





# Foreword

## Hospital Food, Nutrition and Hydration: An integral part of the patients' treatment and experience

Hospital food, nutrition and hydration is recognised in acute hospitals as an essential priority for good quality patient care, both locally and at a national level. This is due to a number of factors:

- (1) We listened to staff - An acknowledgement, by a range of stakeholders, of the importance of food, nutrition and hydration as an integral part of patients' treatment and care.
- (2) We listened to services - The Health Information and Quality Authority (HIQA) report of the review of nutrition and hydration care in public acute hospitals in May 2016 assessed patient's experience of the food service. This review highlighted that nutrition and hydration practices were varied and not consistent within and/or across hospitals and key areas for improvement were identified.
- (3) We listened to patients - The National Patient Experience Survey (NPES) conducted in May 2017 and 2018 asked patients 5 specific questions with respect to their food related experiences. Results from this survey demonstrate the importance of a high quality food service for patients.

Every day there are approximately 10,500 patients in acute hospitals of which approximately 70% will be dependent on oral food and drinks as their sole source of nutrition. Food provided to patients is an important factor that influences both their clinical outcome and their overall satisfaction with their hospital experience. Catering for inpatients requires food provision to a varied group with special needs including many who are already at risk of developing malnutrition. Malnutrition affects more than

one in four patients admitted to our hospitals and is directly related to increased length of stay and complications, such as pressure ulcers. Similarly, the rate of healthcare-associated infections have been found to be more than three times greater among malnourished patients. In addition to clinical consequences, there are also economic consequences; annual healthcare costs associated with disease related malnutrition were estimated to be in region of 1.5 billion euro in 2012. In addition the nutritional status of the patients can deteriorate the longer their stay in hospital. The nutritional status of the patient depends on a chain of interlinking steps and is dependent on effective communication between multiple staff. Suboptimal performance at any stage of the process leads to a reduction in the amount a patient eats and increases food waste.

The Food, Nutrition and Hydration Policy addresses all of the above and provides us with a framework to standardise and benchmark food, nutrition and hydration care for all adult patients in acute hospitals. It provides a minimum nutrition standard for all hospital diets. The policy also provides overarching principles that ensure a patient centred focused food and nutrition service is provided to all from admission to discharge. This policy is further strengthened by the supporting National Clinical Guideline: Nutrition Screening and the Use of Oral Nutrition Support (due for publication in 2019). This toolkit has been developed to provide you with guidance to help you to implement the policy recommendations and to strengthen current food, nutrition and hydration practices. We look forward to local implementation of this policy and to continually working with the Hospital Groups to achieve this.

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# Acknowledgements

Content for the toolkit was developed by the members of the Nutrition Policy Development Group.

**Contributions were also provided by:**

The Nutrition Steering Committee Naas General Hospital.

The Catering Department Mater Misericordiae University Hospital.

The Guideline Development Group National Clinical Guideline: Nutrition Screening and use of Oral Nutrition Support.

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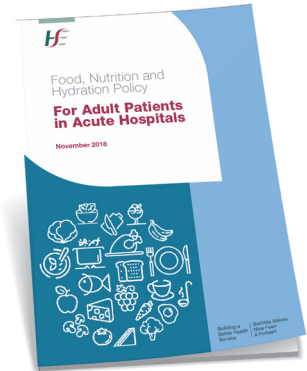
# Section 1.0

## Introduction to the Toolkit and Getting Started with Implementation

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# Section 1.0

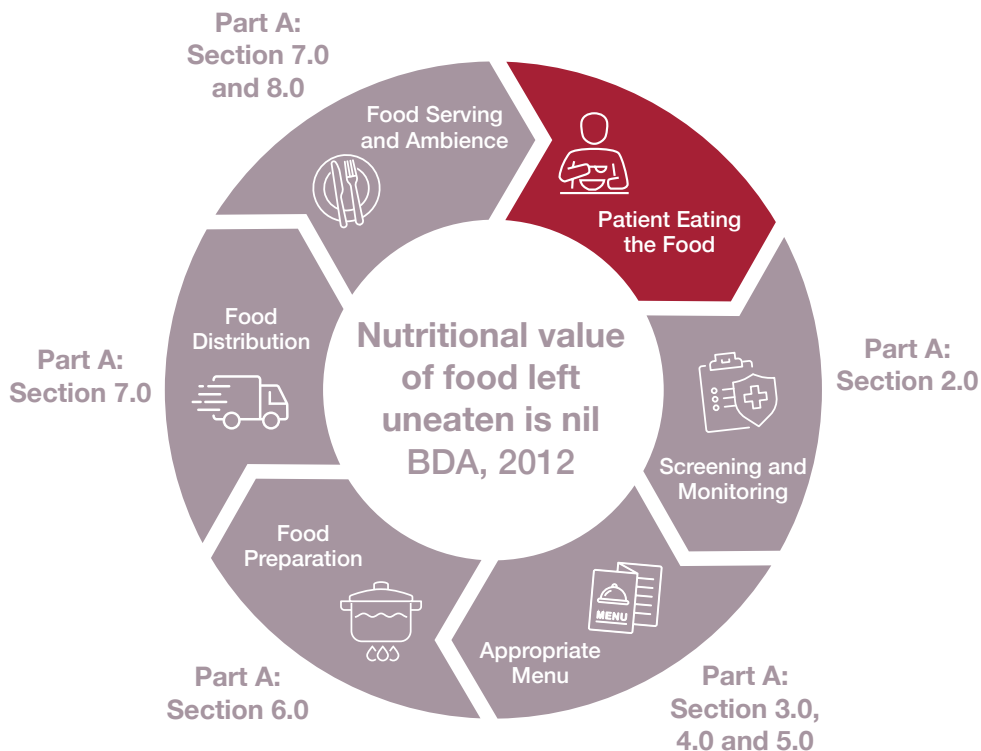
## Introduction to the Toolkit and Getting Started with Implementation



### 1.1 Introduction to the Toolkit

Welcome to the Implementation toolkit for the HSE Food, Nutrition and Hydration Policy (2018). The toolkit is the ‘how to’ guide for all members of the multidisciplinary team tasked with implementing the policy recommendations. Each section in Part A of the policy addresses a specific aspect of the food chain as demonstrated in Figure 1.

Figure 1 - The Food Chain



The Toolkit has been aligned with the relevant sections from Part A and Part B of the policy. It will provide you with:

- > The HSE vision for the hospital food environment and guidance documents to enable you to:
  - (1) Improve nutritional care for patients
  - (2) Provide healthier food options for staff and visitors
  - (3) Ensure feasible access to food for all
- > Tools to enable you to undertake an analysis of the current food, nutrition and hydration practices and identify areas for improvement
- > Guidance and checklists to enable development of procedures to standardise food, hydration and nutritional care
- > Menu planning guidance to enable provision of the nutrition standards for macronutrients (energy, protein, fluid) and micronutrients (vitamins and minerals)
- > Menu planning guidance to enable provision of therapeutic diets
- > Menu planning guidance to enable provision of texture modified diets
- > Resources to support patient information
- > Additional tools to support implementation planning

And much more...

## 1.2 Getting Started with Implementation

- Step 1** Read the policy
- Step 2** Conduct a Gap Analysis (this should be done by the Nutrition and Hydration Steering Committee)
- Step 3** Apply the gap analysis firstly to the specific recommendations outlined in the Policy Part B Section 5.0 pertaining to Nutrition and Hydration Steering Committees
- Step 4** Apply the gap analysis to all key recommendations outlined in the Policy Part A sections
- Step 5** Identify and describe the gaps
- Step 6** Identify areas for improvement
- Step 7** Prioritise areas for improvement
- Step 8** Set up project teams to develop implementation plans
  - > Identify solutions, with costs and benefits
  - > Set timelines and key deliverables
- Step 9** Use the toolkit to enable implementation of key recommendations
- Step 10** Use supporting reference documents



## 1.3 Developing your Implementation Plan

Once you have completed your gap analysis, your next step will be to develop an Implementation Plan. Implementation involves the carrying out of specific planned, intentional activities undertaken with the aim of making evidence informed policies and practices work better for people. It can be described as the 'how' as well as the 'what'. The Department of Health (2018) have published an Implementation Guide and Toolkit for National Clinical Guidelines. Whilst this guide refers to 'guidelines' it can also be applied to enable and support implementation of other evidence based interventions such as the Food, Nutrition and Hydration Policy. The Implementation Guide provides the theory, steps and, tools for each stage of implementation.

Sample tools are provided below to get you started with implementing the policy:

**TOOL 1:** Gap analysis template ([click here](#))

**TOOL 2:** The HSE Hospital Food Environment with reference documents (click [here](#))

**TOOL 3:** Implementation tools

- > Logic Model, (click [here](#))
- > Hexagon Tool, (click [here](#))
- > Implementation Plan, (click [here](#))



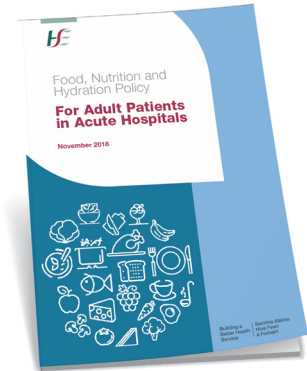
# Section 2.0

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# Section 2.0

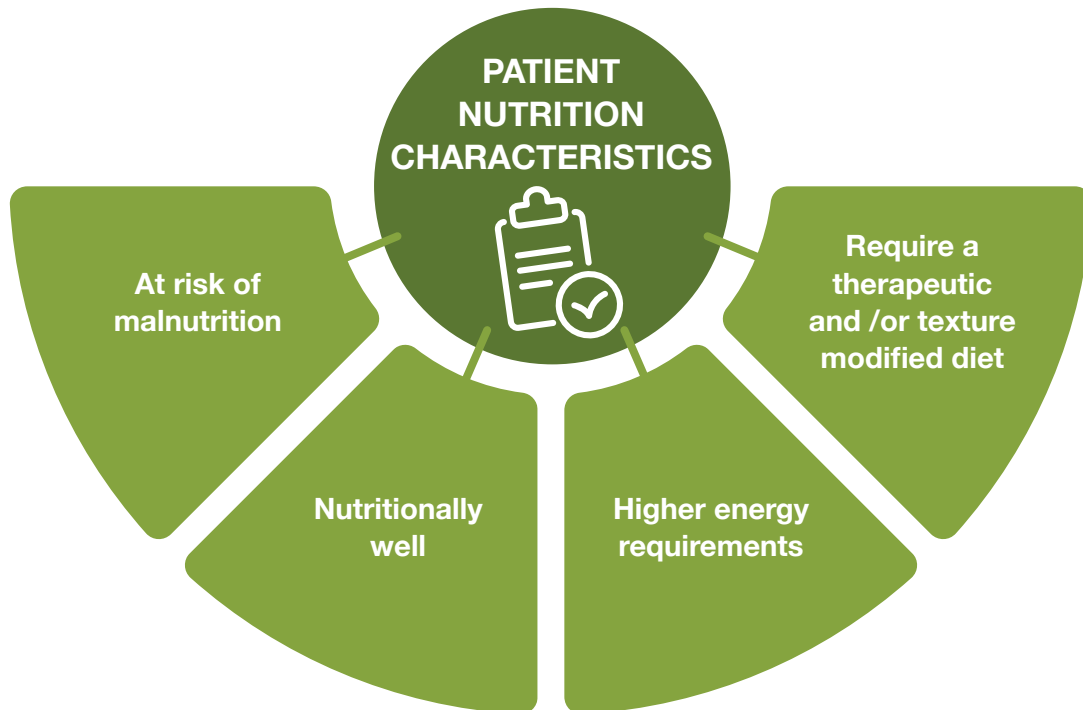
## Nutritional Care for Adult Patients in Acute Hospitals



### 2.1 Introduction

Provision of nutritional care is complex and challenging due to the varied group of patient’s with different medical and dietary needs. Dietary needs can be broadly categorised into 4 groups as shown in Figure 1.

Figure 1 - Patient Nutrition Characteristics



Patient may also have cultural, ethnic or religious dietary requirements.



## 2.2 Identification of Food, Nutrition and Hydration Needs on Admission to Hospital

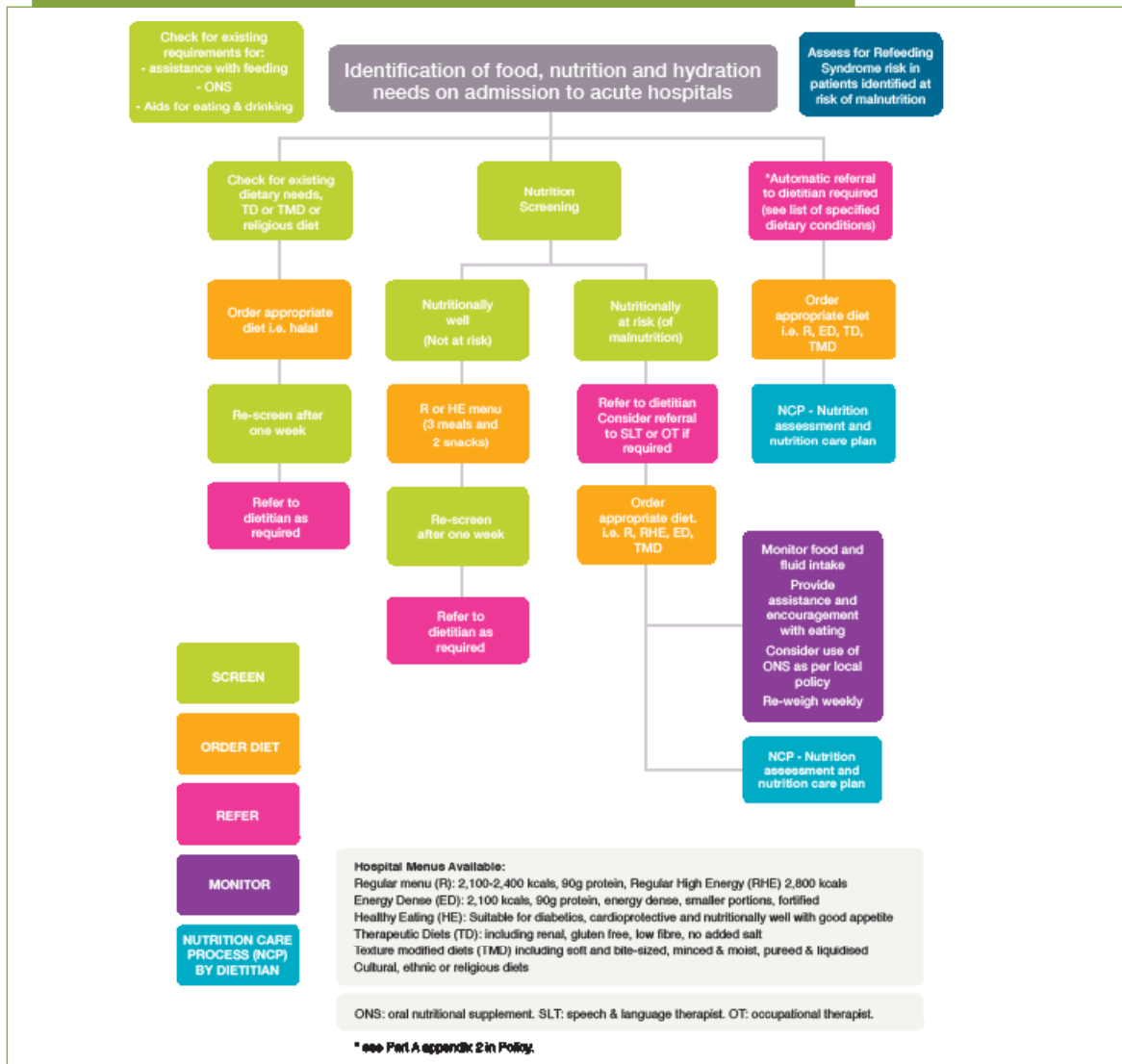
On admission to hospital all patients should have their food, nutrition and hydration needs assessed to ensure no delay in:

- > optimising nutritional intake
- > accessing the therapeutic or texture modified diet required as part of treatment plan for medical/clinical condition
- > access to continued oral nutritional support (if already requiring pre admission).

The following tools provide guidance to develop a template to identify patients' food, nutrition and hydration needs on admission to hospital.



### Tool 1: Identification of Food, Nutrition and Hydration Needs on Admission to Acute Hospitals (click [here](#))





The following checklist is designed to support staff to identify and document the individual patient's food, nutrition and hydration requirements.



## Tool 2: Food, Nutrition and Hydration Needs Checklist

### Identification of Food, Nutrition and Hydration Needs on Admission to Hospital

|            |  |
|------------|--|
| <b>1.</b>  | Screen all patients for risk of malnutrition using a validated screening tool  |
| <b>2.</b>  | Measure weight and height and calculate BMI*   |
| <b>3.</b>  | Ask if existing requirements: <ul style="list-style-type: none"> <li>- for a therapeutic or textured modified diet</li> <li>- for cultural, ethnic or religious dietary requirements</li> <li>- for nutrition support (<i>oral nutritional supplements, enteral tube feeding, parenteral nutrition</i>)</li> </ul> |
| <b>4.</b>  | Check for presence of medically diagnosed food allergies or intolerances   |
| <b>5.</b>  | Ask patients to rate their appetite, for example, good, fair, poor   |
| <b>6.</b>  | Check for physical difficulties with eating and drinking including: <ul style="list-style-type: none"> <li>- Swallowing difficulties</li> <li>- Requirement for adaptive cutlery</li> </ul> Send referrals to Speech and Language Therapy and/or Occupational Therapy ( <i>as appropriate</i> )                    |
| <b>7.</b>  | Assess level of assistance required with eating and drinking <ul style="list-style-type: none"> <li>- Not applicable</li> <li>- Partial assistance</li> <li>- Total assistance</li> </ul>  |
| <b>8.</b>  | Check oral health status   |
| <b>9.</b>  | Check food and fluid preferences   |
| <b>10.</b> | Consider conditions that require referral to the dietitian ( <i>see Part A appendix 2 in policy</i> )  |

\*Weight, height and BMI is included in some nutrition screening tools for example the Malnutrition Universal Screening Tool (MUST).



After you have identified the patient's food, nutrition and hydration needs, a range of hospital diet menus need to be available to order that meet the requirements of patient types outlined in Figure 1. **Tool 3** details the different hospitals diets and identifies the different patient needs which can be met by the range of diets.



### Tool 3: Range of Hospital Diets

| Hospital Diet                | Suitable for   |
|------------------------------|--|
| <b>Regular</b>               | Post nutrition screening: <ul style="list-style-type: none"> <li>&gt; Patients identified as nutritionally well who do not have any therapeutic or texture modified diet requirements</li> <li>&gt; Patients identified at risk of malnutrition who do not have any therapeutic or texture modified dietary requirements</li> </ul>  |
| <b>Regular Higher Energy</b> | <ul style="list-style-type: none"> <li>&gt; Age profile, for example, a young male 18-30 years old and/or</li> <li>&gt; Patients who as a result of acute illness/injury have increased energy requirements</li> </ul>   |
| <b>Energy Dense</b>          | <ul style="list-style-type: none"> <li>&gt; Patients with a reduced appetite and/or</li> <li>&gt; A poor food intake</li> <li>&gt; Physical difficulty with eating and drinking</li> <li>&gt; Early satiety</li> </ul>   |
| <b>Healthy Eating</b>        | <ul style="list-style-type: none"> <li>&gt; Patients with dyslipidaemia, cardiovascular risk/disease and hypertension</li> <li>&gt; Patients with Type 1 and Type 2 Diabetes</li> <li>&gt; Patients who have been identified as overweight or obese and nutritionally well</li> <li>&gt; Patients who have not been identified at risk of malnutrition and who choose to consume a diet which is high in fibre and low in fat, sugar and salt</li> </ul> |



### Tool 3: Range of Hospital Diets

| Hospital Diet        | Suitable for  |
|----------------------|---|
| <b>No Added Salt</b> | <p>May be prescribed to support the medical management of patients with clinical conditions such as:</p> <ul style="list-style-type: none"> <li>&gt; Chronic Kidney Disease and End Stage Kidney Disease</li> <li>&gt; Liver Disease with ascites</li> <li>&gt; Congestive Heart Failure</li> <li>&gt; Hypertension</li> <li>&gt; Acute Kidney Injury</li> </ul>  |
| <b>Gluten Free</b>   | <ul style="list-style-type: none"> <li>&gt; Patients with Coeliac Disease</li> <li>&gt; Patients with Dermatitis Herpetiformis</li> </ul>   |
| <b>Renal</b>         | <ul style="list-style-type: none"> <li>&gt; Patients with Chronic Kidney Disease (CKD) Stages 3-5 who are not on dialysis</li> <li>&gt; Patients with End Stage Kidney Disease (ESKD) who are receiving dialysis (Haemodialysis or Peritoneal Dialysis)</li> <li>&gt; Patients with high blood potassium levels</li> <li>&gt; Patients with high blood phosphate levels</li> <li>&gt; Patients with CKD/ESKD who also have Diabetes</li> </ul>  |
| <b>Low Fibre</b>     | <p>A low fibre diet is part of the recommended treatment plan for patients:</p> <ul style="list-style-type: none"> <li>&gt; With acute relapses in bowel diseases such as crohns, ulcerative colitis, irritable bowel disease or diverticulitis</li> <li>&gt; Post some bowel and abdominal surgeries for a short period</li> </ul>   |
| <b>Neutropenic</b>   | <p>This diet may be required in the following patients types:</p> <ul style="list-style-type: none"> <li>&gt; Some cancer patients</li> <li>&gt; Haematology patients undergoing chemotherapy</li> <li>&gt; Bone marrow transplant (haematopoietic stem cell transplantation) patients for example treatment of leukaemia, lymphomas, some solid tumours</li> <li>&gt; Other haematological conditions such as severe aplastic anaemia or autoimmune or hereditary immune disorders</li> <li>&gt; Those with Acquired Immunodeficiency Syndrome (AIDS)</li> </ul> |



### Tool 3: Range of Hospital Diets

| Hospital Diet                             | Suitable for  |
|---|---|
| <b>Light Diet*</b>                        | <p>This diet is typically required by the following patients:</p> <ul style="list-style-type: none"> <li>&gt; Post surgery/medical procedures</li> <li>&gt; When transitioning post operatively from fluids only to regular diet</li> <li>&gt; That cannot tolerate the regular diet and want bland, easily digested food in small quantities due to nausea</li> </ul>  |
| <b>Minimal Fat Diet for a chyle leak*</b> | <p>A minimal fat diet will be required for patients</p> <ul style="list-style-type: none"> <li>&gt; Where a chyle leak has been diagnosed and oral nutritional therapy in the form of a minimal fat diet is required</li> </ul>   |
| <b>Texture Modified Diets</b>             | <ul style="list-style-type: none"> <li>&gt; Patients with oropharyngeal dysphagia</li> <li>&gt; Patients at risk of aspiration</li> </ul> <p>A texture modified diet may also be required in the following patient cohorts on request by a member of the medical team:</p> <ul style="list-style-type: none"> <li>&gt; Patients with altered oesophageal anatomy as well as gastrointestinal strictures</li> <li>&gt; Post upper gastrointestinal/oral surgery, for example, post jaw wiring</li> </ul> <p>It may also be requested for:</p> <ul style="list-style-type: none"> <li>&gt; Patients who chose to eat a texture modified diet</li> <li>&gt; Patients with poor dentition/sore mouth or throat</li> </ul> |

\*These diets are not routinely required.

