional who will assess, diagnose and treat dietary and nutritional problems at an individual and wider public health level.

Dish descriptor - A description of each dish on the hospital menu which includes a general description of the dish, a list of ingredients to allow for the identification of allergens and the macronutrient content per portion which will enable carbohydrate counting as appropriate.

Evaluation - The study of the performance of a service (or element of treatment and care) with the aim of identifying successful and problem areas of activity.

Food allergen - Something in food, generally a protein which causes some individuals to have an immune reaction.

Food allergy - An immune reaction to food.

Food chain - The processes involved in purchasing, preparing, cooking, delivering and serving food.

Food enrichment - Strategies are used to increase the energy and nutrient content (density) of foods and beverages without significantly affecting their volume (also known as food fortification).

Food in Hospitals - The short title for the national nutrition and catering specification for food and fluid provision in hospitals in Scotland.

Food intolerance - A reaction to food that does not involve the immune system.

Food Standards Scotland (FSS) - From 1 April 2015, FSS is the independent public body in Scotland responsible for protecting consumers and public health in respect of food safety and food standards.

Healthier eating diet/ principles - A diet that follows the principles for a healthy balanced diet, including five portions of fruit and vegetables per day, reduced total and saturated fats, reduced free sugar and reduced salt content.

Healthcare Improvement Scotland (HIS) - A national healthcare improvement organisation for Scotland and part of NHS Scotland. Works with staff who provide care in hospitals, GP practices, clinics, NHS boards and with patients, carers, communities and the public.

Higher energy and nutrient-dense diet - A diet recommended for the 'nutritionally vulnerable' patient with a poor appetite or increased requirements. The diet is characterised by provision of energy and nutrients in small portions of foods and drinks and increased eating opportunities (such as provision of substantial snacks).

Hospital Caterers Association (HCA) - National organisation with aims and objectives for the promotion and improvement of the standards of catering in hospitals and healthcare establishments in the UK; the education and training of persons in health care catering services; and the provision and improvement of the professional interests and status of those engaged in health care catering services.

Hypertriglyceridemia - A condition in which triglyceride levels are elevated, often caused or exacerbated by uncontrolled diabetes mellitus, obesity, and sedentary habits. This condition is a risk factor for coronary artery disease (CAD).

Late meal - A meal served outwith the normal set mealtimes usually due to patients being admitted to a ward during or after a mealtime.

Main meal - A serving of food which provides the greatest contribution to the energy and range of nutrients required daily. Usually consists of hot cooked dishes with accompaniments.

Malnutrition - A state of nutrition in which a deficiency, excess or imbalance of energy, protein or other nutrients, including minerals and vitamins, causes measurable adverse effects on body function and clinical outcome.

Malnutrition Universal Screening Tool (MUST) - The MUST is a validated, simple five-step nutritional screening tool designed to identify adults who are malnourished or at risk of malnutrition.

Menu capacity - The ability of the menu to meet the range of nutrient and dietary needs of the patient population for whom it is intended.

Menu planning guidance - Statements and further practical information to help caterers and menu planning groups achieve the nutrient and food-based standards.

Menu planning and food-based criteria/ standards - The menu planning and food-based criteria aim to ensure that patients' differing dietary needs are catered for and opportunities to ensure nutritional needs can be met are maximised. They are intended to assist hospitals achieve the nutrient specification detailed in Section 2 and several of the standards set in HIS Standards for Food, Fluid and Nutritional Care.

Missed meal - A meal which a patient has been unable to take due to a clinical treatment or attendance at a clinic/ diagnostic service during a planned mealtime.

Monitoring - The systematic process of collecting information on clinical and non-clinical change, improvement and performance. Monitoring may be intermittent or continuous. It may also be undertaken in relation to specific incidents of concern or to check key performance areas.

Multidisciplinary - A multidisciplinary team is a group of people from different disciplines (both healthcare and non-healthcare) who work together to provide care for patients with a particular condition. The composition of multidisciplinary teams will vary according to many factors. These include: the specific condition, the scale of the service being provided, and geographical/ socio-economic factors in the local area.

National Catering and Nutrition Specification - The document named Food in Hospitals which states the catering, food and nutritional requirements that a hospital establishment must meet or provide.

National Institute for Health and Care Excellence (NICE) - An independent organisation responsible for providing national guidance on promoting good health and preventing and treating ill health.

National Procurement - National Procurement (NP) is a division of NHS National Services Scotland (NSS) and was officially launched in 2005. NP combines the collective history and experience of Scottish Healthcare Supplies (SHS) and the Best Procurement Implementation (BPI) Programme into one coordinated, professional procurement organisation. NP is responsible for ensuring that an efficient service of the highest standards in modern procurement practice is provided to all NHS Scotland organisations. There are three main components to NP: Strategic Sourcing (Better Buying), such as Procurement and Systems (Technology), Logistics (Product Distribution).

Neutropenia - The presence of abnormally few neutrophils in the blood, leading to increased susceptibility to infection.