#### NOTES

- > **Post nutrition screening, patients will have been identified as nutritionally well or at risk of malnutrition**

## 2.3 Supporting Patient Discharge for those Identified at Risk of Malnutrition

Healthcare professionals are well placed to provide first-line nutrition support for people who are malnourished or at risk of malnutrition who are waiting to see the dietitian.

Here are some patient resources that could be considered for use to aid patients to get more nourishment.

Patient Information:

- > *Making the most of every Bite*



This leaflet can be downloaded from (click [here](#)).

- > A 222 page cook book called *Making the most of every bite*



You can order copies of the of the cookbook free of charge for patients who might benefit at [www.healthpromotion.ie](http://www.healthpromotion.ie), register as a Health Care Professional if you are not already registered and search 'making the most.'

### NOTES

- > **These resources are not suitable for patients who also require a therapeutic diet, for example, diabetic or renal diet**
- > **All nutrition related patient information for use in all locations by all members of the multidisciplinary team in the hospital, for example, nutritional information on stoma leaflets, dietary advice for tests or procedures must be reviewed and approved for use by the Nutrition and Hydration Steering Committee with input from a registered dietitian**

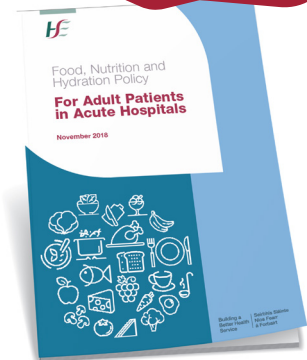
# Section 3.0

## Menu Planning Guidance to Implement the Nutrition Standards for Adult Patients

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# Section 3.0

## Menu Planning Guidance to Implement the Nutrition Standards for Adult Patients



### 3.1 Providing the Nutrition Standards for Energy, Protein and Fluid

To provide the nutrition standards for energy, protein and fluid, the following is required on a daily basis:

- (1) 3 meals, 2 snacks and 8 cups of fluid
- (2) Standardised portion sizes for the 4 main food groups
  - > Vegetables, salad and fruit
  - > Cereals and breads, potatoes, pasta and rice
  - > Milk, yogurt and cheese
  - > Meat, poultry, fish, eggs and beans



The following tools provide guidance on how to standardise portion sizes, and to meet the protein and fluid nutrition standards for all menus.

**Tool 1** Standardised Portion Size Guidance

**Tool 2** Sample Meal Plan for Protein Allocation from Meat, Poultry, Fish, Eggs and Beans

**Tool 3** Sample Hydration Plan

To meet the nutrient standards for energy, protein, vitamins and minerals, diets should include the following recommended portions each day. Amendments to portions sizes and types of foods allowed will be required for some therapeutic and textured modified diets, see section 4.0 and 5.0.

 **Tool 1:**  
Standardised Portion Size  
Guidance (Click [here](#))

| Food Groups  | Standardised Portions<br>Use standardised utensil sizes (e.g. ladle sizes)   |
|--|--|
| <p><b>*Vegetables, salad and fruit</b></p> <p><b>Provide 5 portions per day</b></p>                  | <p>1 portion is equal to 80g</p> <ul style="list-style-type: none"> <li>&gt; 1 medium sized fruit – apple, orange, pear or banana</li> <li>&gt; 2 small fruits – plums, kiwi or mandarin oranges</li> <li>&gt; Small fruits – 6 strawberries, 10 grapes or 16 raspberries</li> <li>&gt; ½ cup of cooked vegetables – fresh or frozen</li> <li>&gt; 1 bowl of salad – lettuce, tomato, cucumber</li> <li>&gt; 1 bowl of homemade vegetable soup</li> <li>&gt; 150mls unsweetened fruit juice</li> </ul> |
| <p><b>*Cereals and breads, potatoes, pasta and rice</b></p> <p><b>Provide 5 portions per day</b></p> | <p>1 portion is equal to:</p> <ul style="list-style-type: none"> <li>&gt; 2 thin slices of white or wholemeal bread</li> <li>&gt; 1 torilla wrap</li> <li>&gt; 1 ½ slices wholemeal soda bread or 1 pitta pocket</li> <li>&gt; 40g dry porridge oats</li> <li>&gt; 45g flaked type breakfast cereal</li> <li>&gt; 125g cooked rice,</li> <li>&gt; 100g pasta, noodles, or cous cous</li> <li>&gt; 2 medium potatoes (200g) or 4 small potatoes</li> </ul>  |




**Tool 1: Standardised Portion Size Guidance**

| Food Groups  | Standardised Portions<br>Use standardised utensil sizes (e.g. ladle sizes)   |
|--|--|
| <p><b>*Milk, yogurt and cheese</b></p> <p><b>Provide 3 portions per day</b></p>  | <p>1 portion is equal to:</p> <ul style="list-style-type: none"> <li>&gt; 200mls milk</li> <li>&gt; 25g cheese</li> <li>&gt; 125g yogurt</li> </ul>  |
| <p><b>Meat, poultry, fish, eggs and beans</b></p> <p><b>To meet the nutrition standard for protein (90g per day), 35-42g protein must be provided per day from meat, fish, chicken, eggs and beans</b></p> <p><b>Protein containing foods should be provided at 2-3 meals each day</b></p> | <p>Each of these foods provides 7g protein:</p> <ul style="list-style-type: none"> <li>&gt; 1 egg</li> <li>&gt; 25g roast chicken</li> <li>&gt; 22g roast beef</li> <li>&gt; 25g cooked roast pork</li> <li>&gt; 30g cooked minced beef</li> <li>&gt; 30g baked salmon</li> <li>&gt; 30g baked cod</li> <li>&gt; 100g cooked beans</li> </ul> <p>These foods must be weighed after cooking to ensure that specified weight is given at each meal for example to provide 28g protein from roast chicken, cooked portion should weigh 100g</p> |
| <p><b>Foods and drinks high in fat, salt and sugar</b></p>   | <p>Portions and types of foods used will be determined by the nutrition standards for the individual therapeutic and texture modified diets, see Section 4.0 and 5.0</p>   |

\*DOH, HEG, 2016

**Please refer to the HSE Nutrition Standards for food and beverage provision for staff and visitors in healthcare settings (pending publication) section: Guidance for Caterers. This provides advice for buying ingredients, for preparation, cooking and serving guidance to maximise nutritional content.**





## Tool 2: Sample Meal Plan for Protein Allocation from Meat, Poultry, Fish, Eggs and Beans

| Meal                        | Meal Plan 1                              |             | Meal Plan 2                |             | Meal Plan 3 (Vegetarian)                             |             |
|-----------------------------|--|-------------|----------------------------|-------------|--|-------------|
|                             | Food                                     | Protein (g) | Food                       | Protein (g) | Food   | Protein (g) |
| <b>Breakfast</b>            | 1 egg                                    | 7           | No egg or meat or fish     | 0           | 1 egg  | 7           |
| <b>Lunch (Main meal)</b>    | 75g roast beef                           | 21          | 100g roast pork            | 28          | 200g mixed beans (chilli or bean casserole)          | 14          |
| <b>Tea (Small Meal)</b>     | 50g roast chicken in a sandwich or salad | 14          | 1 egg and 100g baked beans | 7<br>5      | 60g tinned tuna (sandwich/salad) or mixed bean salad | 14          |
| <b>Total Protein Intake</b> |  | <b>42g</b>  |                            | <b>40g</b>  |  | <b>35g</b>  |
| <b>Notes</b>                |  |             |                            |             | <b>Include higher protein snacks</b>                 |             |

Approximate protein values.

### Tips to include plant based protein food sources where possible and appropriate

- > Add pulses and/or lentils to stews and casseroles and reduce amount of meat used accordingly
- > Use pulses and lentils in soups
- > Add pulses to salads, for example, three bean salad and reduce meat provided accordingly
- > Use pulses and lentils in curries and offer as small meal option, for example vegetable curry made with chickpeas and vegetables.
- > Provide pulses as side portion at main meal times.

See Section 4.0 and 5.0 for food types to avoid and allowed on different therapeutic and texture modified diets

 **Tool 3:**  
**Sample Hydration Plan**

| Provision Times  | Fluids  |
|--|---|
| <b>Water jug provided at least twice daily (if appropriate)*</b> | <b>The patient (if appropriate)* should have access to chilled water 24 hours of the day</b>    |
| <b>Breakfast</b>   | 150mls unsweetened orange juice<br>Tea or coffee<br><b>Jug of water placed on bedside table</b> |
| <b>Mid morning</b>   | Tea, coffee or milk<br>Water available throughout the morning                                   |
| <b>Midday meal</b>   | Milk offered with meal<br>Tea or coffee   |
| <b>Mid afternoon</b>   | <b>Water jug replenished</b>  |
| <b>Evening meal</b>  | Milk offered with meal<br>Tea or coffee<br>Water available throughout the evening               |
| <b>Bed time</b>  | Tea/coffee/milk based drinks offered  |

\*Patient is able to eat and drink and is not on a fluid restriction.

This provides approximately 2350-2600 ml per day:

- > 5 x Tea/coffee/water with meals and snacks (3 meals, 2 snacks) 750-1000ml



- > 1 fruit juice 150 ml
- > Milk with meals 2 x 150ml
- > Milk in cereal 150 ml
- > Jug of water 1000ml.

### 3.2 Regular Hospital Diet Menu Planning Guidance

Once you have standardised portion sizes for food servings at all mealtimes, your next step will be to develop a regular hospital diet that can be used for patients that have been identified as:

- > Nutritionally well
- > At risk of malnutrition and for those
- > Identified with higher energy requirements.

The regular menu should consist of 3 meals and 2 snacks with specified portion sizes (see page 14, Tool 1) to meet the recommended nutrition standards outlined in Section 3.0 of the policy.

The following tools have been developed to get you started:

**Tool 4** Food Based Standards: Foods to Include on a Regular Diet Menu

**Tool 5** A Sample Regular Diet Meal Plan

## Tool 4: Food Based Standards: Foods to Include on a Regular Diet Menu

| Food Groups   | Recommendations  | Important Considerations  |
|---|--|---|
| <b>Vegetables, salad and fruit</b>                            | Fresh and frozen fruit, fruit tinned in fruit juice or syrup<br><br>100 per cent fruit juice, (limited to one 150ml serving per day)<br><br>Fresh, frozen and tinned vegetables  | It is important not to exceed 5 portions of fruit and vegetables, as they may induce early satiety. These foods are low in calories and protein |
| <b>Wholemeal cereals and breads, potatoes, pasta and rice</b> | White bread, white baguette and white bread rolls, white wraps<br><br>Wholemeal, granary, brown, wheaten and brown soda breads, brown pitta bread, brown wraps, and brown/wholemeal chapattis<br><br>All types of breakfast cereal, no restriction on sugar content<br><br>White rice, white pasta, white pitta bread and white noodles<br><br>Chips, fried rice<br><br>Mashed potatoes/roast potatoes/jacket potatoes | Foods high in fibre such as wholemeal bread, cereals pasta and rice can lead to early satiety   |

**Tool 4: Food Based Standards: Foods to Include on a Regular Diet Menu**

| Food Groups   | Recommendations   | Important Considerations  |
|---|---|---|
| <b>Milk, yogurt and cheese</b>                      | <p>Full fat milk, yogurt/yogurt drinks.</p> <p>Full fat Cheese</p> <p>Milk puddings and custard made on full fat milk</p> <p>Cream</p>  | <p><b>Avoid:</b></p> <p>Low fat milk</p> <p>Low fat cheese and Low fat yogurt drinks as will reduce energy intake</p> |
| <b>Meat, poultry, fish, eggs, beans and nuts</b>    | <p>All types of meat, poultry, fish, eggs, beans and nuts</p> <p>All processed meat e.g. ham, bacon, salami, corned beef, burgers, sausages, chicken goujons/nuggets</p> <p>Fish in batter</p> <p>Tinned beans and peas</p> |   |
| <b>Fats, spreads and oils</b>                       | All types allowed   | Reduced fat or light spread, mayonnaise or salad cream should not be used as will reduce energy intake                |
| <b>Foods and drinks high in fat, sugar and salt</b> | Chocolate, crisps, biscuits, pastries, cakes, ice-cream, sugary soft drinks, puddings, sweets, jams, honey, sugar, salt   | Foods high in fat, and sugar are not restricted as a useful source of energy  |



## Tool 5: Sample Regular Diet Meal Plan

| Meal/Snacks and Beverages                  | Foods  |
|--|--|
| <b>Breakfast</b>                           | <p>150mls orange juice</p> <p>Cornflakes with 150mls full fat milk</p> <p>2 slices of bread (white or wholemeal whichever preferred)</p> <p>Butter or full fat spread</p> <p>Jam</p> <p>Tea or coffee</p>                          |
| <b>Midday meal<br/>(Main/large meal)</b>   | <p>Bowl of Soup</p> <p>Roast Pork</p> <p>Steamed carrots</p> <p>2 scoops of mashed potato with butter</p> <p>Gravy</p> <p>Jelly and Ice cream</p> <p>Glass of full fat milk</p> <p>Tea or coffee</p>                               |
| <b>Evening Meal<br/>(Small/light meal)</b> | <p>Scrambled egg</p> <p>Grilled Tomato</p> <p>2 slices of bread (white or wholemeal)</p> <p>Butter or full fat spread</p> <p>Marmalade</p> <p>Full fat yoghurt</p> <p>Fruit</p> <p>Glass of full fat milk</p> <p>Tea or coffee</p> |
| <b>Snacks</b>                              | <p>2 snacks</p> <p>See snack suggestions below</p> <p>Served with tea, or coffee</p>   |



### Tool 5: Sample Regular Diet Meal Plan

| Meal/Snacks and Beverages     | Foods   |
|-------------------------------|---|
| <b>Milk with meals</b>        | 150mls full fat milk with midday and evening meal (300mls in total)<br><br>May also be served with snacks |
| <b>Milk for Tea or Coffee</b> | 100mls per day  |

See Appendix 1.0 for meal plan nutritional analysis.

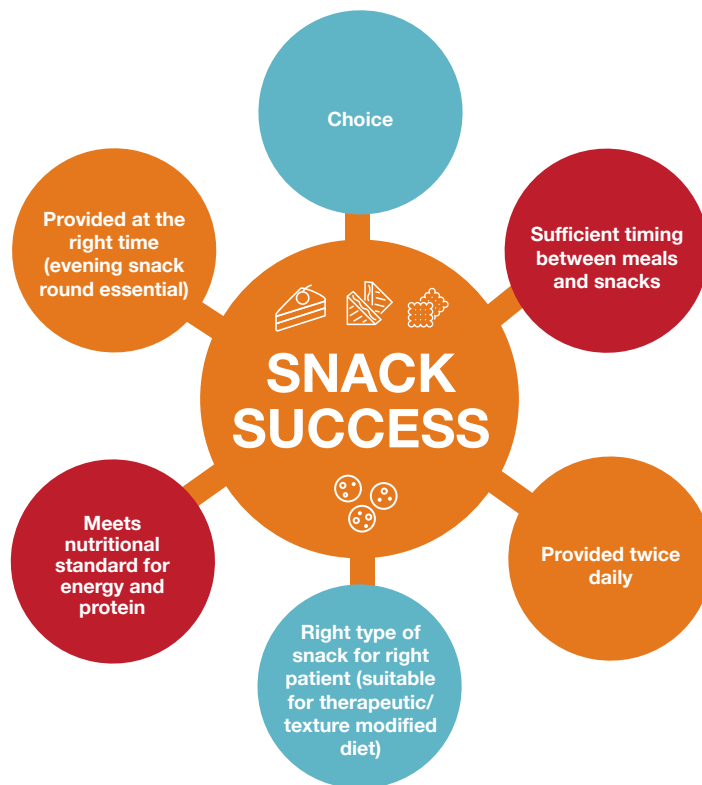
- > Main meal can be provided at midday or in the evening

To provide a regular high energy diet, higher energy containing snacks and desserts will be required, see section on snacks 3.3 and desserts 4.3.

### 3.3 Snacks

To maximise the opportunities for patients to eat and drink a range of snacks must be available twice daily.

**Snack success is dependent on:**



**Table 1: Nutrition Standard for Snacks**

| Snacks must be provided twice daily   | Nutrition Standard                          | Snack Suggestions |
|---|---|-------------------|
| <b>Regular Menu</b>   | 150 kcal and 2g protein per snack           | Table 2           |
| <b>Regular Higher Energy Menu (could also be used on the energy dense diet)</b>                             | ≥ 300 kcal per snack                        | Table 3           |
| <b>Evening snacks for patients with decompensated liver disease (see Part A Appendix VII of the policy)</b> | Evening snack must contain 50g carbohydrate | Table 4           |

Higher protein snack option could be used on Regular, Regular Higher Energy and/or Energy Dense Diet menus. Snacks with a high protein content of ≥ 7g per portion have been highlighted in Table 2 and 3.



## Table 2: Sample Snack Suggestions

(providing approximately 150kcal and 2g protein)

Energy Range 115-200 Kcal, Protein Range 1.5-8 g protein

| Snack   | Weight (g) | Energy (kcal)                   | Protein (g) |
|---|------------|---------------------------------|-------------|
| <b>Full fat yogurt</b>  | 125        | 115-160                         | 4-5         |
| <b>Custard pot</b>  | 150        | 146-158*<br>*flavoured versions | 4           |
| <b>Rice pudding pot</b>   | 150        | 170                             | 5           |
| <b>Crackers (2)</b>   | 14 -16     | 197                             | 6           |
| <b>1 pat of butter</b>  | 7          |                                 |             |
| <b>1 portion of cheddar cheese</b>                              | 20         |                                 |             |
| <b>Crackers (2)</b>   | 16         | 146                             | 5           |
| <b>2 cheese triangle</b>  | 34         |                                 |             |
| <b>Chocolate biscuits (2)</b>                                   | 32         | 160                             | 2           |
| <b>Gingernut biscuits (3)</b>                                   | 31         | 138                             | 1.5         |
| <b>Shortbread biscuits (3)</b>                                  | 30         | 147                             | 1.8         |
| <b>Digestives (2)</b>   | 30         | 162                             | 2.2         |
| <b>Custard Creams (3)</b>                                       | 34         | 168                             | 1.8         |
| <b>½ lean meat sandwich (i.e. 2 triangles)</b>                  | 67         | 140                             | 8           |
| <b>1 slice of bread/toast with butter</b>                       | 38+7       | 135                             | 3           |
| <b>Small bowl of flaked type breakfast cereal with milk</b>     | 25+110     | 163                             | 5           |
| <b>1 wheat biscuit with milk</b>                                | 20+110     | 140                             | 6           |
| <b>4 squares plain milk chocolate with cup of tea with milk</b> | 26 +35     | 163                             | 3           |



**Table 2: Sample Snack Suggestions**

| Snack   | Weight (g) | Energy (kcal) | Protein (g) |
|---|------------|---------------|-------------|
| <b>Croissant</b>                              | 50         | 186           | 4           |
| <b>Blueberry, apple and lemon squares*</b>    |            | 150           | 4.4         |
| <b>Slice of fruit cake</b>                    | 50         | 167           | 2           |
| <b>Small blueberry muffin</b>                 | 50         | 190           | 2.5         |
| <b>Hot chocolate made with full fat milk</b>  | 18+200     | 200           | 8           |
| <b>Ice-cream with tinned peaches in syrup</b> | 55+100     | 148           | 2.2         |

Nutritional analysis from McCance and Widdowson's *The Composition of Foods Seventh Summary Edition*, product specification sheets and from *Making the Most of Every Bite Cookery Book (HSE/UCC)*.

\**Making the Most of Every Bite Cookery Book (HSE/UCC)*.

**Table 3: Aiming for  $\geq 300$ kcal per snack**

Sample Snacks for those requiring higher energy intakes.

| Snack   | Weight (g) | Energy (kcal) | Protein (g) |
|---|------------|---------------|-------------|
| <b>Carrot cake</b>  | 80         | 300           | 3.4         |
| <b>Fruit cake</b>   | 100        | 334           | 4           |
| <b>1 lean meat sandwich</b>                               | 140        | 280           | 16          |
| <b>2 wheat biscuits with full fat milk + banana</b>       | 40+180+80  | 310           | 11          |
| <b>2 slices bread/toast with butter/spread and jam</b>    | 76+14+20   | 322           | 6           |
| <b>2 slices bread with peanut butter (10g/slice)</b>      | 76+20      | 288           | 10.5        |
| <b>4 cream crackers + spread/ butter + cheddar cheese</b> | 32+14+40   | 394           | 12          |



**Table 3: Aiming for  $\geq 300$ kcal per snack**

| Snack   | Weight (g) | Energy (kcal) | Protein (g) |
|---|------------|---------------|-------------|
| <b>Fruit scone with spread/<br/>butter &amp; jam</b>                                | 50+7+20    | 270           | 4           |
| <b>Flavoured milk</b>   | 500        | 320           | 18          |
| <b>Danish pastry</b>  | 100        | 446           | 5           |
| <b>Digestive biscuits (2) and<br/>glass of full fat milk</b>                        | 30+200     | 288           | 9           |
| <b>Drinking choc (3 tsp) + 200<br/>mls full fat milk + 2 digestive<br/>biscuits</b> | 18+200+30  | 362           | 10.2        |
| <b>8 squares chocolate and cup<br/>of tea with 35mls full fat milk</b>              | 52+35      | 326           | 6           |
| <b>Chocolate muffin</b>   | 100        | 436           | 5.5         |
| <b>Blueberry muffin</b>   | 100        | 375           | 5.0         |
| <b>Banana bread*</b>  |            | 321           | 5           |
| <b>Scone*</b>   |            | 416           | 7.4         |
| <b>Flapjack*</b>  |            | 305           | 4.3         |
| <b>Granola bars*</b>  |            | 305           | 5           |
| <b>Treacle bread*</b>   |            | 314           | 8           |
| <b>White chocolate strawberry<br/>mousse*</b>                                       |            | 525           | 4.4         |

Nutritional analysis from McCance and Widdowson's *The Composition of Foods Seventh Summary Edition*, and from *Making the Most of Every Bite Cookery Book (HSE/UCC)*.

\**Making the Most of Every Bite Cookery Book (HSE/UCC)*.



**Table 4: Evening snacks containing approximately 50g carbohydrate**

| Evening Snack Options for Patients with Decompensated Liver Disease |
|---|
| Yogurt and two biscuits   |
| Muffin and glass of milk  |
| 2 slices toast and jam  |
| Rice pudding and one biscuit  |
| 200ml milk and a flapjack   |
| 200ml milk and slice of fruit cake                                  |
| 200ml milk and a cereal bar   |
| Banana sandwich and a cup of tea                                    |
| Large bowl of cereal with milk                                      |
| Small bowl of cereal with banana and milk                           |
| Scone with butter and jam and glass of milk                         |
| 300mls milk and 3 plain or chocolate biscuits                       |
| 5 plain or chocolate biscuits                                       |
| 1 ½ slices plain or fruit cake                                      |

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# Section 4.0

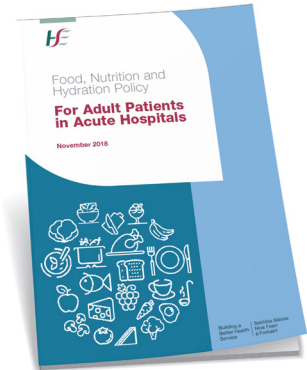
## Menu Planning Guidance to Implement the Nutrition Standards for Therapeutic Diets

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# Section 4.0

## Menu Planning Guidance to Implement the Nutrition Standards for Therapeutic Diets



### 4.1 Introduction

This section provides menu planning guidance to enable development of therapeutic diets that meet the recommended nutrition standards specified in Section 4.0 of the policy. Many therapeutic diets have similar nutrient goals to a regular diet but require different food choices and/or modified cooking techniques to achieve specific targets.

### 4.2 Healthy Eating Diet Menu Planning Guidance


The healthy eating menu should consist of 3 meals and 2 snacks using standardised portion sizes (see Tool 1, page 14) to meet the recommended nutrition standards specified in Section 4.0 of the policy.

The following tools have been developed to get you started:

**Tool 1** Food Based Standards: Foods to Avoid and Allowed on a Healthy Eating Diet Menu

**Tool 2** Sample Healthy Eating Diet Meal Plan

**Tool 3** Snack Suggestions for a Healthy Eating Diet Menu



## Tool 1: Food Based Standards: Foods to Avoid and Allowed on a Healthy Eating Diet Menu

| Food Group  | Avoid ✗  | Allowed ✓  |
|---|--|--|
| <b>Vegetables, salad and fruit</b>                            | <p>Fruit tinned in syrup</p> <p>Fruit juice with added sugar (sweetened)</p> <p>Tinned vegetables with added salt or sugar</p>   | <p>Fresh and frozen fruit, fruit tinned in fruit juice</p> <p>Unsweetened 100 per cent fruit juice (limited to one 150ml serving per day)</p> <p>Fresh, frozen and tinned vegetables</p>   |
| <b>Wholemeal cereals and breads, potatoes, pasta and rice</b> | <p>White bread, white baguette, white bread rolls, and white wraps</p> <p>White rice, white pasta, white pitta bread and white noodles</p> <p>Chips, fried rice</p> <p><b>Breakfast cereals with less than 6g of fibre and more than 12.3g total sugars per 100g</b></p> | <p>Wholemeal, granary, brown, wheaten and brown soda breads, brown pitta bread, brown wraps, and brown/wholemeal chapattis, brown rice, wholemeal pasta, wholewheat noodles, potatoes (preferable with skins), sweet potatoes.</p> <p><b>Porridge, breakfast cereals must contain more than 6g of fibre per 100g and must not exceed 12.3g of total sugars per 100g</b></p> <p>Couscous, bulgar wheat, semolina, tapioca, maize, cornmeal and quinoa</p> |
| <b>Milk, yogurt and cheese</b>                                | <p>Full fat milk, full fat yogurt, cream, full fat cheese</p> <p>Standard yogurt drinks.</p> <p>Milk pudding and custard made on full fat milk and sweetened with sugar</p>  | <p>Low fat milk,</p> <p><b>yogurt/yogurt drinks must be low in fat (less than 3g fat per 100g) and low in sugar (contain less than 11g sugar per 100g)</b></p> <p><b>Low fat Cheese (less than 25g of fat per 100g)</b></p> <p>Milk puddings and custard made on low fat milk and sweetened with artificial sweetener</p>  |



**Tool 1: Food Based Standards: Foods to Avoid and Allowed on a Healthy Eating Diet Menu**

| Food Group  | Avoid X  | Allowed ✓  |
|---|--|--|
| <b>Meat, poultry, fish, eggs, beans and nuts</b>    | <p>All processed meat e.g. ham, bacon, salami, corned beef, burgers, sausages, chicken goujons/nuggets</p> <p>Fish in batter</p> <p>Scotch eggs</p> <p>Tinned beans and peas with added salt</p> | <p>Lean meat, chicken, fish (fresh and frozen, including breaded fish/fish fingers)</p> <p><b>Oily fish: Provide twice weekly</b></p> <p><b>Eggs: Limit to 7 per week</b></p> <p>Beans, pulses e.g. chickpeas, butter beans, kidney beans and lentils. Nuts, tofu, soya and quorn, baked beans</p> |
| <b>Fats, spreads and oils</b>                       | <p>Butter, lard, ghee, suet, palm oil, coconut oil</p> <p>Full fat mayonnaise/salad cream</p>  | <p>Cooking oils based on mono or polyunsaturated fats</p> <p>Poly or monounsaturated spread</p> <p>Mayonnaise/salad creams must be low fat, light or reduced calorie versions</p>  |
| <b>Foods and drinks high in fat, sugar and salt</b> | <p>Chocolate, crisps, biscuits, pastries, cakes, ice-cream, sugary soft drinks, puddings, sweets, jams, honey, sugar, salt, cups of soup</p>   | <p>Artificial sweetener, reduced sugar jam and marmalade.</p>  |



## Tool 2: Sample Healthy Eating Diet Meal Plan

| Meal/Snacks and Beverages                  | Foods  |
|--|--|
| <b>Breakfast</b>                           | <p>150mls unsweetened orange juice</p> <p>2 wheat biscuits with 150mls low fat milk</p> <p>2 slices wholemeal or brown soda bread</p> <p>Poly or monounsaturated spread</p> <p>Tea or coffee</p>   |
| <b>Midday Meal<br/>(Main/large meal)</b>   | <p>Bowl of vegetable soup</p> <p>Roast chicken</p> <p>Steamed carrots</p> <p>2 scoops of mashed potato</p> <p>Gravy</p> <p>Poly or monounsaturated spread (on the side)</p> <p>Fruit cocktail tinned in natural juice</p> <p>Low fat and low sugar yogurt</p> <p>Tea or coffee</p> |
| <b>Evening Meal<br/>(Small/light meal)</b> | <p>Roast beef salad (with mixed salad and coleslaw)</p> <p>2 slices of wholemeal bread</p> <p>Poly or monounsaturated spread</p> <p>Fruit</p> <p>Low fat and low sugar yogurt</p> <p>Tea or coffee</p>   |
| <b>Snacks</b>                              | <p>2 snacks, see <b>Tool 3</b> for snack suggestions</p> <p>Served with tea or coffee</p>  |
| <b>Milk with meals</b>                     | <p>150mls low fat milk served with midday and evening meal (300mls in total)</p> <p>Can also be served with snacks</p>   |



## Tool 2: Sample Healthy Eating Diet Meal Plan

| Meal/Snacks and Beverages | Foods               |
|---------------------------|---------------------|
| Milk for tea or coffee    | 100mls low fat milk |

See Appendix 2.0 for nutritional analysis.



- > **Main meal can be provided at midday or in the evening**



## Tool 3: Snack Suggestions for the Healthy Eating Diet Menu

| Snacks  | Weight (g) | Energy (kcal) | Protein (g) |
|---|------------|---------------|-------------|
| 2 oat cakes   | 26         | 118           | 2.4         |
| 2 bread sticks*   | 14         | 54            | 1.5         |
| 4 cream crackers and spread                                     | 28+20      | 230           | 2.4         |
| 2 rye crispbreads (2) with low fat spread and reduced sugar jam | 20+10+10   | 122           | 1.7         |
| 1 slice of wholemeal toast with poly/monounsaturated spread     | 38+10      | 135           | 3           |
| 1 small brown scone with poly/monounsaturated spread            | 40+10      | 191           | 3           |

### Tool 3: Snack Suggestions for the Healthy Eating Diet Menu

| Snacks   | Weight (g) | Energy (kcal) | Protein (g) |
|--|------------|---------------|-------------|
| <b>Small bowl of high fibre cereal (1 wheat biscuit) with low fat milk</b> | 20+110     | 117           | 6           |
| <b>Apple (medium 112g)</b>   | 112        | 57            | 0.7         |
| <b>Banana (medium 100g)</b>  | 100        | 81            | 1.2         |
| <b>Orange (small 120g)</b>   | 120        | 43            | 0.9         |
| <b>Rice or corn cakes with no added salt (2)*</b>                          | 14         | 54            | 1           |
| <b>Digestive Biscuits (2)**</b>  | 30         | 162           | 2.2         |

\*serve with low fat cream cheese or portion of fruit.

\*\*once a day maximum.

Nutritional analysis from McCance and Widdowson's  
The Composition of Foods Seventh Summary Edition.

NOTES

- > **Provide 2 snacks daily**
- > **Fruit must be offered twice daily**

## 4.3 Energy Dense Diet Menu Planning Guidance

The Energy Dense Diet menu should consist of 3 meals and 2 snacks to meet the recommended nutrition standards specified in Section 4.0 of the policy

The following tools have been developed to get you started:

**Tool 1** Food Guide to Developing the Energy Dense Diet Menu

**Tool 2** Guide to Fortifying Food and Increasing Intakes

**Tool 3** Sample Energy Dense Diet Meal Plan

**Tool 4** Higher Energy and Protein Desserts



## Tool 1: Food Guide to Developing the Energy Dense Diet Menu

|   |  |
|---|--|
| ✓ | All food types allowed on the Regular diet are suitable for the Energy Dense Diet (see Section 3.2)  |
| ✓ | Fortify foods (see Tool 2), provide 3 fortified reduced portion size main meals  |
| ✓ | Provide 2 desserts each day (at midday and evening meal); fortified or served with ice-cream, cream or custard (see Tool 4)  |
| ✓ | Provide 2 snacks between meals, it may be necessary to include higher energy containing snacks (>300kcal per snack, see Section 3.3, Table 3) to meet the nutrition standards for energy and protein |
| ✓ | Provide high protein milk with all meals   |
| ✓ | Do not use low calorie products  |



### NOTES

**It may not be possible to meet nutrition standards for micronutrients by diet alone and supplementation may be required.**

## Food Fortification

Food fortification is a strategy that is used to increase the energy and nutrient content (density) of foods and beverages without significantly affecting their volume/portion size.

The dietary intakes of some hospital patients have been found not to meet energy and nutrient requirements, particularly when poor appetite and/or early satiety is present due to inability to eat the volume of food provided on regular menus. To cater for these individuals' dietary needs, the focus needs to be on the provision of tasty, energy and nutrient-dense foods that come in smaller portion sizes.

Increasing the availability of suitable food choices and also the opportunities to eat will be critical in enabling patients to achieve their nutritional needs.

A diet higher in energy and nutrient-density can be achieved by encouraging an increase in the overall amount of food eaten and also by increasing the energy and nutrient content through food fortification.





## Tool 2: Guide to Fortifying Food and Increasing Intakes

Ingredients can either be in the form of natural food stuffs or the addition of powders/ syrups to foods that have a high protein, fat or carbohydrate content such as whey protein.

Energy and nutrient-density of foods and meals can be increased by providing:

- > A wide choice of breakfast items, including a choice of higher calorie breakfast cereals, for example sweetened muesli, porridge made with fortified milk, a cooked breakfast option for example rasher, sausage and egg
- > Higher energy desserts
- > A fortified main meal option that contains a smaller portion of meat, fish or chicken, potatoes or rice and vegetables presented as dinner in a bowl e.g. chicken and mushroom casserole
- > A smaller main meal portion served with a fortified soup and dessert

### Food Fortification

- > Use high protein milk and full-fat milk products, e.g. cheese
- > Use butter on sandwiches
- > Add butter and milk or cream to mashed vegetables and potatoes
- > Provide milk-based sauces to accompany vegetables or meats, e.g. parsley sauce, white sauce or cheese sauce
- > Add cream or protein powder to milk puddings and soups
- > Provide cream or ice-cream to accompany dessert, for example apple tart with cream
- > Make cream-based sauces for use with pasta or rice
- > Add gravy and sauce enriched with a protein powder to meat dishes
- > Add glucose polymers or protein powders to dishes as appropriate
- > Enrich milk with milk powder
- > Add sugar to stewed fruit
- > Offer higher calorie-containing fluids such as fruit juice, milk and flavoured milk, hot chocolate, coffee made on milk
- > Provide small, energy and nutrient-dense easy to eat snacks as appropriate for patient group for example:
  - cakes and biscuits
  - small sandwiches
  - full fat custard pot or rice pudding pot.





### Tool 3: Sample Energy Dense Diet Meal Plan

| Meal/Snacks and Beverages                            | Foods  |
|--|--|
| <b>Breakfast</b>                                     | <p>Small bowl of porridge made with high protein milk</p> <p>150mls orange juice</p> <p>Boiled egg</p> <p>1 slice white bread with butter and jam</p> <p>Tea or coffee</p>   |
| <b>Midday Meal</b><br>~600 kcals and<br>~25g protein | <p>Fortified dinner, for example chicken and mushroom casserole</p> <p>Dessert</p> <p>Tea or coffee</p> <p><b>or</b></p> <p>Small portion of main course served with high energy and high protein dessert</p> <ul style="list-style-type: none"> <li>&gt; 50-60g meat or equivalent high biological value protein (HBV) source</li> <li>&gt; 40g (½ standard portion for vegetables)</li> <li>&gt; 1 small scoop of fortified potatoes (½ regular diet portion)</li> <li>&gt; If a composite dish is served the HBV protein content (i.e. meat, chicken or fish) must provide a minimum of 50g cooked weight</li> <li>&gt; Dessert</li> </ul> <p>Tea or coffee</p> |
| <b>Evening Meal</b>                                  | <p>As per midday meal</p> <p>Swap bread, rice or pasta for potatoes</p>  |
| <b>Snacks*</b>                                       | <p>2 snacks per day</p> <p>Served with tea or coffee</p>   |
| <b>Milk with meals</b>                               | <p>150mls high protein milk served with midday and evening meal (300mls in total)</p>  |



### Tool 3: Sample Energy Dense Diet Meal

| Meal/Snacks and Beverages | Foods                    |
|---------------------------|--------------------------|
| Milk for tea or coffee    | 100mls high protein milk |

\*See Section 3.0 for snack suggestions for this menu.

See Appendix 3 for nutritional analysis.



### Tool 4: Higher Energy and Protein Desserts





## 4.4 No added Salt Diet Menu Planning Guidance

The no added salt menu should consist of 3 meals and 2 snacks using standardised portion sizes (see Tool 1, page 14) to meet the recommended nutrition standards specified in Section 4.0 of the policy.

The following tools have been developed to get you started:

**Tool 1** Food Guide to Developing a No Added Salt Diet

**Tool 2** Food Based Standards: Foods to Avoid and Allowed on a No Added Salt Diet Menu

**Tool 3** Tips to Improve Taste and Flavour of Meals


**Tool 4** Guide to Label Reading



### Tool 1: Guide to Developing a No Added Salt Diet Menu

|   |  |
|---|--|
| ✓ | Salt should not be used during the preparation or cooking of meals   |
| ✓ | Use fresh food instead of processed or canned foods  |
| ✓ | Herbs, spices and pepper are all suitable alternatives to salt   |
| ✓ | Avoid use of salt substitutes such as Lo Salt and So-Low, as they are very high in potassium. (Refer to Renal section 4.8) |
| ✓ | Salt sachets should not be placed on the patient's food trays  |
| ✓ | Within recipes try to limit the amount of bouillon or gravy mixes that is used   |





## Tool 2: Food Based Standards: Foods to Avoid and Allowed on a No Added Salt Diet Menu

| Food Group   | Avoid ✗  | Allowed ✓   |
|--|--|---|
| <b>Meat, poultry, fish, eggs, beans and nuts</b>   | <p>Salted meats such as ham, bacon, rashers, sausages, black and white pudding, salami, corned beef, pâté, meat pies, frankfurters</p> <p>Fish tinned in brine</p> <p>Tinned beans/pulses with added salt</p>  | <p>Fresh cuts of lean meat, such as beef, pork, lamb, chicken, turkey</p> <p>Fresh or frozen fish, plain or in breadcrumbs</p> <p>Fish tinned in oil (drained) or water</p> <p>All types of eggs</p> <p>Unsalted tinned and dried beans/pulses</p> <p>Baked beans</p> |
| <b>Vegetables, salad and fruit</b>   | <p>Tinned vegetables, tinned or packet soups, olives</p>   | <p>Fresh or frozen vegetables</p> <p>Unsalted tinned vegetables</p> <p>All types of fruit, fresh, frozen or tinned</p>  |
| <b>Wholemeal cereals and breads, potatoes, pasta and rice</b>  | <p>Should have &lt;1.5g salt per sandwich including any fillings used</p>  | <p>Sandwiches made with unprocessed meat or chicken, fish or egg</p> <p>All types of white and brown bread, pasta and cereal</p> <p>All types of potatoes</p>   |
| <p><b>Food and drinks high in fat, sugar and salt</b></p> <ul style="list-style-type: none"> <li>- <b>Stocks and sauces</b></li> <li>- <b>Snacks</b></li> <li>- <b>Drinks</b></li> </ul> | <p>Stock cubes, bottled and packet sauces, soy sauce, oyster sauce, casserole mixes</p> <p>Salty snacks such as crisps, salted popcorn, salted nuts, pretzels, salted and cheese, flavoured biscuits, tortilla chips</p> <p>Tomato juice, Bovril</p> | <p>Choose lower salt stock cubes/ bouillon</p> <p>Homemade popcorn with no added salt, plain crackers or biscuits</p> <p>Tea, coffee, water, milk, fruit juice</p>  |

There are lots of ways to add flavour to foods without using salt. Use herbs and spices to flavour your food.