National Services Scotland (NSS) - A non-departmental public body which provides advice and services to the rest of NHS Scotland. Accountable to the Scottish Government, NSS works at the heart of the health service, providing national strategic support services and expert advice to NHS Scotland.

NHS Scotland Assure - NHS Scotland Assure (formally known as Health Facilities Scotland (HFS)) is a division of NSS and provides operational guidance to NHS Scotland bodies on a range of healthcare facilities topics.

Nutrient analysis - To calculate the amount of energy and nutrients in a particular food, recipe or menu using a standard procedure.

Nutrient (based) standards - The nutrient requirements of a 'general' hospital population, which a hospital catering service is required to meet through food and fluid provision. These are defined for the 'nutritionally vulnerable' patient and also the 'nutritionally well'.

Nutrient specification - A document which states the food and nutritional requirements that a catering establishment must meet.

Nutritional Care - Embodies a coordinated approach to the delivery of food and fluid by different healthcare professionals and recognises the patient as an individual with needs and preferences. As a process, nutritional care determines a person’s preferences and cultural needs, defines their physical requirements, and then provides the person with what they need. It follows a person’s progress through an illness, responding to changing nutritional requirements. It involves the monitoring and reassessment of nutritional status at regular intervals, referral for specialist care when appropriate, and good communication between services and during periods of transition of care.

Nutritional Assessment - A more in-depth evaluation of a patient’s nutritional state, undertaken by an individual(s) with nutritional expertise, for example a dietitian.

Note 7: This is not the same as a nurse’s nutritional care assessment.

Nutritional needs/ requirements - The amounts of energy and nutrients that individuals need for health.

Nutritional screening - A simple, rapid process by which an individual's nutritional status or risk of developing poor nutritional status is determined. This then allows a care plan of monitoring and treatment to be implemented for the individual patient. This ideally should be carried out using a validated nutritional screening tool.

Nutritionally vulnerable - Individuals who have normal nutritional requirements but with poor appetite and/ or unable to eat normal quantities at mealtimes; or who have increased nutritional needs.

Nutritionally well - Individuals who have normal nutritional requirements and normal appetite or those with a condition requiring a diet that follows healthier eating principles.

Obesity - Obesity occurs when energy intake from food and drink consumption, including alcohol, is greater than energy requirements of the body's metabolism over a prolonged period, resulting in the accumulation of excess body fat. The Body Mass Index (BMI) is commonly used as a measure of obesity and overweight with BMI greater than 30kg/m^2 taken to indicate obesity.

Operational Group - Responsible for implementing local protocol or protocols for the provision of food and fluid to patients. The core membership of this group includes a senior member of catering staff, a senior nurse, a doctor, a senior member of the oral health team, a senior dietitian, other allied health professionals including a Speech and Language Therapist (SLT), and patient representation. The group will also have other representatives appropriate to population need and to the food delivery system.

Oral Nutritional Supplements (ONS) - Are typically used in addition to the normal diet, when diet alone is insufficient to meet daily nutritional requirements. ONS not only increase total energy and protein intake, but also the intake of micronutrients.

Out-of-hours provision - The provision of appropriate food and drinks to individuals outwith the scheduled mealtimes set within the hospital. Defined as food or fluid provided when the catering facility has closed for the day.

Patient - A person who is receiving care or medical treatment. A person who is registered with a doctor, dentist, or other healthcare professional, and is treated by him/ her when necessary.

Protected mealtimes - Periods of time on a hospital ward when all nonurgent activity stops, allowing the patient to eat without being interrupted and staff are available to provide assistance.

Protein source - A food item such as meat, fish, eggs, cheese or pulses which provides the nutrients necessary for proper growth and function of the human body.

Renal diets - Therapeutic diets for individuals who have kidney disease.

Satisfaction survey - Seeking the views of service users through responses to pre-prepared questions and carried out through interview or self-completion questionnaires.

Scottish Dietary Goals (SDGs) - The goals describe, in nutritional terms, the diet that will improve and support the health of the Scottish population. They are set at the Scottish population level. They indicate the direction of travel and assist policy development to reduce the burden of obesity and diet-related disease in Scotland. They will continue to

underpin diet and health policy in Scotland and will be used for scientific monitoring purposes.

Screening tool - A nutritional screening tool is an aid to assess a patient's nutritional status.

Special and personal diets - For example, religious or ethnic dietary requirements or other lifestyle diet choices such as vegan.

Standard - A level of quality or achievement that is considered acceptable.

Standard recipe - A recipe where the quantities, ingredients and methods are set and defined and should not be deviated from. A standard recipe should give a consistent quality product.

Snack - A snack is a small quantity of food eaten between meals.

Substantial snacks - Two small quantities of food which, when combined, contribute a minimum of 200 kilocalorie (kcals) daily.

Texture-modified diet - Food/ fluid that has had its consistency altered to enable a person to chew and swallow it safely without choking. Also sometimes referred to as modified consistency diets.

Therapeutic diet - Food/ fluid which has had its nutrients modified to meet the nutritional needs of a person, and which forms part of their medical treatment to prevent symptoms or improve nutritional status.

Ward supplies - Minimum food and beverage provisions that must be available on a ward to provide to patients.

Wholegrain cereals - Fibre content is >3g/100g or at least 3g in reasonable expected daily intake of food (Healthy Living Award).

References

1. Food, Fluid and Nutritional Care Standard, 2014, Healthcare Improvement Scotland (HIS)
2. The Nutrition and Hydration Digest, Nutritional Standards (2023), British Dietetic Association (BDA)
3. ResAP(2003)3 - Resolution on food and nutritional care in hospitals, Resolution on food and nutritional care in hospitals (2003)
4. Malnutrition and Nutritional Care Survey in Adults, 2022, Malnutrition and Nutritional care survey in adults, British Association for Parenteral and Enteral Nutrition (BAPEN)
5. Good Food Nation, 2022, Good Food Nation, Scottish Government.
6. National Good Food Nation Plan, 2024, National Good Food Nation plan, Scottish Government
7. Audit Scotland Reports, 2024, Audit Scotland Reports
8. Eatwell guide, NHS Scotland 'Eat Well Guide'
9. The NHS Scotland Climate Emergency and Sustainability Strategy 2022-2026', 2022, Scottish Government
10. NHS Scotland Waste Prevention and Re-Use Guide, 2023, Zero Waste Scotland
11. Malnutrition Week report, 2022, BAPEN Annual Report 2022
12. Combating Malnutrition: Recommendations for Action, 2008, Output of a meeting of the Advisory Group on Malnutrition 12 June 2008 Edited by M. Elia and C.A. Russell
13. Dietary intakes in geriatric orthopaedic rehabilitation patients: Need to look at food consumption not just provision), 2015, Science Direct
14. High Food Wastage and Low Nutritional Intakes in Hospital Patients, Clinical Nutrition), 2000, National Library of Medicine
15. Appendix 5: Regulation 14 of the CQC (Meeting Nutritional and Hydration Needs), 2025, Care Quality Commission
16. Measuring success with standardized recipes, 2002, nourishca.org
17. The Composition of Foods, 2014, Royal Society of Chemistry, McCance and Widdowson's: The Composition of Foods

18. Planning Menus to Prevent Food Waste, 2026, Hospital Caterers Association

19. Delivering Value Based Health and Care: A Vision for Scotland (2022) , Scottish Government

20. Nutrition guidelines for hospital catering, 2010, Open Library

21. Food Anaphylaxis in the United Kingdom: Analysis of National Date, 1998-2018 2021, British Medical Journal

22. About Coeliac Disease, Coeliac.org

23. Food Information to Consumers - Legislation, 2016, European Commission

24. Allergens Matrix, 2023, Food Standard Agency

25. Commission Regulation (EC) No 41/2009 concerning the composition and labelling of foodstuffs suitable for people intolerant to gluten, 2009, Official Journal of the European Union

26. Oats and the Gluten Free Diet, 2024, National Celiac Association

27. International Dysphagia Diet Standardisation Initiative (IDDSI), 2025, Internation Dysphagia Diet Standardisation Initiative

28. Water UK website, 2026, Water UK

29. Joint Formulary Committee, British National Formulary (BNF) 70, 2026, National Institute for Care and Excellence (NICE)

30. Halal Certification for Businesses Seeking Global Reach website, 2026, HALAL Certification Europe

31. The Shap Working Party on World Religions in Education Mission Statement, 2011, The Shap Calander Group

32. The Kashrut Division of the London Beth Din website, 2026, London Beth Din.org

33. Human Rights Act 1998, Legislation.gov.uk

34. The Equality Act 2010 in England, Wales and Scotland, 2010, Gov.UK

35. Healthy eating and pregnancy, Food Standards Scotland (FSS), 2026, Food Standards Agency

36. Dietary Reference Values for Energy, 2011, The Scientific Advisory Committee on Nutrition (SACN) Public Health England,

37. United Nations Children's Fund (UNICEF) Baby Friendly Standards, 2026, UNICEF

38. Setting the Table: Nutritional Guidance for Early Learning and childcare, 2024, gov.scot

39. Good practice guidance: prevention and management of choking episodes in babies and children, 2019, Care Inspectorate

40. Healthy Eating in Schools (2020): Primary School Guidance, 2020, gov.scot

41. The Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations , 2008, legislation.gov.uk

42. National Food in Hospital Report' (FAC404-002), 2024, National Services Scotland

43. Public Health England Government Dietary recommendations, 2016 Public Health England

44. Parenteral and Enteral Nutrition Group, Parenteral and Enteral Nutrition Group (PENG) website

45. A review of nutritional requirements for adults aged ≥65y in the UK, 2020, University of Hertfordshire

46. A Policy for NHS Scotland on the Climate Emergency and Sustainable Development, 2021, scot.gov