### Tool 3: Tips to Improve Taste and Flavour

| Food                        | Suggested Flavouring  |
|-----------------------------|---|
| <b>Beef</b>                 | Allspice, dry mustard rubbed into the meat before cooking, oregano, bay leaf, chilli powder, cayenne pepper |
| <b>Fish</b>                 | Vinegar, lemon, mint, thyme, lime, garlic, chilli, dill   |
| <b>Pork</b>                 | Cloves, apple, garlic, onion, sage, curry powder  |
| <b>Lamb</b>                 | Rosemary, mint, basil, curry powder   |
| <b>Chicken</b>              | Tarragon, dill, basil, paprika, rosemary, sage, thyme, chilli powder, cayenne pepper                        |
| <b>Grilled Meat</b>         | Lemon juice, sprinkle with ground ginger before grilling  |
| <b>Stews and casseroles</b> | Basil, bay leaf, dill, bouquet garni, oregano, sage, thyme, garlic  |



### Tool 4: Guide to Label Reading

| Conversions                                   |
|---|
| Sodium gram (g) to Salt (g) multiply by 2.5   |
| Salt (g) to sodium divide by 2.5              |
| Sodium (mg) to sodium (mmoles) divide by 23   |
| Sodium (mmoles) to sodium (mg) multiply by 23 |
| 1g salt = 17mmoles sodium                     |

#### NOTES

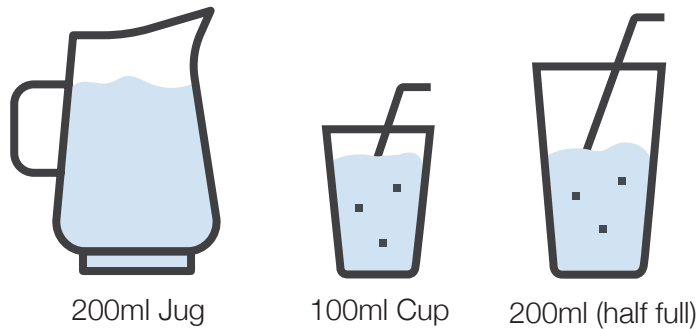
- > **Main meal can be provided at midday or in the evening**



## 4.5 How to Support a Patient on a Fluid Restriction?

Restricting fluid is one of the most difficult dietary restrictions for patients. To help patients adhere to the fluid restriction prescribed it is essential to provide the following:

**Tools required:** A small jug, cup and glass.



- A Fluid Plan: Any fluids that are liquid at room temperature must be counted as part of the daily fluid intake.

The following sample fluid plans for different clinical scenarios provide a template to help patients to:

- Distribute their fluid allowance throughout the day, helping to alleviate thirst
- Include more nourishing drinks where required (for example, if identified at risk of malnutrition) within the fluid allowance.

### 4.5.1 Sample Fluid Plans

**Table 1:** Suggested Fluid Plan for 1 litre fluid restriction using 100ml drink exchanges.

| Meal                | 100ml exchange | Suggested Amount                 |
|---------------------|----------------|----------------------------------|
| <b>Breakfast</b>    | 2              | Beverage 100ml<br>Beverage 100ml |
| <b>Midmorning</b>   | 1              | Beverage 100ml                   |
| <b>Midday meal</b>  | 2              | Beverage 100ml<br>Beverage 100ml |
| <b>Evening meal</b> | 2              | Beverage 100ml<br>Beverage 100ml |
| <b>Supper</b>       | 1              | Beverage 100ml                   |
| <b>Medications</b>  | 2              | Water 200mls                     |

## Sample Fluid Restriction Plans for patients requiring a 1 Litre fluid restriction and also identified at risk of malnutrition.

**Case Example 1:** Patient with renal disease identified at risk of malnutrition and prescribed 1 litre fluid restriction.

| Meal                | 100ml exchange | Suggested Amount                 |
|---------------------|----------------|----------------------------------|
| <b>Breakfast</b>    | 2              | Beverage 100ml<br>Beverage 100ml |
| <b>Midmorning</b>   | 1              | Beverage 100ml                   |
| <b>Midday meal</b>  | 2              | Milk 100ml<br>Beverage 100ml     |
| <b>Evening meal</b> | 1              | Milk 100ml                       |
| <b>Supper</b>       | 2              | Beverage 200ml                   |
| <b>Medications</b>  | 2              | Water 200mls                     |

**Assumption:** Patient is having one dairy exchange in milk and tea; therefore allowing one additional exchange as a beverage suggestion as 2x100mls glasses of milk (see renal section).

**Case Example 2:** Patient with liver disease identified at risk of malnutrition and prescribed 1 litre fluid restriction.

| Meal                | 100ml exchange | Suggested Amount                 |
|---------------------|----------------|----------------------------------|
| <b>Breakfast</b>    | 2              | Beverage 100ml<br>Beverage 100ml |
| <b>Midmorning</b>   | 1              | Beverage 100ml                   |
| <b>Midday meal</b>  | 2              | Milk 100ml<br>Beverage 100ml     |
| <b>Evening meal</b> | 1              | Milk 100ml                       |
| <b>Supper</b>       | 2              | Milk 200ml                       |
| <b>Medications</b>  | 2              | Water 200mls                     |

**Assumption:** Use full daily milk allocation to maximise energy and protein intake (400mls full fat milk).

200ml of milk allocated at suppertime to incorporate requirement for 50g CHO snack e.g. glass of milk and a flapjack/slice of fruit cake/cereal bar. (See Section 3.3, Table 4).

**Suggestion:** Consider using high protein milk.



**Case Example 3:** Patient with Congestive Cardiac Failure identified at risk of malnutrition and prescribed 1 litre fluid restriction.

| Meal                | 100ml exchange | Suggested Amount                 |
|---------------------|----------------|----------------------------------|
| <b>Breakfast</b>    | 2              | Beverage 100ml<br>Beverage 100ml |
| <b>Midmorning</b>   | 1              | Beverage 100ml                   |
| <b>Midday meal</b>  | 2              | Milk 100ml<br>Beverage 100ml     |
| <b>Evening meal</b> | 1              | Milk 100ml                       |
| <b>Supper</b>       | 2              | Milk 200ml                       |
| <b>Medications</b>  | 2              | Water 200mls                     |

**Assumption:** Use full daily milk allocation to maximise energy and protein intake (400mls full fat milk).

**Suggestion:** Consider using high protein milk.

## 4.6 Gluten Free Diet Menu Planning Guidance


The gluten free menu should consist of 3 meals and 2 snacks using standardised portions (see Tool 1, Page 14) to meet the recommended nutrition standards specified in Section 4 of the Policy. Gluten free products should be used.

The following tools have been developed to get you started:

**Tool 1** Food Based Standards: Foods to Avoid and Allowed on a Gluten Free Diet Menu

**Tool 2** Specific Food Types to Avoid and Allowed on a Gluten Free Diet Menu





## Tool 1: Food Based Standards: Foods to Avoid and Allowed on a Gluten Free Diet Menu

| Food Group   | Avoid ✘  | Allowed ✔  | NOTE: Need to check these foods with specification sheets to confirm if gluten free   |
|--|--|--|---|
| <p><b>Wholemeal cereals and breads, potatoes, pasta and rice</b></p> | <p>Wheat, ordinary flour, ordinary breadmix, bulgar wheat, durum wheat, wheat germ, wheat bran, wheat starch, semolina, couscous, barley, malt, malted barley, rye, oats, triticale, kamut, spelt, farina</p> <p>Ordinary bread (including naan, ciabatta &amp; chapatti) breadcrumbs, croutons, scones, pizza bases,</p> <p>Ordinary fresh or dried Pasta including spaghetti, macaroni, lasagne &amp; egg noodles</p> <p>Wheat based breakfast cereals, cereals that contain malt extract flavouring e.g. cornflakes, porridge oatmeal, wheatgerm, muesli (most ordinary breakfast cereals)</p> <p>Potatoes in batter, breadcrumbs or dusted with flour, potato croquettes &amp; waffles</p> | <p>Corn, maize, buckwheat, millet, teff, quinoa, soya potato flour, gram flour, polenta are all naturally gluten-free but maybe cross contaminated if they are milled in a factory that handles gluten containing flours</p> <p>Sago, rice, ground rice, tapioca, arrowroot are gluten-free</p> <p>Special gluten-free dietary flours &amp; mixes</p> <p>Special gluten-free dietary breads, rolls, pizza bases</p> <p>Special gluten-free dietary pasta</p> <p>Special dietary cereals that do not contain malt extract flavouring, e.g. gluten-free labelled cornflakes/ porridge/muesli</p> | <p>Cornflour, savoury rice</p> <p>Rice cakes</p> <p>Rice noodles, poppadoms, soba noodles (buckwheat)</p> <p>Rice bran, soya bran</p> <p>Oven, microwave &amp; frozen chips, instant mash, potato waffles, potato salad</p> |

**Tool 1: Food Based Standards: Foods to Avoid and Allowed on a Gluten Free Diet Menu**

| Food Group  | Avoid ✗  | Allowed ✓   | <b>NOTE: Need to check these foods with specification sheets to confirm if gluten free</b>  |
|---|--|---|---|
| <p><b>Meat, poultry, fish, eggs, beans and nuts</b></p> | <p>Meat &amp; poultry cooked in batter or breadcrumbs, breaded or crumbed ham, ordinary sausages &amp; puddings, meat with stuffing, meatloaf, burgers with cereal or breadcrumbs, Cornish pasties</p> <p>Fish fingers, fish in batter or breadcrumbs, fish burgers, fish cakes, fish in pastry</p> <p>Scotch eggs</p> | <p>All fresh natural meats &amp; poultry, smoked hams, cured pure meats, unprocessed corned beef e.g. silverside/brisket joints, rashers, gluten-free sausages as listed in Coeliac Society Food List</p> <p>All fresh natural fish &amp; shellfish, smoked fish, kippered &amp; dried fish, canned fish in oil or brine</p> <p>Eggs</p> <p>All pulses, and lentils</p> | <p>Meat pâtés, canned or prepacked meats in own juices, burgers, prepacked cooked meats, meat/poultry in sauce, stuffing mix</p> <p>Fish in sauce, fish pate, chowder, prawn cocktail</p> <p>Seed mixes, dry roasted nuts, Bombay mix</p> <p>Baked beans</p> <p>Tofu, Quorn</p> <p>Nuts and seeds</p> |
| <p><b>Milk, yogurt and cheese</b></p>                   | <p>Cheese fillers, breaded cheese</p> <p>Oat milk, yogurt and fromage frais containing muesli or biscuit, Rice Dream</p>   | <p>Plain cheese, cottage cheese, low-fat cheese</p> <p>Fresh, dried, condensed, evaporated milk, buttermilk, goats milk, soured cream, natural crème fraiche, natural yogurt</p>  | <p>Cream cheeses, processed cheese, cheese spreads, ready-grated cheese, cheese strings</p> <p>Coffee &amp; tea whiteners, milkshakes, fromage frais, yogurt, custard</p>   |



**Tool 1: Food Based Standards: Foods to Avoid and Allowed on a Gluten Free Diet Menu**

| Food Group  | Avoid ✗  | Allowed ✓  | <b>NOTE: Need to check these foods with specification sheets to confirm if gluten free</b>  |
|---|--|--|---|
| <b>Vegetables, salad and fruit</b>                  | Vegetables in batter, breadcrumbs, or dusted with flour, onion rings   | All natural, fresh, frozen, canned and dried pure fruit and vegetables, all plain salads without dressings   | Coleslaw, baked beans   |
| <b>Fats, spreads and oils</b>                       | Processed suet   | Butter, margarine, lard, cooking oils, ghee  | Egg mayonnaise<br>Low-fat spreads   |
| <b>Foods and drinks high in fat, sugar and salt</b> | <p>Snacks made from wheat, rye, oats, barley and flavored with malt extract flavoring</p> <p>Mincemeat which includes suet dusted in flour</p> <p>Semolina, sponge puddings, tarts, pies, Pick 'n' Mix</p> <p>Biscuits, cakes, pastries, muffins, buns</p> | <p>Homemade natural popcorn</p> <p>Sugar, brown sugar, glucose, molasses, jams and marmalades, honey, golden syrup, treacle, maple syrup</p> <p>Plain jelly, milk puddings made with gluten-free ingredients</p> <p>Special gluten-free dietary cakes and biscuits</p> | <p>Crisps, processed nuts</p> <p>Mincemeat using rice flour, lemon curd, peanut butter</p> <p>Custard, dessert mixes, instant whips, ice-cream &amp; frozen desserts, tinned puddings, sweets, chocolates, chewing gum, mousses</p> <p>Fruit pie fillings, waffles</p> <p>Meringues, meringue mixes, macaroons, aerosol creams, artificial creams, ice-cream, liquorice</p> |



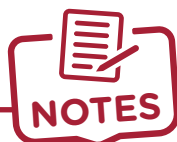
## Tool 2: Specific Food Types to Avoid and Allowed on a Gluten Free Diet Menu

| Food Group              | Avoid ✕   | Allowed ✓  | NOTE: Need to check these foods with specification sheets to confirm if gluten free   |
|-------------------------|---|--|---|
| <b>Soups and sauces</b> | Soups made with barley, broth mix, noodles & croutons, soup made with ordinary flour, spice blends where wheat flour is used as a carrier | Tomato puree, pure herbs and individual spices, vinegar, malt vinegar, garlic bulbs  | Gravy granules, stock cubes, canned and dried soups, fresh soups in cartons, dried sauces & mixes, table sauces, cooking sauces, stir-fry sauces, mustard, mayonnaise, salad cream, salad dressings, pickles, chutneys, spice blends, curry powder, tomato ketchup, soy sauce |
| <b>Beverages</b>        | Malted drinks, barley waters, squashes which contain barley   | Tea, tea bags, coffee, pure fruit juice, squash, mineral water, minerals, plain, Complan, Bovril, Marmite, Cadbury's cocoa | Drinking chocolate, economy blends of coffee, milkshake powders, squashes & cordials  |

## Tool 2: Specific Food Types to Avoid and Allowed on a Gluten Free Diet Menu

| Food Group                | Avoid ✗                    | Allowed ✓   | NOTE: Need to check these foods with specification sheets to confirm if gluten free |
|---------------------------|----------------------------|---|---|
| <b>Baking Ingredients</b> | Ice-cream cones and wafers | Gelatine, bread soda, dried and fresh yeast, bextartar, dried fruit, glace cherries, vanilla essences, food colouring, ground almonds, desiccated coconut | Marzipan, icing sugar, cake decorations, baking powder                              |
| <b>Miscellaneous</b>      |                            | Low calorie sweeteners  |   |

Guidance for preparing a gluten free meal for people with coeliac disease: Additional information on gluten free menu planning can be got from the coeliac society of Ireland; Caterers and Restaurateur Guide – “preparing a gluten free meal for a person with coeliac disease” <https://www.coeliac.ie/join-now/professional/caterers-and-restaurateurs/>



### NOTES

- > **Main meal can be provided at midday or in the evening**



## 4.7 Low Fibre Diet Menu Planning Guidance

The Low Fibre Diet Menu should consist of 3 meals and 2 snacks using standardised portions (see Tool 1, page 14) and meet the recommended nutrition standards specified in Section 4.0 of the policy.

The following tools have been developed to help get you started:

**Tool 1** Food Based Standards: Foods to Avoid and Allowed on a Low Fibre Diet Menu

**Tool 2** Sample Low Fibre Diet Meal Plan



### Tool 1: Food Based Standards: Foods to Avoid and Allowed on a Low Fibre Diet Menu

| Food Group   | Avoid ✗   | Allowed ✓   |
|--|---|---|
| <b>Vegetables, salad and fruit</b><br><br>*limit to one portion of fruit and one portion of vegetables per day | <p>Sweet corn, pips, tough skins of vegetables (skins of baked potatoes, tomato, cucumber, bell peppers)</p> <p>Tough stalks (e.g. celery), broccoli, brussel sprouts, curly kale, cabbage, okra, leeks, spring greens, pak choi, onions, mushrooms</p> <p>Fruit with seeds, pips, pith, hard skins and fibre (e.g. berries, kiwi, citrus fruits, grapes, rhubarb, plantain)</p> <p>Unpeeled fruit (e.g. apples, pears, peaches, nectarines)</p> <p>Raw or dried fruit (e.g. figs, prunes, dates and apricots)</p> <p>Fruit juice with bits</p> <p>Mixed dried fruit</p> <p>Jams or fruit spreads containing seeds, pips or tough skins</p> | <p>Peeled and deseeded vegetables (e.g. carrots, parsnips, cauliflower and turnips)</p> <p>Must be cooked until soft and easily mashed or pureed</p> <p>Peeled and soft fruit without pips or pith</p> <p>Cooked or tinned fruits</p> <p>Avocado (smooth guacamole)</p> <p>Smooth fruit juice</p> |




**Tool 1: Food Based Standards: Foods to Avoid and Allowed on a Low Fibre Diet Menu**

| Food Group  | Avoid ✕  | Allowed ✓   |
|---|--|---|
| <b>Wholemeal cereals and breads, potatoes, pasta and rice</b> | <p>Wholemeal, granary, brown, wheaten and brown soda breads, brown pitta bread, brown wraps, and brown/wholemeal chapattis, rye bread, crispbreads, malted fruit bread</p> <p>Brown rice, wholemeal pasta, whole wheat noodles, jacket potatoes</p> <p>Whole wheat cereals e.g. Weetabix, shredded wheat, bran flakes or any cereal with added fruit and nuts</p> <p>Cereal crunchy bars</p> | <p>White flour and products (e.g. white bread, toast, white scones (without dried fruit), crackers, crumpets, bagels, muffins, pancakes, yorkshire puddings, pizza bases)</p> <p>White rice, white pasta. couscous, bulgar wheat, semolina, tapioca, maize, cornmeal and quinoa.</p> <p>Rice kripsies, cornflakes, and sugar coated cereals</p> |
| <b>Milk, yogurt and cheese</b>                                | <p>Yogurts with large pieces of fruit, cereal or nuts</p> <p>Cheese with large pieces of fruits or nuts</p>  | <p>Milk – all types</p> <p>Cheese</p> <p>Smooth or natural yogurt</p> <p>Cream</p>  |
| <b>Meat, poultry, fish, eggs, beans and nuts</b>              | <p>Meat, chicken or fish made with wholemeal pastry or wholemeal breadcrumbs</p> <p>Whole beans</p> <p>Tinned baked beans</p> <p>Kidney beans, soya beans, green beans</p> <p>All whole nuts and seeds</p>   | <p>All types of meat, fish, chicken and eggs</p>  |
| <b>Fats, spreads and oils</b>                                 | <p>No restrictions</p>   | <p>All allowed</p>  |

**Tool 1: Food Based Standards: Foods to Avoid and Allowed on a Low Fibre Diet Menu**

| Food Group  | Avoid ✕  | Allowed ✓   |
|---|--|---|
| <b>Foods and drinks high in fat, sugar and salt</b> | Fruit cake or biscuits containing hard pieces of dried fruit or fruit peel, nuts and seeds, Bombay mix, chocolate with dried fruits or nuts, wholegrain mustard, jams or fruit spreads containing pips, seeds or tough skins | Plain flour sponges, biscuits (chocolate, shortbread, gingernut etc), cakes (Madeira, swiss roll, teacakes etc)<br><br>Danish pastries without dried fruit, honey, jellies, boiled sweets, seedless spreads, sugar and salt<br><br>Jam (no seeds) |

 **Tool 2: Sample Low Fibre Diet Meal Plan**

| Meal/Snacks and Beverages            | Foods   |
|--------------------------------------|---|
| <b>Breakfast</b>                     | 150mls orange juice<br><br>Rice based cereal with 150mls full fat milk<br><br>2 slices white bread<br><br>Poly or monounsaturated spread or butter<br><br>Jam (no seeds)<br><br>Tea or coffee |
| <b>Midday meal (Main/large meal)</b> | Roast Chicken<br><br>Steamed carrots<br><br>2 scoops of mashed potato<br><br>Butter<br><br>Gravy<br><br>Ice cream and jelly<br><br>Tea or coffee  |

## Tool 2: Sample Low Fibre Diet Meal Plan

| Meal/Snacks and Beverages                  | Foods  |
|--|--|
| <b>Evening Meal<br/>(Small/light meal)</b> | Scrambled egg and waffle<br>2 slices of white bread<br>Poly or monounsaturated spread or butter<br>Smooth or natural yogurt<br>Tea or coffee |
| <b>Snacks</b>                              | 2 snacks low in fibre per day<br>Served with tea or coffee   |
| <b>Milk with meals</b>                     | 150mls full fat milk served with midday and evening meal<br>(300mls in total)<br>May also be served with snacks                              |
| <b>Milk for tea or coffee</b>              | 100mls full fat milk   |

See Appendix 4.0 for nutritional analysis.



### NOTES

- > **Main meal can be provided at midday or in the evening**
- > **Choose one low fibre containing snack (<0.5g Fibre) and one snack that is fibre free**
- > **Low fibre containing snacks include:**
  - Cream Crackers with Cream Cheese
  - Slice of white toast with butter and jam
  - Custard creams, ginger nut or rich tea biscuits
- > **Fibre free snacks include:**
  - Custard pot
  - Rice pudding pot
  - Yogurt



## 4.8 Renal Diet Menu Planning Guidance

The Renal Diet Menu is one of the most challenging and complex diets to cater for due to the number of dietary restrictions required whilst still achieving an adequate energy and protein intake.

The following tools have been developed to get you started:

- Tool 1** Checklist for Renal Diet Menu Development
- Tool 2** Guide to Reading Labels for Phosphate Additives
- Tool 3** Checklist for Producing a Renal Diet Menu
- Tool 4** Guidance for Nutrient Targets for Meals and Desserts
- Tool 5** Recommended Cooking Methods
- Tool 6** Portion Control for Potatoes, Vegetables, Fruit and Dairy Products
- Tool 7** Foods Based Standards: Food to Avoid and Allowed on a Renal Diet Menu
- Tool 8** Sample 90g and 70g Protein Renal Meal Plans
- Tool 9** Snack Recommendations



### Tool 1: Checklist for Renal Diet Menu Development

|   |  |
|---|--|
| ✓ | Input from a renal dietitian who has a good understanding of this patient group dietary requirements is essential when planning this menu                                  |
| ✓ | The menu should include 3 meals (breakfast, midday and evening meal) and 2 snacks per day  |
| ✓ | The menu in its totality should meet both the lower target for protein (70g) and the upper target for protein (90g) utilising the snack menu                               |
| ✓ | A variety of snacks should be available with higher and moderate protein options to allow flexibility of protein intake  |
| ✓ | The carbohydrate (starchy) component of foods and at meals should be a consistent portion size (as per standardised portions guide see Tool 1, Page 14)                    |
| ✓ | The carbohydrate content of foods/meals should be visible on the menu or available to patients, to facilitate patients with CKD and diabetes who are carbohydrate counting |
| ✓ | Whole (full fat) unfortified milk should be used   |





|   |  |
|---|--|
| ✓ | A maximum of 1/3 pint milk and one other dairy option at the main meal to be provided daily  |
| ✓ | Salt substitutes containing potassium chloride should not be used  |
| ✓ | Phosphate additives should be avoided and all pre-prepared food should be checked for additives (especially meat or poultry, processed cheese, sandwiches from external suppliers). Baked goods purchased from outside the hospital should be free of phosphate additives (see Tool 2 Guide to reading labels for phosphate additives) |



## Tool 2:

### Guide to Reading Labels for Phosphate Additives

#### Avoiding Phosphate Additives

1. Check for **“phos”** such as **diphosphate**, **sodium polyphosphate**, **calcium triphosphate**.
2. Check for phosphate E numbers:  
**E338, E339, E340, E341, E343, E450, E451, E452, E541.**



### Tool 3: Checklist for Renal Diet Menu Development

|   |  |
|---|--|
| ✓ | Review nutritional analysis for all recipes used on other diets and code as suitable for renal and renal diabetes diets using minimum nutrition standards specified in section 4.0 of the policy and guidance for nutrient targets for meals and desserts (Tool 4) |
| ✓ | Utilise the renal meal plans in Tool 8 and nutritional analysis in Appendix 5 and 6 to guide menu selection  |
| ✓ | Cooking methods for vegetables and potatoes as outlined in Tool 5 should be utilised to leach potassium and reduce total provision   |
| ✓ | Portion sizes for potatoes, fruit and vegetable should be exactly as outlined in Tool 6 below to safeguard against hyperkalaemia   |
| ✓ | List of foods to avoid and allowed (Tool 7) should be used when stocking items for the renal menu and developing recipe and meal contents  |
| ✓ | Include suitable snacks are outlined in Tool 9   |



The following guidance should be utilised for planning purposes at individual meals so that daily nutrition standards recommended in section 4.0 of the policy can be achieved. This meal guidance is recommended by the British Dietetic Association (BDA) 2017.



## Tool 4: Guidance for Nutrient Targets for Meals and Desserts

|                                 | Food Types                           | Protein*             | Potassium          | Phosphate |
|---------------------------------|--------------------------------------|----------------------|--------------------|-----------|
| <b>Nutrient Targets at meal</b> | Meat, chicken, fish                  | See appendix 5 and 6 | ≤12 mmol potassium | ≤300mg    |
|                                 | Potatoes, Vegetables and side dishes | See appendix 5 and 6 | <12 – 14 mmol      |           |

Salt content for the TOTAL meal should be <1.5g.

\*Portion sizes of meat, fish and chicken should be provided as per standardised portions guide, see Tool 1 Page 14.

See tool 6 for guidance on portions for potatoes and vegetables.

## Dessert

| Food Types                              | Protein                                  | Potassium         | Phosphate |
|---|--|-------------------|-----------|
| At least one option to provide ≥200kcal | At least 1 option to provide ≥5g protein | ≤8 mmol potassium | ≤220mg    |

Nutrient guidance for desserts as recommended by the BDA, 2017.

Desserts and snacks for patients with CKD and Diabetes should contain <16g sugar per portion (Expert Opinion and INDI Renal Interest Group Renal Diabetes Diet Sheet).



To reduce the potassium content of potatoes and vegetables, the following cooking methods should be utilised.

## Potatoes

To prepare low potassium potatoes either method one or method 2 should be utilised.



### Tool 5: Recommended Cooking Methods

| Method 1 'Double boiled' Potatoes   | Method 2  |
|---|---|
| <ol style="list-style-type: none"> <li>1. Peel the potatoes and cut into thin slices</li> <li>2. Bring to the boil, using four times as much water as potatoes</li> <li>3. Throw water away, and replace with the same volume of fresh boiling water</li> <li>4. When cooked, drain and measure as per portions outlined below</li> </ol> | <ol style="list-style-type: none"> <li>1. Peel and dice the potatoes into 1cm cubes</li> <li>2. Bring to the boil in 10 times as much water as potatoes</li> <li>3. Cook until potatoes are soft</li> <li>4. When cooked, drain and measure as per portions outlined below</li> </ol> |
| <p><b>Note:</b> After cooking (using either method), you can mash, fry or roast the potatoes</p>  |   |

## Vegetables

To prepare low potassium vegetables utilise the method outlined below

1. Cut the vegetable into small pieces
2. Boil in four times as much water as vegetables
3. When cooked, drain and measure as per portions outlined below.



The following recommendations regarding portion size control of lower potassium potatoes, vegetables and dairy products on the renal menu should be adhered to. This is necessary to control daily dietary potassium and phosphate provision.



## Tool 6: Portion Control for Potatoes, Vegetables, Fruit and Dairy Products

|                   |  |
|-------------------|--|
| <b>Potatoes</b>   | <p>A maximum of 200g cooked lower potassium potatoes per day</p> <p>Daily provision of rice, pasta, plain noodles or bread as an alternative is recommended</p>  |
| <b>Vegetables</b> | <p>Maximum of 2 portions of suitably* cooked lower potassium vegetables per day or a maximum of 1 suitably cooked lower potassium vegetable portion and 1 x salad portion per day as outlined in Tool 7. Cooking method and portion control are key components</p> <p>Salad vegetables contained in a sandwich or a side dressing do not need to be counted within the total menu so long as the portion contains &lt;2 mmol of potassium and the salad vegetables included are detailed in the vegetables to choose as outlined in tool 7 below</p> <p>Higher potassium vegetables should be avoided*</p> <p>*Utilise tool 7 below to determine suitable vegetable options and specifics regarding portion size</p> |
| <b>Fruit</b>      | <p>Maximum of 2 portions of suitable* fruit per day</p> <p>Fruit may be included as part of a dessert</p> <p>Fruit smoothies should be avoided</p> <p>Higher potassium fruit options should be avoided*</p> <p>*Utilise Tool 7 below to determine suitable fruit options and specifics regarding portion size</p>  |
| <b>Dairy</b>      | <p>Keep to a maximum of 2 portions per day</p> <ul style="list-style-type: none"> <li>- 200ml milk divided between milk in tea and milk in cereal and a</li> <li>- Second dairy portion from yoghurt, cheese or milk based desserts</li> </ul> <p>Whole, <b>unfortified</b> milk should be provided</p> <p><b>Do not</b> offer milk at mealtimes</p> <p><b>Do not</b> offer milk based food items as snack items</p>   |





## Tool 7: Food Based Standards: Foods to Avoid and Allowed on a Renal Diet Menu

| Food Group   | Foods to AVOID ✗  | Foods ALLOWED ✓   |
|--|---|---|
| <p><b>Grains/<br/>Potatoes</b></p> <p>Max 200g cooked low potassium potato per day</p> | <p>Chips (including oven chips)</p> <p>Potato croquettes</p> <p>Crisps</p> <p>Jacket potatoes</p> <p>Instant mashed potatoes</p> <p>Potato waffles</p>  | <p>White rice</p> <p>Basmati rice</p> <p>Pasta</p> <p>Cous cous</p> <p>Plain noodles</p> <p>Lower potassium potatoes (cooked as per cooking method in Tool 5)</p>   |
| <p><b>Vegetables</b></p>   | <p>Aduki beans</p> <p>Avocado</p> <p>Baked beans</p> <p>Beans (all types except green or runner beans)</p> <p>Black eyed peas</p> <p>Broad beans</p> <p>Butter beans</p> <p>Tinned vegetables</p> <p>Carrot juice</p> <p>Lentils</p> <p>Peas (all types)</p> <p>Mushrooms</p> <p>Sweetcorn</p> <p>Tomato based sauces - unless 'homemade' as part of a composite meal, that has been counted as part of vegetable provision</p> <p>Tomato puree</p> <p>Tomato juice</p> | <p>Prepared using lower potassium cooking method and served in portion outlined:</p> <p><b>Celery:</b> 2 dessert spoons 50g</p> <p><b>Turnip:</b> 2 dessert spoons 50g</p> <p><b>Parsnip:</b> 2 dessert spoons 50g</p> <p><b>Yam:</b> 2 dessert spoons 50g</p> <p><b>Brussel Sprouts:</b> 5 50g</p> <p><b>Carrots:</b> 4 dessert spoons 100g</p> <p><b>Broccoli:</b> 4 dessert spoons 100g</p> <p><b>Green Beans:</b> 4 dessert spoons 100g</p> <p><b>Leeks:</b> 4 dessert spoons 100g</p> <p><b>Onion:</b> 6 dessert spoons 150g</p> <p><b>Cauliflower:</b> 6 dessert spoons 150g</p> <p><b>Cabbage:</b> 6 dessert spoons 150g</p> <p><b>1 salad portion:</b></p> <ul style="list-style-type: none"> <li>&gt; 1 small tomato OR</li> <li>&gt; 4 dessert spoons of coleslaw OR</li> <li>&gt; A small side salad: 4 leaves of lettuce, ½ tomato, 3 rings of onion, cucumber or pepper, 1 dessert spoon of grated carrot</li> </ul> |

## Tool 7: Food Based Standards: Foods to Avoid and Allowed on a Renal Diet Menu

| Food Group  | Foods to AVOID ✗  | Foods ALLOWED ✓  |
|---|---|--|
| <p><b>Fruit</b></p> <p>Maximum 2 portions per day</p> <p>DO NOT offer fruit smoothies</p> <p>1 fruit containing dessert = 1 portion</p> | <p>Prune juice</p> <p>Apricots (fresh &amp; dried)</p> <p>Bananas</p> <p>Dried fruit (e.g. currants, raisins, dates, prunes)</p> <p>Figs</p> <p>Mince pie</p> <p>Rhubarb</p> <p>Christmas cake, Christmas pudding</p> | <p>Apple</p> <p>Pear</p> <p>Small orange</p> <p>2 small plums</p> <p>2 thin slices of mango</p> <p>100g raw blackcurrants (40g)</p> <p>5 passion fruit</p> <p>20 small raw blackberries (100g)</p> <p>18 raw cherries</p> <p>1 large slice of pineapple without skin</p> <p>8 small strawberries</p> <p>2 small mandarins</p> <p>16 grapes</p> <p>1 thin slice of melon</p> <p>1 kiwi</p> <p>1 peach</p> <p>25 raspberries</p> <p><b>Tinned Fruit:</b> Small bowl of fruit cocktail, mandarins, strawberries, pears, peaches or pineapple (with the juice drained) as per portions below:</p> <p>Fruit cocktail 170g</p> <p>Pears 200g</p> <p>Peaches 100g</p> <p>Mandarins 200g</p> <p>Strawberries 200g</p> <p>Pineapple 200g</p> <p>Fruit Juice (one small glass, no more than 100mls of unsweetened fruit juice)</p> |

### Tool 7: Food Based Standards: Foods to Avoid and Allowed on a Renal Diet Menu

| Food Group  | Foods to AVOID ✗  | Foods ALLOWED ✓   |
|---|---|---|
| <p><b>Dairy</b></p> <p>Maximum 2 small options per day</p> <p>DO NOT offer milk at mealtimes.</p> <p>DO NOT offer a milk based snack.</p> | <p>Angel Delight</p> <p>Complan/Horlicks/Ovaltine</p> <p>Cornetto Ice Cream</p>   | <p>Milk (medium glass 200ml) for cereal and tea</p> <p>Yoghurt (125g pot)</p> <p>Fromage Frais (2 small pots)</p> <p>Cheese (1oz/25g)</p> <p>Grated mozzarella cheese (2oz/50g)</p> <p>1 bowl of milk pudding (sugar/sweetener)</p> <p>Cottage cheese (2oz/50g)</p> <p>Plain Ice-cream (3 small scoops)</p>             |
| <p><b>Meat/ Chicken/ Fish/Egg</b></p>   | <p>Anchovies</p> <p>Bacon</p> <p>Black and white pudding</p> <p>Cockles</p> <p>Cornbeef</p> <p>Crab</p> <p>Fish paste</p> <p>Game meat (e.g. venison, pheasant)</p> <p>Gammon</p> <p>Offal meats (e.g. heart, kidney, liver)</p> <p>Kippers</p> <p>Liver pate</p> <p>Lobster</p> <p>Meat paste</p> <p>Mussels</p> <p>Pepperoni</p> <p>Pilchards</p> <p>Processed meat (e.g. sausages, rashers, packet ham, salami)</p> <p>Prawns</p> <p>Ready made meals</p> <p>Smoked fish</p> | <p>Fresh beef, pork, lamb</p> <p>Fresh chicken, turkey</p> <p>Fresh Cod, Whiting, Plaice, Tuna, Salmon, Lemon Sole, Mackerel</p> <p>Breaded Cod or Whiting</p> <p>Fish Fingers</p> <p>Tinned Tuna, Tinned Salmon, Tinned Mackerel in water or oil (drain off)</p> <p>Boiled Egg/Poached Egg/Scrambled Egg/Fried Egg</p> |





## Tool 7: Food Based Standards: Foods to Avoid and Allowed on a Renal Diet Menu

| Food Group       | Foods to AVOID ✕  | Foods ALLOWED ✓   |
|------------------|---|---|
| <b>Seasoning</b> | <p>Salt</p> <p>LoSalt</p> <p>50mls gravy per day is allowed</p>   | <p>Gravy browning</p> <p>Pepper, mixed herbs, mustard powder, garlic powder, onion powder,</p> <p>Curry powder, ginger, paprika,</p> <p>Thyme, basil</p>  |
| <b>Misc</b>      | <p>Ale, cider, beer</p> <p>Bovril</p> <p>All nuts</p> <p>Build up</p> <p>Casserole mixes</p> <p>Cereal bars</p> <p>Chocolate – ALL products:<br/>Chocolate buns, cake, drinks, sweets, ice cream, mousse, chocolate spread, chocolate nut spread, chocolate sundae,</p> <p>Cocoa, coconut</p> <p>Coffee</p> <p>Currant bread, currant buns</p> <p>Fruit cake and fruit brack</p> <p>Fig Rolls</p> <p>Drinking chocolate</p> <p>Fudge</p> <p>Fruit Gums</p> <p>Liqueurs</p> <p>Liquorice</p> <p>LoSalt</p> <p>Marmite</p> <p>Marzipan</p> <p>Stock cubes (e.g. Oxo)</p> <p>Packet sauces (e.g. parsley)</p> <p>Port</p> <p>Salted butter</p> <p>Sherry</p> <p>Soda water</p> <p>Soup</p> | <p><b>Biscuits:</b> Digestives, Rich Tea, Marietta, Lincoln, Shortcake, Madeira Cake</p> <p><b>Desserts:</b> Crumbles, tarts, pancakes, jelly/sugar free jelly</p> <p><b>Sweets:</b> Mints/sugar free mints (beware of sorbitol, taken in large quantities this sweetener can cause diarrhoea), marshmallows</p> <p>Garlic bread</p> <p>Jam/reduced sugar jam, marmalade/reduced sugar</p> <p>Marmalade</p> <p>Popcorn without salt</p> <p>Cream</p> <p>Olive oil/vegetable oil</p> <p>Very low salt stock cubes/boullion</p> <p>Rice milk (original) unfortified</p> <p>Cooking cream/crème fraiche</p> <p>Butter/spread</p> |

**Tool 7: Food Based Standards: Foods to Avoid and Allowed on a Renal Diet Menu**

| Food Group  | Foods to AVOID ✕  | Foods ALLOWED ✓ |
|-------------|---|-----------------|
| <b>Misc</b> | Soy sauce<br>Stout<br>Toffee<br>Tortilla chips<br>Wheatgerm<br>Wine (especially red wine)<br>Boullion |                 |

2 sample renal diet meal plans are outlined below containing 90g and 70g of protein respectively.

**Sample Renal Diet Meal Plans**

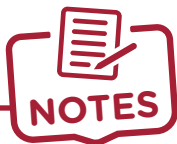
 **Tool 8: Sample Renal Diet Meal Plan (90g)**

| Meal/Snacks and Beverages            | Foods   |
|--------------------------------------|---|
| <b>Breakfast</b>                     | 2 wheat biscuits with 100mls full fat milk<br>2 slices of white bread<br>Butter or spread<br>Jam or marmalade<br>Orange<br>Tea                          |
| <b>Midday meal (main/large meal)</b> | Roast chicken<br>Boiled carrots and parsnips*<br>2 scoops of mashed potato*<br>Gravy<br>Butter for potatoes (on the side)<br>Milk pudding (rice)<br>Tea |

### Tool 8: Sample Renal Diet Meal Plan (90g)

| Meal/Snacks and Beverages              | Foods  |
|--|--|
| <b>Evening meal (small/light meal)</b> | Egg mayonnaise sandwich<br>Apple<br>Tea  |
| <b>Snacks</b>                          | 2 snacks per day for example<br>Iced bun<br>½ beef sandwich<br>Served with tea |
| <b>Milk for tea</b>                    | 100mls full fat milk per day   |

See Appendix 5.0 for nutritional analysis.



#### NOTES

- > **Main meal can be provided at midday or in the evening**
- > **Beverage amounts provided will be determined by fluid restriction and will need to be individualised**
- > **\*See Tool 5 for guidance on preparing and cooking potatoes and vegetables**
- > **See Tool 9 for snack suggestions**

## Renal Diet Meal Plan (70g protein)

| Meal/Snacks and Beverages              | Foods  |
|--|--|
| <b>Breakfast</b>                       | Cornflakes with 100mls full fat milk<br>2 slices of white bread<br>Butter or spread<br>Jam or marmalade<br>Orange<br>Tea               |
| <b>Midday meal (main/large meal)</b>   | Baked salmon<br>Boiled broccoli*<br>2 scoops of mashed potato*<br>Gravy<br>Butter for potatoes (on the side)<br>Full fat yogurt<br>Tea |
| <b>Evening Meal (small/light meal)</b> | Roast beef salad (coleslaw and sliced tomato)<br>2 slices white bread<br>Butter or spread<br>Pear<br>Tea                               |
| <b>Snacks</b>                          | 2 snacks per day for example<br>- Iced bun<br>- 3 gingernut biscuits<br>Served with tea  |
| <b>Milk for tea</b>                    | 100mls per day   |

See Appendix 6.0 for nutritional analysis.



### NOTES

- > **Main meal can be provided at midday or in the evening**
- > **Beverage amounts provided will be determined by fluid restriction and will need to be individualised**
- > **\*See Tool 5 for guidance on preparing and cooking potatoes and vegetables**
- > **See Tool 9 for snack suggestions**





## Tool 9: Snack Recommendations for the Renal Diet Menu

| Lower protein Snacks<br>(1 - 2g protein) | Higher Protein Snacks (>4g protein)                  |
|--|--|
| Fruit (1 portion)                        | Slice of Jam Swiss Roll – 56g                        |
| Plain biscuits (2-4 biscuits)            | ½ meat sandwich<br>(i.e. 1 slice bread and 1oz meat) |
| Pancakes with jam                        | Apple tart and cream                                 |
| Iced bun                                 |  |
| Plain fairy cake with cream              |  |
| Croissant                                |  |

### 4.9 Guidance on Food Provision for Renal Day Patients

A protein containing snack (for example a sandwich) should be provided for renal patients attending haemodialysis and should provide the recommended minimum nutrition standard for protein.

The following guidance on sandwich composition will enable you to provide the recommended amount of protein.

#### Sandwich Composition

Sandwiches should contain meat, fish, chicken or egg. Suitable filling types and amounts are included in table below:

| Sandwich Type (2 slices of bread)* | Amount of Meat/Chicken/Fish or Eggs |
|------------------------------------|-------------------------------------|
| Chicken or turkey sandwich         | 50g cooked poultry                  |
| Beef sandwich                      | 50g cooked meat                     |
| Tuna sandwich                      | 50g drained tinned tuna             |
| Egg sandwich                       | 2 hard boiled eggs                  |

\*Suitable bread types include sliced white, brown or granary bread.

#### 4.9 Guidance on Food Provision for Renal Day Patients (cont.)

- > Fresh cooked meats should be used and should contain no phosphate additives
- > Use tuna tinned in spring water or oil only
- > Suitable spread and or condiments include: Butter or spread, mayonnaise, bread stuffing, chutney, relish, mint, mustard or cranberry sauce
- > A small amount of salad may also be added to the sandwich
- > Recommended salad options are included below to ensure that potassium content of the salad portion is within acceptable limits.

#### Choose any ONE of the following options:

- > 25g iceberg lettuce
- > 12g rocket
- > 12g butterhead lettuce
- > 1 cherry tomato or ¼ tomato (15g)
- > 5 thin slices (25g) of cucumber
- > 2 rings (25g) of red pepper
- > ½ small (25g) onion
- > 15g raw carrot (grated)
- > 2 average radishes (16g)
- > 15g watercress.

For further information refer to the INDI Renal Interest Group Eating on Haemodialysis information for patients and dialysis providers (2016).

See section 7.0 of the toolkit for a patient information leaflet, “Eating well on your haemodialysis days”.

#### 4.10 Neutropenic Diet Menu Planning Guidance

The neutropenic diet menu should consist of 3 meals and 2 snacks using standardised portions (see Tool 1, Page 14) to meet the recommended nutrition standards specified in Section 4.0 of the policy.

The development of a menu for patients who have low neutrophils should be discussed and agreed with the relevant Consultants. The tools developed below are based on guidance from the British Dietetic Association Oncology Policy Statement 2016: Neutropenic dietary advice for Haematology patients.

The following tools have been developed to get you started:

**Tool 1** Food Safety Advice where Neutrophil Counts  $<2.0 \times 10^9$ /litre

**Tool 2** Additional Food Safety Advice where Neutrophil Counts  $<0.5 \times 10^9$ /litre

**Tool 3** Further Considerations if Neutrophil Counts  $<2.0 \times 10^9$ /litre

**Tool 4** Further Considerations if Neutrophil Counts  $<0.5 \times 10^9$ /litre





## Tool 1: Food Safety Advice where Neutrophil Counts $<2.0 \times 10^9/\text{litre}$

| Foods to AVOID x  | Alternatives ✓   |
|---|--|
| All unpasteurised dairy products<br>e.g. milk sold on local farms   | Any pasteurised milk, soya milk, Jersey milk or UHT milk   |
| Soft cheeses made with unpasteurised milk<br>e.g. feta, parmesan<br><br>Homemade/deli paneer and labnah<br><br>Mould-ripened cheeses e.g. Camembert, Brie, goat's cheese<br><br>Blue veined cheeses e.g. Danish Blue and Stilton                              | Cheeses made with pasteurised milk, processed cheese e.g. Dairylea, Kraft, Philadelphia, mesh and halloumi<br><br>Pasteurised parmesan, pasteurised mozzarella. Paneer made with pasteurised milk<br><br>Vacuum-packed pasteurised and hard cheeses e.g. Cheddar and Edam  |
| Raw or lightly cooked shellfish   | Well-cooked shellfish e.g. prawn curry   |
| Raw/undercooked meat, poultry or fish e.g. meat which is still pink, sushi, caviar and oysters<br><br>Smoked meats e.g. salami<br><br>Avoid smoked salmon unless eaten directly from a freshly opened packet, provided it is eaten within 24 hours of opening | Well cooked meat, poultry and fish; tinned meat and fish<br><br>Vacuum-packed cold meats such as turkey and ham stored below 3°C and eaten following the manufacturer's instructions<br><br>Vacuum packed fish eaten straight from a new packet, provided it is eaten within 24 hours of opening (this includes smoked salmon) |
| Raw eggs or undercooked eggs e.g. homemade mayonnaise, homemade ice cream, mousse, meringue, hollandaise sauce and béarnaise<br><br>Any dressing containing raw eggs<br>e.g. home/restaurant-made Caesar salad dressing                                       | Hard boiled eggs; shop-bought mayonnaise and other products made with pasteurised egg  |
| Probiotic or "bio" foods, drinks or supplements e.g. Yakult, Actimel, ProViva<br><br>Yogurt which is described on the label as bio or probiotic   | Any yogurt that does not describe itself as bio or probiotic including live, plain, Greek and fruit yogurts  |
| Meat paté, vegetable paté   | Pasteurised paté and paste in tins or jars that do not need to be refrigerated   |

Note bottled water or cooled boiled tap water may be advised for some patient cohorts whilst inpatients, in place of tap water, refer to local guidance.





## Tool 2: Additional Food Safety Advice where Neutrophil Counts $<0.5 \times 10^9/\text{litre}$

| Foods to AVOID x   | Alternatives ✓   |
|--|--|
| <p>Raw unpeeled fruit or vegetables including salad items, stuffed vine leaves, fetoosh and tabouleh, raw dried fruit, products containing these e.g. muesli, Bombay Mix, confectionary</p> <p>Damaged or over-ripe fruit or vegetables</p> <p>Unpasteurised or freshly squeezed fruit or vegetable juice or smoothies</p> | <p>Good quality fruit and vegetables that are well cooked or peeled</p> <p>UHT or long-life fruit juices – in cartons or jars</p> <p>Pasteurised smoothies</p> <p>Tinned fruit</p> <p>Cooked dried fruit e.g. in fruitcake, flapjacks or cereal bars</p> |
| Fresh nuts, nuts in shells   | <p>Cooked nuts, nuts in cans</p> <p>Peanut butter, roasted nuts</p>  |
| Uncooked herbs, spices and pepper  | Cooked herbs, spices and pepper  |
| Cold smoked salmon   | Cooked dishes containing smoked salmon   |
| Non-drinking water, water from wells, water from coolers, domestic water filters and water fountains   | Please check with your local hospital for guidance   |
| Ice when away from home e.g. in a restaurant and slush puppies   | Ice made from appropriate water sources (see above)  |
| Ice cream from ice cream vans and soft serve ice cream/dispensers  | Ice cream from reputable sources, individual portions, wrapped, small pots   |
| Unpasteurised or 'farm fresh' honey and honeycomb  | <p>Pasteurised or heat-treated honey</p> <p>Ideally try to use individual sachets or portions</p>  |
| <p>Unnecessarily large packets of food items from pick and mix, universal jars</p> <p>Deli counter foods e.g. olives, hummus, shawarma and baklava</p>   | Ideally, packets should be individual portions e.g. butter, sweets, pickles  |





### Tool 3: Further Considerations if Neutrophil Counts $<2.0 \times 10^9$ /litre

|                        |   |
|------------------------|---|
| <b>Reheating meals</b> | Follow risk reduction guidelines and consume within 24 hours of cooking |
| <b>Reheating rice</b>  | Avoid   |
| <b>Smoked fish</b>     | Allow if eaten directly from a freshly opened packet                    |



### Tool 4: Further Considerations if Neutrophil Counts $<0.5 \times 10^9$ /litre

|                  |   |
|------------------|---|
| <b>Ice</b>       | Allow where made from suitable water source; check local guidance |
| <b>Nuts</b>      | Avoid fresh nuts  |
| <b>Smoothies</b> | Allow where pasteurised or appropriately homemade                 |



#### NOTES

- > **Main meal can be provided at midday or in the evening**

## 4.11 Light Diet Menu Planning Guidance

This diet should only be required for short periods of time as will not meet the nutrition standards for macronutrients (energy and protein) and micronutrients (vitamins and minerals). Foods to include on this menu need to be discussed and agreed with the surgical team.

The following tools have been developed to help you get started:

**Tool 1** Food Based Standards: Foods to Avoid and Allowed on a Light Diet Menu

**Tool 2** Sample Light Diet Menu Plan





## Tool 1: Food Based Standards: Foods to Avoid and Allowed on a Light Diet Menu

| Food Group  | Foods to AVOID x                                      | Foods ALLOWED ✓   |
|---|---|---|
| <b>Vegetables, salad and fruit</b>                            | May have to avoid some types                          | If allowed, small portions of lower containing fibre fruit and vegetables may be allowed (see 4.7 low fibre diet) |
| <b>Wholemeal cereals and breads, potatoes, pasta and rice</b> | Wholemeal bread, brown rice or pasta, jacket potatoes | White bread, corn or rice based cereals<br><br>Sandwiches on white bread  |
| <b>Milk, yogurt and cheese</b>                                | No restriction  | All types allowed but amounts may be restricted   |
| <b>Meat, poultry, fish, eggs, beans and nuts</b>              | Beans, nuts, bacon, sausages                          | All other types allowed but amounts may be restricted   |
| <b>Fats, spreads and oils</b>                                 | Fried foods   | Amounts may be restricted   |
| <b>Foods and drinks high in fat, sugar and salt</b>           | No restriction  | Amounts may be restricted   |



## Tool 2: Sample Light Diet Meal Plan

| Meal/snacks and beverages | Foods  |
|---------------------------|--|
| <b>Breakfast</b>          | <p>Small bowl of corn or rice based cereal</p> <p>1 -2 slices of white bread</p> <p>Spread/butter</p> <p>Jam (no seeds)</p> <p>Tea</p>   |
| <b>Midday meal</b>        | <p>Meat based soup</p> <p>1-2 slices bread</p> <p>Spread/butter</p> <p>or</p> <p>Ham or tuna sandwich on white bread</p> <p>Jelly and Ice cream/milk pudding/smooth yogurt</p> <p>Tea</p>                |
| <b>Evening Meal</b>       | <p>Scrambled egg/omelette</p> <p>1-2 slices bread</p> <p>Low fat spread/butter</p> <p>or</p> <p>Ham or tuna sandwich on white bread</p> <p>Jelly and ice cream/milk pudding/smooth yogurt</p> <p>Tea</p> |
| <b>Snacks</b>             | <p>Plain biscuits</p> <p>Smooth yogurt</p> <p>Cream crackers with spread/jam</p> <p>Small white scone (no fruit)</p>   |



## 4.12 Menu Planning Guidance for Minimal Fat Diet for a Chyle Leak

This diet is not required routinely. However it is important that if prescribed as part of the management plan for a chyle leak, that fat content of the diet provided is minimised.

The following tools have been provided to aid you provide this diet:

**Tool 1** Food Based Standards: Foods to Avoid and Allowed on a Minimal Fat Diet Menu for a Chyle Leak

**Tool 2** Sample Minimal Fat Diet Meal Plan



### Tool 1: Food Based Standards: Foods to Avoid and Allowed on a Minimal Fat Diet Menu for a Chyle Leak

| Food Group               | Foods to AVOID x  | Foods ALLOWED ✓   |
|--------------------------|---|---|
| <b>Dairy/oils/fats</b>   | Regular or low fat milk, cream, ice-cream, full fat yoghurt. Creamy desserts, fromage frais, petit filous, butter margarine, low fat spread, cheese, oil, lard, dripping, fries, cream sauce, drinking chocolate, cocoa, milky drinks                   | Skimmed milk, diet low fat yoghurt, diet/low fat cottage cheese             |
| <b>Meat/fish/chicken</b> | Oily fish e.g. sardines, salmon, kippers, mackerel, fish in breadcrumbs and batter, fish pies, fish tinned in oil, dark poultry, meat, duck, nuggets, bacon, pork, mince, sausages including low fat. Salami, burgers, meat paste, paste, pastry dishes | White fish, white chicken or very lean beef or lamb (no skin no fat)        |
| <b>Drinks</b>            |   | Water, fruit squash, fruit juice, minerals, tea, coffee                     |
| <b>Eggs</b>              | Egg yolk  | Egg white   |
| <b>Fruit and veg</b>     | Avocado, olives, chips including oven chips, roast potato, potato salad   | All fruit and vegetables, fresh tinned or frozen, except avocado and olives |

**Tool 1: Food Based Standards: Foods to Avoid and Allowed on a Minimal Fat Diet Menu for a Chyle Leak**

| Food Group     | Foods to AVOID x   | Foods ALLOWED ✓   |
|----------------|--|---|
| <b>Cereals</b> | Ready brek, muesli, cereals containing nuts, all bran, soda bread, crackers, biscuits, cakes, pastries, crumble, mousse, cheesecake, milk pudding, semolina, oats, bran, french bread, ciabatta, naan bread, croissants                                    | Cornflakes, porridge, sugar coated cereals, pasta, rice noodles, white and wheat flour, rye, sliced bread, crumpets, custard powder, sago tapioca made with skimmed milk, porridge made on water  |
| <b>Other</b>   | Salad dressing, mayonnaise, coleslaw and dressed ready prepared salads, pesto, vinaigrette, crisps including low fat crisps, savoury snacks, pizza, lemon curd, chocolate spread, peanut butter, popcorn, chocolate, toffee fudge, butter mints, nut seeds | Sugar, jam, marmalade, honey, golden syrup, treacle, ketchup, brown sauce, soya sauce, marmite, oxo, Bovril, fat free salad dressing, stock cubes, jellies, boiled sweets, marshmallows, chewing gum, water ices, cool pops, meringue, sorbet, jelly, salt, pepper, vinegar and herbs |



## Tool 2: Sample Minimal Fat Diet Meal Plan

| Meal/snacks and beverages   | Foods   |
|---|---|
| <b>Breakfast</b>  | Cereal with skimmed milk and sugar<br>2 slices of bread with jam or marmalade<br>Egg white (if available)<br>Glass of fruit juice or piece of fruit<br>Tea/coffee with skimmed milk and sugar   |
| <b>Midday meal</b>  | Lean meat/white fish/chicken/beans<br>Vegetables (no butter or spread added)<br>Potatoes (no butter or spread added)/rice/pasta<br>Gravy made with gravy granules<br>Jelly or milk pudding made on skimmed milk or meringue with fruit or a diet yoghurt<br>Glass of skimmed milk<br>Tea/coffee with skimmed milk |
| <b>Evening meal</b>   | Lean meat/white fish/chicken/beans/low fat cottage cheese<br>Vegetables/salad no dressing or sauce<br>2 slices of bread or pasta or rice<br>Jam or marmalade<br>Low fat yogurt<br>Fruit<br>Tea  |
| <b>Snacks and milk</b><br><br><b>Provide 2 snacks daily</b><br><br><b>Provide 3 glasses of skimmed milk daily</b> | Low fat yogurt<br>Cream crackers with jam<br>Skimmed milk<br>Fruit/fruit juice<br>Jellies/boiled sweets/marshmallows<br>Toast with jam or marmalade   |

## 4.13 Finger Food Menu Planning Guidance

Finger food options can be a useful way of presenting meals in an easier way to enhance ability to eat for some patients, for example, some patients with dementia.

The following tools have been developed to help you get started:

**Tool 1** Guide to Developing a Finger Food Menu

**Tool 2** Suitable Finger Food Options for Meals and Snacks



### Tool 1: Guide to Developing a Finger Food Menu

|   |   |
|---|---|
| ✓ | All meal items on the regular and energy dense menus should be coded for suitability for a finger food menu   |
| ✓ | Cold items can be useful for between meal snacks and include sandwiches, cakes, sausages rolls and chopped prepared fruit   |
| ✓ | Drained roast meats are best served rolled, and some other items are better cut into smaller pieces e.g. bacon, chicken or fish goujons, omelette strips, fish cakes, jacket and boiled potatoes  |
| ✓ | Dry foods (e.g. toast and biscuits) can be obvious choices at mealtimes however they may lack the moistness and flavour of products cooked and served in gravy or sauce. Moist products need to be served carefully, e.g. fruit cocktail drained of juice, meatballs drained of sauce |
| ✓ | Finger foods can be left out on the route the person may take when they wander, or they can be put in a pouch that the person can carry around with them. Good food hygiene is paramount, particularly for perishable foods   |
| ✓ | Further ideas for finger foods and a sample finger food menu can be found from the Caroline Walker Trust 'Eating well Supporting Older People and Older People with Dementia, Practical Guide (2011)  |





## Tool 2: Suitable Finger Food Options for Meals and Snacks

| Meal  | Sample Finger Food Breakfast/Snack Options:   |
|---|---|
| <b>Breakfast</b>                                  | <ul style="list-style-type: none"> <li>&gt; Soft cereal bar (no hard pieces)</li> <li>&gt; Hard-boiled egg (shell removed)</li> <li>&gt; Buttered toast cut into fingers</li> <li>&gt; Banana</li> <li>&gt; Orange wedges</li> <li>&gt; Soft peeled and chopped fruit</li> <li>&gt; Larger dried fruit (e.g. prunes)</li> <li>&gt; Cheese cubes</li> <li>&gt; Crackers</li> </ul>   |
| <b>Sample finger food main/light meal options</b> | <ul style="list-style-type: none"> <li>&gt; Mini burgers</li> <li>&gt; Mini salmon</li> <li>&gt; Meat balls</li> <li>&gt; Kebabs</li> <li>&gt; Fish fingers</li> <li>&gt; Chicken goujons</li> <li>&gt; Thick cut chips</li> <li>&gt; Roast potato</li> <li>&gt; Toast/crisp bread/rice cakes</li> <li>&gt; Bread sticks</li> <li>&gt; Broccoli florets</li> <li>&gt; Carrot/parsnip/turnip sticks (thick cut, raw or cooked)</li> <li>&gt; Celery</li> <li>&gt; Soup served in a cup with toast cut into fingers</li> <li>&gt; Sandwich or wrap</li> </ul> |
| <b>Sample finger food snack/dessert options</b>   | <ul style="list-style-type: none"> <li>&gt; Ice-cream in a cone</li> <li>&gt; Mini muffin, bun or scone</li> <li>&gt; Biscuits</li> </ul>   |
| <b>Sample finger foods snack suggestions</b>      | <ul style="list-style-type: none"> <li>&gt; Buttered toast cut into fingers</li> <li>&gt; Banana</li> <li>&gt; Orange wedges</li> <li>&gt; Larger dried fruit (e.g. prunes)</li> <li>&gt; Cheese cubes</li> <li>&gt; Crackers</li> </ul>  |



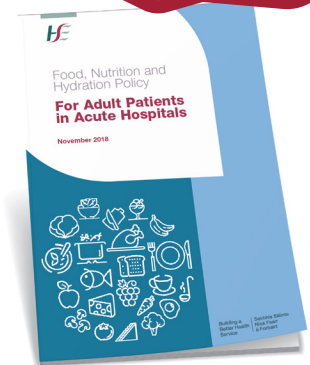
# Section 5.0

## Menu Planning Guidance for Texture Modified Diets

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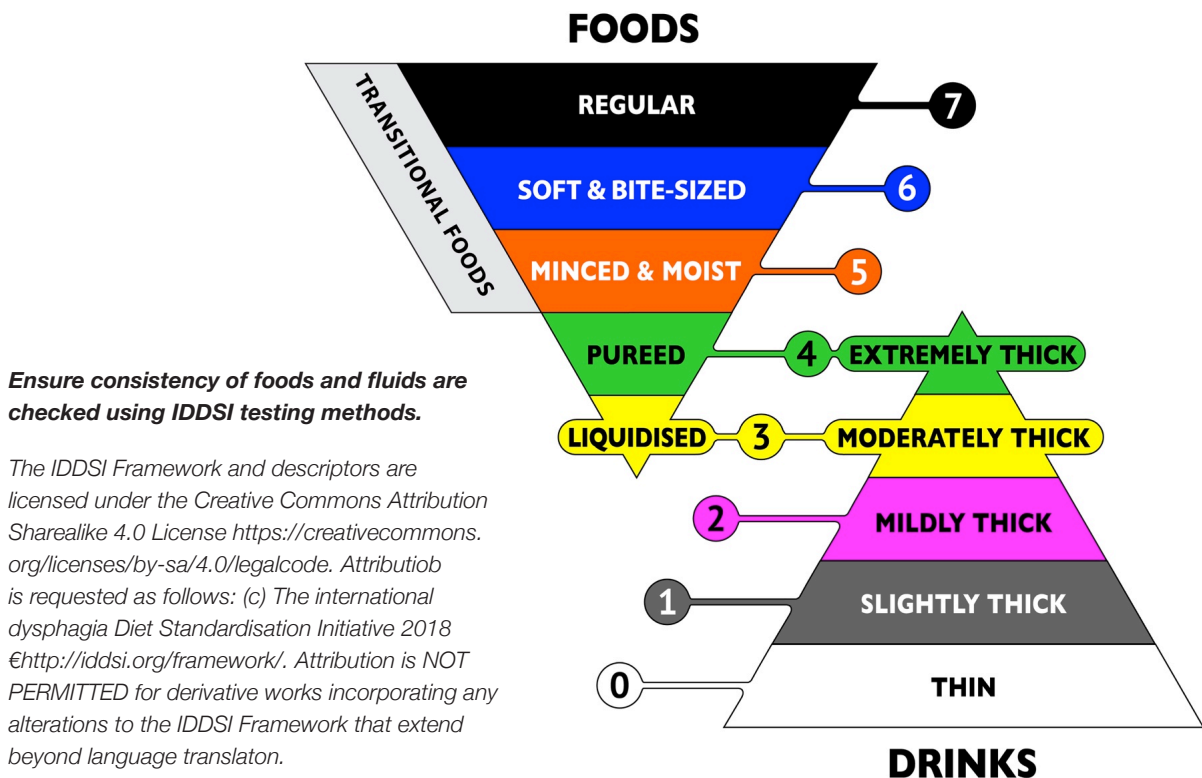
## Menu Planning Guidance for Texture Modified Diets



### 5.1 Introduction

Texture modified diets should consist of 3 meals and 2 snacks with specified portion sizes (see Tool 1, Page 14) to meet the nutrition standards outlined in Section 3.0 of the policy. Foods included on the different levels of texture modified diets must be provided in accordance with the International Dysphagia Diet Standardisation Initiative as shown in Figure 1.

Figure 1: International Dysphagia Diet Standardisation Initiative (IDDSI)



## 5.2 Food Based Menu Planning Guidance for Texture Modified Diets

The IDDSI framework provides examples of suggested foods to allow and those to avoid.

Within each texture modified food descriptor, ensure that the consistency is compliant using the IDDSI testing methods detailed on <http://iddsi.org/framework/food-testing-methods/>

### Level 7: Regular Diet

| Food Suggestions ✓                | Avoid ✗                               |
|-----------------------------------|---------------------------------------|
| <b>All consistencies of foods</b> | No texture restrictions at this level |

**Transitional Foods** - May be considered for use within Regular diet (Level 7), Soft (Level 6) and Minced & Moist (Level 5)

|  |   |
|--|---|
| <b>Food Specific</b>   | <p>This texture may include and is not limited to:</p> <ul style="list-style-type: none"> <li>&gt; Ice chips</li> <li>&gt; Ice cream if assessed as suitable by a speech &amp; language therapist</li> <li>&gt; Wafers (also includes Religious Communion wafer)</li> <li>&gt; Waffle cones used to hold ice cream</li> <li>&gt; Some biscuits. Cookies and crackers</li> <li>&gt; Shortbread</li> <li>&gt; Prawn crisps</li> </ul> |
| <b>Commercially available foods that are transitional food textures include but are not limited to</b> | <ul style="list-style-type: none"> <li>&gt; KP Skips crisps, Chickatee crisps, Snax crisps, Cadbury's Milk Chocolate buttons - small discs</li> </ul>   |

### Level 6: Soft & Bite Sized Diet

|                               | Suggestions ✓  | Avoid ✗   |
|-------------------------------|--|---|
| <b>Meat</b>                   | <ul style="list-style-type: none"> <li>&gt; Cooked, tender meat no bigger than 1.5cm x 1.5cm</li> </ul>  | <ul style="list-style-type: none"> <li>&gt; Dry, tough or crispy meats</li> <li>&gt; Meat with gristle</li> </ul>                             |
| <b>Fish</b>                   | <ul style="list-style-type: none"> <li>&gt; Soft enough cooked fish to break into small pieces with a fork/spoon</li> </ul>  | <ul style="list-style-type: none"> <li>&gt; No bones</li> </ul>   |
| <b>Casserole/ Stew/ Curry</b> | <ul style="list-style-type: none"> <li>&gt; Liquid portion must be thick</li> <li>&gt; Can contain meat, fish or vegetables if final cooked pieces are no larger than 1.5cm x 1.5cm and are soft and tender</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Dry, tough or crispy meats</li> <li>&gt; Meat with gristle</li> <li>&gt; No hard lumps</li> </ul> |



## Level 6: Soft & Bite Sized Diet

|                   | Suggestions ✓   | Avoid X   |
|-------------------|---|---|
| <b>Fruit</b>      | <ul style="list-style-type: none"> <li>&gt; Serve mashed</li> <li>&gt; Fresh fruit piece that are naturally soft, for example, banana</li> <li>&gt; Stewed and canned fruits in small pieces (1.5cm). Drain excess juice</li> <li>&gt; Assess individual ability to manage fruit with high water content (e.g. watermelon) where juice separates from solid in the mouth during chewing</li> <li>&gt; Pureed fruit</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Fibrous parts of fruit are not suitable</li> <li>&gt; Large or round fruit pieces that pose a choking risk for example grapes, cherries</li> <li>&gt; Dried fruits (such as raisins), seeds and fruit peel</li> <li>&gt; Dried tropical fruits, for example, pineapple</li> </ul> |
| <b>Vegetables</b> | <ul style="list-style-type: none"> <li>&gt; Steamed or boiled vegetables with final cooked size of 1.5 cm x 1.5 cm</li> <li>&gt; Soft, canned vegetables, for example, peas</li> <li>&gt; Well cooked legumes (the outer skin must be soft), for example, baked beans</li> <li>&gt; Soft roast potatoes and chips that have no hard edges and can be mashed with a fork</li> </ul>  | <ul style="list-style-type: none"> <li>&gt; Stir fried vegetables are often too firm and not soft or tender</li> <li>&gt; All raw vegetables</li> <li>&gt; Hard, fibrous or stringy vegetables and legumes, for example, sweet corn, broccoli stalks</li> </ul>   |
| <b>Cereal</b>     | <ul style="list-style-type: none"> <li>&gt; Smooth with soft tender lumps no bigger than 1.5cm acceptable</li> <li>&gt; Texture fully softened</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Any excess milk or fluid must be drained</li> <li>&gt; Coarse or hard breakfast cereals that do not moisten easily for example toasted muesli, bran flakes</li> <li>&gt; Cereals with nuts, seeds and dried fruit</li> </ul>  |
| <b>Bread</b>      | <ul style="list-style-type: none"> <li>&gt; No bread unless assessed as suitable by speech and language therapist/dysphagia specialist, on individual basis</li> </ul>  | <ul style="list-style-type: none"> <li>&gt; Consider removing crusts</li> <li>&gt; Avoid breads with seeds and grains</li> </ul>  |
| <b>Rice</b>       | <ul style="list-style-type: none"> <li>&gt; Rice - well cooked</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Not particulate/grainy, sticky or glutinous</li> </ul>  |

## Level 6: Soft & Bite Sized Diet

|                             | Suggestions ✓  | Avoid ✗   |
|-----------------------------|--|---|
| <b>Snacks/<br/>Desserts</b> | <ul style="list-style-type: none"> <li>&gt; Puddings, dairy desserts, custards, yoghurt and ice cream, mousse, jelly*</li> <li>&gt; Creamed rice, moist bread and butter pudding</li> <li>&gt; Moist cakes (extra moisture may be needed, e.g. custard)</li> <li>&gt; Soft stewed fruit based desserts (e.g. apple crumble with soft crumble)</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Dry cakes</li> <li>&gt; Hard biscuits</li> <li>&gt; Hard or flaky pastry</li> <li>&gt; Nuts and seeds</li> <li>&gt; Dried fruit</li> <li>&gt; Crackers</li> </ul> |
| <b>Miscellaneous</b>        | <ul style="list-style-type: none"> <li>&gt; Soup - may contain lumps*</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Soups with large pieces of meat, vegetables, corn or rice</li> </ul>  |

\* These foods may need modification for individuals requiring thickened fluids

## Level 5: Minced & Moist Diet

|                                  | Suggestions ✓  | Avoid ✗   |
|----------------------------------|--|---|
| <b>Meat</b>                      | <ul style="list-style-type: none"> <li>&gt; Finely minced or chopped, tender mince (pieces 2-4mm)</li> <li>&gt; Remove all skin, bones and gristle before mincing</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Casseroles or mince dishes with hard or fibrous particles, for example, peas/ onions</li> </ul>       |
| <b>Fish</b>                      | <ul style="list-style-type: none"> <li>&gt; Finely mashed in extremely thick smooth, non - pouring sauce or gravy</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; No bones</li> </ul>   |
| <b>Casserole/<br/>Stew/Curry</b> | <ul style="list-style-type: none"> <li>&gt; Casserole dishes may be blended to reduce particle size</li> <li>&gt; Serve in extremely thick, smooth non pouring sauce or gravy</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Casseroles or mince dishes with hard or fibrous particles, for example, peas/ onions</li> </ul>       |
| <b>Fruit</b>                     | <ul style="list-style-type: none"> <li>&gt; Mashed soft fresh fruits, for example mango, banana</li> <li>&gt; Mashed pieces of canned or stewed fruit (peel and remove all pips before stewing fresh fruit such as apples and pears)</li> <li>&gt; Drain excess fluid</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Fruit pieces larger than 4mm</li> <li>&gt; Fruit that is too hard to be mashed with a fork</li> </ul> |

## Level 5: Minced & Moist Diet

|                         | Suggestions ✓   | Avoid ✗  |
|-------------------------|---|--|
| <b>Vegetables</b>       | <ul style="list-style-type: none"> <li>&gt; Tender cooked vegetables that are easily mashed with a fork</li> <li>&gt; Well cooked legumes (mashed or blended)</li> </ul>  | <ul style="list-style-type: none"> <li>&gt; All raw vegetables</li> <li>&gt; Vegetable pieces larger than 4mm or too hard to be mashed with a fork</li> <li>&gt; Fibrous/stringy vegetables that require chewing, for example, peas, celery</li> </ul> |
| <b>Cereal</b>           | <ul style="list-style-type: none"> <li>&gt; Very thick and smooth with small (2-4 mm) soft lumps</li> <li>&gt; Texture fully softened</li> </ul>  | <ul style="list-style-type: none"> <li>&gt; Any milk/fluid must not separate away from cereal. Drain any excess fluid before serving</li> </ul>  |
| <b>Bread</b>            | <ul style="list-style-type: none"> <li>&gt; Bread in a soaking solution that is very moist and gelled through the entire thickness</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; No regular, dry bread unless recommended by a speech &amp; language therapist/ dysphagia specialist</li> <li>&gt; All breads, sandwiches, pastries, crackers and dry biscuits</li> </ul>                   |
| <b>Rice</b>             | <ul style="list-style-type: none"> <li>&gt; Not sticky or glutinous (particularly short grain rice) and should not be particulate or separate into individual grains when cooked and served (particularly long grain rice)</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Rice that does not hold together, for example, par-boiled, long-grain or basmati</li> </ul>  |
| <b>Snacks/ Desserts</b> | <ul style="list-style-type: none"> <li>&gt; Smooth puddings, dairy desserts, custard, yoghurt, and ice cream*</li> <li>&gt; Soft moist sponge cake desserts with lots of custard and ice cream* for example, trifle, tiramisu</li> <li>&gt; Stewed fruit based desserts without hard bases, crumbly or flaky pastry, for example, apple crumble with custard</li> <li>&gt; Creamed rice, tapioca</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Desserts with sultanas, seeds or coconut</li> <li>&gt; Pastry and hard crumble</li> </ul>  |

## Level 5: Minced & Moist Diet

|                      | Suggestions ✓                  | Avoid ✗  |
|----------------------|--------------------------------|--|
| <b>Miscellaneous</b> | Soup - may contain small lumps | <ul style="list-style-type: none"> <li>&gt; Soups with large pieces of meats, vegetables, corn or rice</li> <li>&gt; Sweets such as jellies/ marshmallows</li> </ul> |

\* These foods may need modification for individuals requiring thickened fluids

## Level 4: Pureed Diet

|                         | Suggestions ✓  | Avoid ✗  |
|-------------------------|--|--|
| <b>Meat</b>             | <ul style="list-style-type: none"> <li>&gt; Pureed meat</li> <li>&gt; Serve in extremely thick, smooth non pouring sauce or gravy</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Minced or partially pureed meats</li> </ul>  |
| <b>Fish</b>             | <ul style="list-style-type: none"> <li>&gt; Pureed fish</li> <li>&gt; Serve in extremely thick, smooth non pouring sauce or gravy</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; All other types</li> </ul>   |
| <b>Fruit</b>            | <ul style="list-style-type: none"> <li>&gt; Pureed fruits (remove skin and seeds before cooking)</li> <li>&gt; Well mashed banana</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Pureed fruit with visible lumps</li> </ul>   |
| <b>Vegetables</b>       | <ul style="list-style-type: none"> <li>&gt; Pureed vegetables</li> <li>&gt; Pureed potatoes</li> <li>&gt; Pureed legumes, for example, baked beans or peas (ensuring no husks in final puree)</li> </ul>     | <ul style="list-style-type: none"> <li>&gt; All raw vegetables</li> <li>&gt; Coarsely mashed vegetables</li> <li>&gt; Avoid pureed vegetables with fibre or hard skins e.g. cabbage, celery</li> </ul> |
| <b>Cereal</b>           | <ul style="list-style-type: none"> <li>&gt; Smooth, lump free breakfast cereals. For example semolina, pureed porridge, Ready Brek, Weetabix (mashed and mixed with milk)* - smooth and lump free</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Cereals with coarse lumps or fibrous particles, for example, all dry cereals, porridge that has not been pureed</li> <li>&gt; All dry cereals</li> </ul>   |
| <b>Rice</b>             | <ul style="list-style-type: none"> <li>&gt; Pureed rice</li> </ul>   |  |
| <b>Snacks/ Desserts</b> | <ul style="list-style-type: none"> <li>&gt; Smooth puddings, dairy desserts for example pureed rice pudding, custards, yoghurts, and ice-cream*</li> <li>&gt; Yoghurt must be lump free</li> </ul>           | <ul style="list-style-type: none"> <li>&gt; Desserts with fruit pieces, seeds, nuts, crumble, pastry or non-pureed garnishes</li> <li>&gt; Cakes, biscuits, pastries</li> </ul>                        |

## Level 4: Pureed Diet

|                      | Suggestions ✓  | Avoid X   |
|----------------------|--|---|
| <b>Miscellaneous</b> | <ul style="list-style-type: none"> <li>&gt; Soup - blended or strained to remove lumps*</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Soups with lumps</li> <li>&gt; Crisps and sweets</li> </ul> |

\* These foods may need modification for individuals requiring thickened fluids.

## Level 3: Liquidised Diet

|                         | Suggestions ✓  | Avoid X  |
|-------------------------|--|--|
| <b>Meat</b>             | <ul style="list-style-type: none"> <li>&gt; Liquidised meat (pureed with sauce/gravy to achieve a runny moist texture). Remove all bones, gristle and skin prior to liquidising</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Minced or partially pureed meats</li> </ul>  |
| <b>Fish</b>             | <ul style="list-style-type: none"> <li>&gt; Liquidised fish (pureed with sauce/gravy to achieve a runny moist texture). Remove all bones, skin prior to liquidising</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Minced or partially pureed fish</li> </ul>   |
| <b>Fruit</b>            | <ul style="list-style-type: none"> <li>&gt; Liquidised fruits (remove skin and seeds before cooking)</li> <li>&gt; Liquidised tinned pears or peaches</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Pureed fruit with visible lumps</li> </ul>   |
| <b>Vegetables</b>       | <ul style="list-style-type: none"> <li>&gt; Liquidised vegetables</li> <li>&gt; Liquidised baked beans/peas (sieved and strained to ensure no husks)</li> <li>&gt; Vegetable soup that has been blended or strained to remove lumps</li> </ul> | <ul style="list-style-type: none"> <li>&gt; All raw vegetables</li> <li>&gt; Coarsely mashed vegetables</li> <li>&gt; Avoid liquidising vegetables with fibre or hard skin e.g. cabbage, celery</li> </ul> |
| <b>Cereal</b>           | <ul style="list-style-type: none"> <li>&gt; Smooth, lump free breakfast for example semolina, liquidised porridge, Ready Brek, Weetabix</li> </ul>   | <ul style="list-style-type: none"> <li>&gt; Cereals with coarse lumps or fibrous particles, for example all dry cereals</li> </ul>   |
| <b>Snacks/ Desserts</b> | <ul style="list-style-type: none"> <li>&gt; Smooth runny puddings, dairy desserts for example liquidised rice pudding, custards, melted ice cream*</li> </ul>  | <ul style="list-style-type: none"> <li>&gt; Desserts with fruit pieces, seeds, nuts, crumble, pastry or non-pureed garnishes</li> <li>&gt; Cakes, biscuits, pastries</li> </ul>                            |
| <b>Miscellaneous</b>    | <ul style="list-style-type: none"> <li>&gt; Soup - blended or strained to remove lumps</li> </ul>  | <ul style="list-style-type: none"> <li>&gt; Soup with lumps</li> <li>&gt; Crisps, sweets</li> </ul>  |

\* These foods may need modification for individuals requiring thickened fluids.





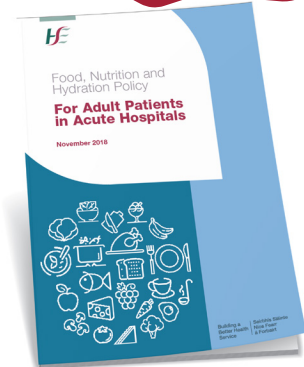
# Section 6.0

## Food Production

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# Section 6.0

## Food Production



### 6.1 Introduction

Suboptimal performance at any stage of food production and service leads to a reduction in the patient experience, amount eaten and increases food waste.

The priorities for the catering department are to produce and provide hospital food:

- > using ingredients from the HSE food tenders
- > that is safe (compliant with all relevant food safety and allergen legislation), nutritious and supports management of clinical conditions (meets the nutrition standards)
- > that tastes and looks appetising
- > that provides a choice of meal options, desserts and snacks
- > within allocated budget
- > using a specific food production and food service system
- > that minimises waste.

The following tools have been developed to support the development of hospital menus that provide the recommended nutrition standards as specified in Sections 3.0, 4.0 and 5.0 of the policy. In addition guidance is provided on measures that can be put in place to reduce food waste.

### 6.2 Menu Development for Hospital Diets

The following steps are required to plan and produce all hospital diet menus:

- Step 1** Standardise Portion Sizes
- Step 2** Develop standardised recipes
- Step 3** Analyse the nutritional content
- Step 4** Code all foods and recipes for diet suitability
- Step 5** Develop new recipes where gaps arise on hospital menus for example, only one meal choice available for patients requiring a gluten free diet at evening meal
- Step 6** Code snacks for example cream crackers, for inclusion on hospital diet menus



## 6.2.1 Standardised Portion Size

To meet the nutrient standards for energy, protein, vitamins and minerals, diets should include the following recommended portions each day for patients. Amendments to portion sizes will be required for some therapeutic diets and textured modified diets, see section 4.0 and 5.0. [Click here](#) to download Standardised Portion Size Guide.



**Tool 1:**  
**Standardised Portion Size**  
**Guidance**

| Food Groups  | Standardised Portions<br>Use standardised utensil sizes (e.g. ladle sizes)   |
|--|--|
| <p><b>*Vegetables, salad and fruit</b></p> <p><b>Provide 5 portions per day</b></p>                  | <p>1 portion is equal to 80g</p> <ul style="list-style-type: none"> <li>&gt; 1 medium sized fruit – apple, orange, pear or banana</li> <li>&gt; 2 small fruits – plums, kiwi or mandarin oranges</li> <li>&gt; Small fruits – 6 strawberries, 10 grapes or 16 raspberries</li> <li>&gt; ½ cup of cooked vegetables – fresh or frozen</li> <li>&gt; 1 bowl of salad – lettuce, tomato, cucumber</li> <li>&gt; 1 bowl of homemade vegetable soup</li> <li>&gt; 150mls unsweetened fruit juice</li> </ul> |
| <p><b>*Cereals and breads, potatoes, pasta and rice</b></p> <p><b>Provide 5 portions per day</b></p> | <p>1 portion is equal to:</p> <ul style="list-style-type: none"> <li>&gt; 2 thin slices of white or wholemeal bread</li> <li>&gt; 1 tortilla wrap</li> <li>&gt; 1 ½ slices wholemeal soda bread or 1 pitta pocket</li> <li>&gt; 40g dry porridge oats</li> <li>&gt; 45g flaked type breakfast cereal</li> <li>&gt; 125g cooked rice,</li> <li>&gt; 100g pasta, noodles, or cous cous</li> <li>&gt; 2 medium potatoes (200g) or 4 small potatoes</li> </ul>   |
| <p><b>*Milk, yogurt and cheese</b></p> <p><b>Provide 3 portions per day</b></p>                      | <p>1 portion is equal to:</p> <ul style="list-style-type: none"> <li>&gt; 200mls milk</li> <li>&gt; 25g cheese</li> <li>&gt; 125g yogurt</li> </ul>  |

## Tool 1: Standardised Portion Size Guidance

| Food Groups  | Standardised Portions<br>Use standardised utensil sizes (e.g. ladle sizes)   |
|--|--|
| <p><b>Meat, poultry, fish, eggs and beans</b></p> <p><b>To meet the nutrition standard for protein (90g per day), 35-42g protein must be provided per day from meat, fish, chicken, eggs and beans</b></p> <p><b>Protein containing foods should be provided at 2-3 meals each day</b></p> | <p>Each of these foods provides 7g protein:</p> <ul style="list-style-type: none"> <li>&gt; 1 egg</li> <li>&gt; 25g roast chicken</li> <li>&gt; 22g roast beef</li> <li>&gt; 25g cooked roast pork</li> <li>&gt; 30g cooked minced beef</li> <li>&gt; 30g baked salmon</li> <li>&gt; 30g baked cod</li> <li>&gt; 100g cooked beans</li> </ul> <p>These foods must be weighed after cooking to ensure that specified weight is given at each meal for example to provide 28g protein from roast chicken, cooked portion should weigh 100g</p> |
| <p><b>Foods and drinks high in fat, salt and sugar</b></p>   | <p>Portions and types of foods used will be determined by the nutrition standards for the individual therapeutic and texture modified diets, see Section 4.0 and 5.0</p>   |

\*DOH, HEG, 2016.


Please refer to the HSE Nutrition Standards for food and beverage provision for staff and visitors in healthcare settings (pending publication) Section: Guidance for Caterers. This provides advice for buying ingredients, for preparation, cooking and serving guidance to maximise nutritional content.



## 6.2.2 Guide to Standardised Recipes

Tool 1 provides a checklist for developing standardised recipes. A sample standardised recipe is provided in Tool 2.

Standardised recipes and portion control must be used to ensure consistent nutritional quality and cost.



### Tool 1:

## Standardised Recipe Checklist

| A standardised recipe must include the following: |   |
|---|---|
| ✓   | A title that describes the meal content   |
| ✓   | Exact description of the ingredients, for example brand types   |
| ✓   | Portions used will be determined by the nutrition standard for the individual diets, see Section 3.0, 4.0 and 5.0 |
| ✓   | Weight of raw ingredients   |
| ✓   | Preparation and cooking method  |
| ✓   | Cooking temperatures and approximate times  |
| ✓   | Recipe yield  |
| ✓   | Weight or volume of a single cooked portion   |
| ✓   | Equipment used to serve a single cooked portion   |
| ✓   | Food allergens  |

Specific information on holding and serving temperatures can also be included.



## Tool 2: Sample Standardised Recipe

|  |  |
|--|--|
| <p><b>Batch Recipe (Raw Ingredients)</b></p> | <p><b>Shepherds Pie</b></p> <p>33kg Minced Beef</p> <p>5kg Diced Carrots</p> <p>5kg Diced Turnips</p> <p>0.9kg Tomato Puree</p> <p>19.5litres Knorr Beef Bouillon (22g paste per litre)</p> <p>13.5kg Mashed Potatoes</p> <p>1.4kg Plain Flour</p> <p>1½oz Dried Mixed Herbs</p> <p>70mls Worcestershire Sauce</p> <p><b>Yield:</b> 230 portions (13 Trays)</p> <p><b>Portion Control Measure:</b> Cooked Weight 1 Portion = 204g (18 portions per tray)</p>   |
| <p><b>Method</b></p>                         | <ol style="list-style-type: none"> <li>1. Boil mince in the bratt pan until at least 75°C and strain</li> <li>2. Add carrots, turnips, herbs, Worcestershire sauce and tomato puree and simmer</li> <li>3. Add beef bouillon and bring to the boil</li> <li>4. Add flour to thicken, mix well and allow to cook out</li> <li>5. Place in 1½ gastronorm trays and place in the chiller for 45 minutes</li> <li>6. Spread the potato evenly among all of the dishes and chill for a further 45 minutes until 3°C or below</li> <li>7. Store in the holding fridge</li> </ol> |



- > **Fish, Cereals containing gluten (Wheat Barley Rye) Celery, Milk, Sulphites**
- > **NOT SUITABLE FOR GLUTEN FREE DIETS**



### 6.2.3 Guide to Nutritional Analysis

All recipe and menus should have a full nutritional analysis undertaken. Recipe nutritional analysis should only be undertaken and/or supervised by an experienced registered dietitian, who can appropriately interpret both the input data and the results, are aware of food regulations and limitations of software programs. Inaccurate nutritional analysis can potentially pose a clinical risk to patients requiring therapeutic diets and provide misleading information to the general population.

Recipe nutritional analysis calculation is a legally accepted alternative to food analysis. Nevertheless it is only a model and cannot account for all processes occurring in foods during their preparation. Results obtained by calculation should be always be regarded as approximations.

For nutrient analysis purposes, recipes must include only the edible portion of the food, i.e. the ingredient information in recipes must be adjusted or converted to reflect what is actually consumed. Standardised recipes and portion control must be available before nutritional analysis is commenced.

Examples of nutritional analysis software packages available for calculating the nutritional content of recipes are listed in alphabetical order, Dietplan 7, MenuCal, Microdiet, Nutmeg, Nutrimer, Nutritics, Saffron, Starchef.

### Key Considerations for using Nutritional Analysis Software Packages

| Databases |  |
|-----------|--|
| 1.        | Ensure your choice of data is up to date i.e. your software package contains the composition of foods integrated dataset (CoFID 2015).   |
| 2.        | Addition of new foods from product specification sheets to the database should be performed or supervised by a dietitian.  |
| 3.        | Food composition data should be used with caution and with an understanding of the inherent differences in the datasets, such as how and when data was obtained, the analytical method used, different fortification policies in different countries and mode of expression. |
| 4.        | Be aware of “new” foods entered with incomplete entries.   |
| 5.        | Foods are constantly being re-formulated, these changes may not be reflected in the nutrient composition databases, so it is important to update your own database and keep abreast of significant recipe changes in popular foods.  |
| 6.        | Consider the on-going technical support each software company can provide in terms of a system’s guide or training, software updates and development and/or maintenance of the software system.  |
| 7.        | Training on how to do nutritional analysis as well as how to use the nutritional analysis software packages is required.   |



Further information on nutritional analysis training available can be obtained from the Irish Nutrition and Dietetic Institute [www.indi.ie](http://www.indi.ie) Detailed guidance on menu analysis can be found in the British Dietetic Association Nutrition and Hydration Digest Improving Outcomes through Food and Beverage Service 2nd edition, 2017.

## The following tools have been developed to get you started:



### Tool 1: Guide to Recipe Nutritional Analysis

#### Preparation

|     |  |
|-----|--|
| 1.  | Obtain written standardised recipe from Catering Department. Ensure the recipe has been produced and tested for taste, appearance and yield (portion size). See section 6.2  |
| 2.  | Check that the form of the ingredients is accurately described in the recipe, for example, onions, peeled  |
| 3.  | Check that the ingredients are properly and accurately described, for example, mayonnaise, reduced fat   |
| 4.  | Check that the method and the ingredients agree and that there is no ingredients omitted, for example, water   |
| 5.  | Ensure cooking methods are clearly specified, for example, boiled, baked or steamed  |
| 6.  | Ensure the raw weights of all ingredients are provided   |
| 7.  | Consider specific gravity of food if not already calculated by the database you are using for nutritional analysis. The composition of foods Integrated dataset (CoFID) entries are by weight (per 100g), therefore food ingredients that are consumed as liquid must be converted from volume into weight using specific gravity. The Food Standard Agency Food Portion Sizes Book Second edition lists the specific gravity for most commonly consumed foods |
| 8.  | Check that the database you are using has the exact ingredients that you require   |
| 9.  | Consider preparation waste; the edible portion weight, for example, the drained weight of tinned tomatoes  |
| 10. | Decide if you are using raw or cooked weights for each ingredient  |
| 11. | Ensure yield for the recipe or serving size per portion is provided  |





## Tool 1: Guide to Recipe Nutritional Analysis

| Performing the Nutritional Analysis |  |
|-------------------------------------|--|
| 1.                                  | Give the recipe a name that is easy to re-locate in the nutritional analysis database e.g. Lasagne, Hospital X, June 2018  |
| 2.                                  | Pick the specific corresponding ingredient from the nutritional analysis software, for example, semi-skimmed milk  |
| 3.                                  | Enter the ingredients in grams or kilograms  |
| 4.                                  | Consider edible conversion factors e.g. bananas weighed with skin, meat with bone and fat, fruit with core and skin, drained weight for canned foods   |
| 5.                                  | Ensure ingredients are providing data for all nutrients  |
| 6.                                  | Check total weight   |
| 7.                                  | Is there a weight change in ingredients? Changes on cooking may be either: <ul style="list-style-type: none"> <li>&gt; Weight gain as in dried pasta and grains, or</li> <li>&gt; Weight loss as in baked recipes and protein foods e.g. roast meats*</li> </ul> |
| 8.                                  | Is the weight loss or gain figure available from the nutritional analysis software?  |
| 9.                                  | Is the vitamin retention managed using the software?*  |
| 10.                                 | The nutrient composition should be given per 100g and also per portion served  |
| 11.                                 | Do the results make sense? Would you expect portion size to provide this nutritional content?  |
| 12.                                 | Save to hard drive, as software system may be live   |

\* Mc Cance and Widdowson's *The Composition of Foods, Seventh Summary Edition (2015) Appendix 4.3 Cooked foods and dishes, gives % weight change, mean and range for individual foods. See Tool 2 and 3 below vitamin losses, cooking gains and losses.*



## Simple Recipe

Analyse recipe from given ingredients (to include water) using data for EITHER raw or cooked ingredients depending on the known weights in the recipe (BDA 2017).

Assess cooking losses or gains, either by test weighing the finished product before and after cooking or by using data as supplied by CoFIDS 2015.

**Example:** Beef Stew.

## Composite Recipes

These are multi-layered dishes composed of more than one recipe combined, to form a composite recipe. Calculate each part of the recipe (described as above) for simple recipes, and then create a recipe, which is the final make up of the dish.

**Example:** Spaghetti Bolognese with Parmesan cheese.

1. Analyse meat sauce with a weight loss factor
2. Analyse the spaghetti with a weight gain factor
3. Create a final recipe, i.e. combine step 1 and 2 and add the parmesan cheese.

Further guidance on recipe nutritional analysis can be found the European Food Information Resource [www.eurofir.org](http://www.eurofir.org).



### Tool 2: Vitamin Losses

Lengthy cooking, chilling, storage, transporting or reheating time increases losses of both heat labile and water soluble vitamins. Losses may be significant for vitamin C, folate and thiamine. It is recommended to limit the holding time post cooking to less than 90 minutes to ensure maximal vitamin retention.

An estimation of vitamin losses in cooked recipe dishes can be performed by assigning a set of factors for percentage vitamin losses to each ingredient in the recipe, according to its food group and the method of cooking. Vitamin losses do not need to be applied to minor ingredients such as herbs, spices and salt. Section 4.3.4 in McCance and Widdowson Seventh Edition details percentage vitamin losses according to cooking method. The values in the tables should be treated as guidelines only, and for more accurate information the foods or composite dish should be analysed.

There is a lack of information regarding chilled and frozen food preparation and this lack of information makes it difficult to make any comparisons with conventional methods.

## Tool 2: Vitamin Losses

Some vitamins are lost on heating but the vitamins that leach into the liquid during cooking will not be lost if the sauce or gravy is eaten as part of the dish.

In published nutritional databases, the vitamin content of foods described as 'cooked' have been adjusted for the nutrient changes that occur with cooking.

Calculating the 'edible portion' or post cooking portion (i.e. what is consumed) and utilising the nutritional analysis data for the cooked food is a second method to determine vitamin content within the portion consumed.



## Tool 3: Cooking Gains and Losses

Some foods will gain weight on cooking (e.g. steamed sponge, pasta) and others will lose weight (e.g. grilled meat). In order to calculate the nutrient composition of cooked dishes correctly, it is essential to take weight (i.e. water and fat) loss or gain on cooking into account.

Fat uptake during frying is very difficult to estimate e.g. fried potatoes. Fried values from nutritional data bases should be used where necessary. An estimation of the cooked weight/edible portion should be determined, if only the raw weight is known.

Fat losses in cooking methods such as grilling should also be considered. See example 1 below for estimating the edible portion of a grilled meat.

Fat uptake for ingredients fried before incorporation into recipes needs to be included in the calculation of the final dish.

Dry foods such as cereal, pasta, rice and pulses will absorb water. This presents a difficult situation for nutrient analysis because the pasta does not absorb the total amount of either the boiling water or any salt that may be added. Cooked values can be used if cooked weight is known. If the cooked weight is unknown, the weight of the dried pasta must be converted to the appropriate amount of cooked pasta, using the edible portion or Yield Factor Method.

An exception to the Yield Factor Method occurs when the pasta is cooked in a liquid that it absorbs fully and/or the liquid is consumed as a sauce. The dry pasta nutritional analysis would be appropriate item to select from a nutritional database and the dry pasta weight used.

## Example 1: Applying a weight loss factor to recipes within main recipe

### Recipe:

#### Beef Burger in bap with onions

- > 80% beef burger raw weight 100g, grilled
- > Peeled and sliced onions 30g
- > White floured bap 60g


The weight loss factor normally used for a beef burger is 30%. However, the onions and bap will not have 30% weight loss and so if this is applied to the whole recipe, the portion size would be inaccurate. A way to solve this issue is to calculate manually the weight loss of the burger and use a cooked code with the cooked weight, in this case 67g of 80% beef burger, grilled. The bap and onions can then be added without any weight loss factor being used.

### 6.2.4 Sample Food and Recipe Menu Coding

To code foods and dishes for inclusion on hospital diet menus you will need to utilise tools from sections 3.0, 4.0 and 5.0 which detail food allowed and to avoid for the different diets. In addition the nutritional analysis (either from product specification sheets or from calculated analysis of a recipe) will be required. Coding of food and dishes for menu inclusion should be done by a dietitian with expertise in nutritional analysis, therapeutic diets management and hospital menu planning.

- Step 1** Collate all foods and dishes provided
- Step 2** Review and or conduct nutritional analysis (if not already available)
- Step 3** Compare nutritional analysis to minimum nutrition standard set for each hospital diet
- Step 4** Code for menu suitability





## Tool 1: Sample Menu Coding

|                        | Regular Hospital Diet | Energy Dense Diet     | Healthy Eating Diet (for diabetes and cardiovascular disease) | No added Salt Diet | Gluten Free                    | Renal Diet   | Low Fibre diet                  |
|------------------------|-----------------------|-----------------------|---|--------------------|--------------------------------|--|---------------------------------|
| White sliced pan bread | ✓                     | ✓                     | ✗   | ✓                  | Gluten Free Required           | ✓  | ✓                               |
| Carrots                | ✓                     | ✓                     | ✓   | ✓                  | ✓                              | Need to be boiled  | ✓                               |
| Roast beef             | ✓                     | ✓                     | ✓   | ✓                  | ✓                              | ✓  | ✓                               |
| Rashers                | ✓                     | ✓                     | ✗   | ✗                  | ✓                              | ✗  | ✓                               |
| Full fat milk          | ✓                     | Needs to be fortified | ✗   | ✓                  | ✓                              | ✓  | ✓                               |
| Rice pudding           | ✓                     | Ideally Fortified     | No added sugar<br>Made with low fat milk                      | ✓                  | Confirm that it is gluten free | From allocated dairy portions                            | ✓                               |
| Cream Crackers         | ✓                     | ✓                     | ✓   | ✓                  | Gluten free crackers           | ✓  | ✓                               |
| Shepherds Pie          | ✓                     | ✓                     | ✓   | ✓                  | ✗                              | Double boil potatoes and count as part of daily portions | Include vegetables in allowance |

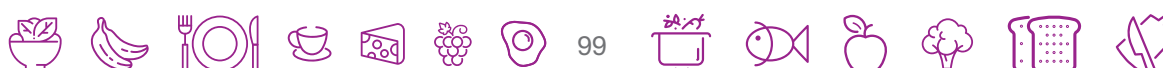
### Tips for Analysing Menu Capacity

- > Use a qualitative menu assessment checklist for the different diets to ensure that correct number of portions and food types have been included (see Appendix 7)
- > Collate all menu options nutritional analysis for each meal and snack each day
- > Refer to the British Dietetic Association Nutrition and Hydration Digest Improving Outcomes through Food and Beverage Service, 2017 Chapters 9 and 10 for specific guidance on demonstrating menu capacity.

### 6.2.5 Process for New Recipe Development

New recipes should be developed

- > where there is insufficient choice on a hospital diet menu
- > poor uptake of a particular dish, increased food waste
- > reduced patient satisfaction
- > to update menu cycles to reflect patient feedback
- > to incorporate new food products.





## Tool 1: Sample Process for New Recipe Development (click [here](#) to download)

### PROCESS FOR NEW RECIPE DEVELOPMENT

Recipe development depending on the type and cooking methods required can take a considerable amount of time. A number of attempts and revisions may be required.

- › Chef creates a bulk recipe
- › Dietitian does nutritional analysis and creates individual recipe that meets specified minimum nutrition standards
- › Dietitian checks ingredients for therapeutic diet suitability



- › Chef cooks recipe for small number of portions and it is reviewed in kitchen for taste, smell, food aesthetics on plating post holding time (cook fresh) and on regeneration (cook chill)
- › Cooked portion weight checked
- › Not always achieved on first try! Often needs to be made a couple of times with changes built into “working recipe”
- › Bulk recipe and yield created



- › Chef cooks bulk recipe
- › Taste, smell, aesthetics and final service product quality checked by chef, catering management and dietitian
- › Recipe yield and portion control measure rechecked and agreed
- › Nutritional analysis completed by dietitian
- › Not always achieved on first try! Often needs to be made a couple of times with changes to “working recipe” tried



- › Consultation with speech and language therapy to see if recipe suitable for Textured Modified Diets and Thickened Fluids
- › Added to appropriate menus for a trial period
- › Allergen information updated



- Update of:
- › Ward pantry dietary information
  - › Requisition/Food ordering system
  - › Recipe and method book in kitchen
  - › Ingredient orders
  - › Update for chefs
  - › Nutritional analysis and menu coding
  - › Combination diet menu cycles



- › Feedback from patients and ward staff in relation to uptake of dish
- › Review of feedback by catering management, chef, dietitian
- › Added as standardised recipe to production cycle



## 6.3 Food Waste

### Food waste can be defined as:

Food that is purchased, prepared, delivered and intended to be eaten by patients, (also applies to staff and visitors) but that remains un-served or uneaten at the end of the meal service. Food waste can be subdivided and further defined as:

- > **Un-served food waste (in main kitchen and at ward level):** This is the food provided in bulk or plated that is not served and is left in containers or in the trolley at the end of service. This food waste is usually disposed of from the containers or plates at ward level. Un-served food waste may also be generated in the main kitchen
- > **Untouched Food Waste (at ward level):** This is plated food that was never touched or consumed in any part. This food waste is usually disposed of from the plates at ward level
- > **Uneaten Food Waste (at ward level):** This is the food remaining on plates after a meal is finished.



### It is recommended that all hospitals review and reduce their food waste by:

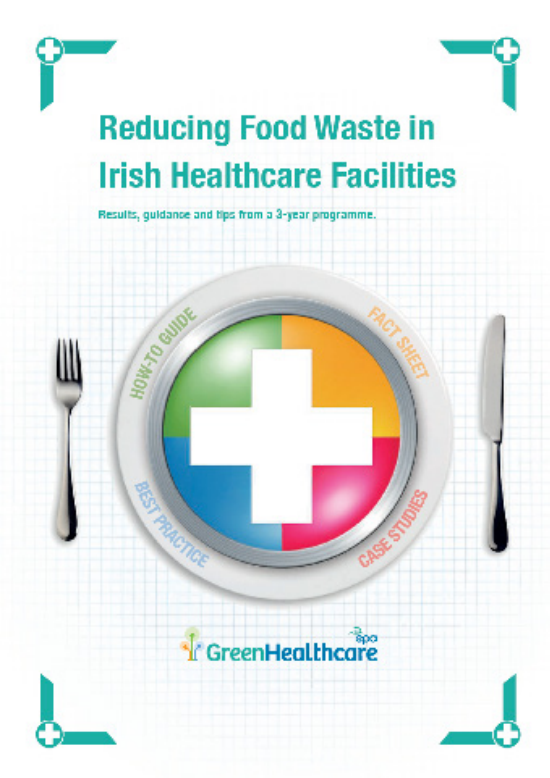
- > Setting up a food waste prevention and improvement programme to measure and monitor food waste
- > Assessing food waste by recording brown bin waste weights from waste contractor bills on a monthly basis
- > Benchmarking waste locally; waste generated per patient or inpatient bed day
- > Comparing their benchmark with the current GHCP benchmark (0.73kg food waste per in-patient bed day)
- > If the benchmark is higher than the GHCP benchmark, a review should be undertaken to identify where food waste is occurring
- > Identifying areas with waste reduction issues and developing solutions to reduce waste if the benchmark is higher than the GHCP benchmark.



## To get started with reviewing and reducing food waste

The Green Healthcare Programme (GHCP) is co funded by the HSE National Health Sustainability Office (NHSO) and the Environmental Protection Agency (EPA) and aims to help healthcare facilities to become more efficient with resources and prevent/reduce waste and overall costs (Green Healthcare programme, HSE, National Health Sustainability Office). Reference documentation on food waste can be found on the NHSO website [www.hse.ie/sustainability](http://www.hse.ie/sustainability). Hospitals are encouraged to initiate a food waste reduction programme through the GHCP.

An excellent resource has been published by the Environment Protection Agency Green Healthcare, “Reducing Food Waste in Irish Healthcare Facilities. Results, guidance and tips from a 3 year programme”. It includes how to guides, fact sheets and case studies of waste reduction initiatives. It can be downloaded from <https://www.epa.ie/pubs/advice/green%20business/Reducing-food-waste-in-Irish-healthcare-Facilities-foodwaste-guidance-booklet-reduced-size.pdf>



### NOTES

**It is imperative that all food waste reduction measures that affect portion control, taste or flavour of food are undertaken in consultation with the nutrition and dietetic department as may affect nutritional intakes of patients.**



# Section 7.0

## Food Service

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# Section 7.0

## Food Service



### 7.1 Introduction

It is important that a food service system is in place that is capable of providing for the nutritional needs of all patients served. Food and drink provision for patients is an essential part of their treatment contributing to patient well-being and aiding recovery. Food provision should be seen as integral component of care rather than a separate “hotel service” provided by the hospital.

Access to a choice of meals, snacks and hydration is essential for all patients that are able to eat and drink. The hospital should provide written information on food services in the patient admission handbook, patient information leaflets and on the hospital website. Monitoring of intake is essential to ensure that suboptimal intakes are identified early and that alternative strategies are put in place to improve intake as required.

For food service to be effective it is essential that all ward staff contribute to “making meal times matter” (see section 8.0) by ensuring the patient receives:

- > The correct meal
- > High quality food that is nutritious, looks appealing and tastes good
- > Adequate level of assistance to ensure that food can be consumed
- > Food in an environment that is conducive to eating.



### 7.2 Communication

Close communication between catering, catering support services, nursing and the dietitian is crucial to ensure an effective and efficient food service is delivered. The HIQA Report of the review of nutrition and hydration care in public hospitals 2016, recommended that there should be a safe and consistent process of communication between all ward staff to ensure that the patients always receive the correct diet, nutritional care and adequate hydration. The National Clinical Guideline No: 11 Communication (Clinical Handover) in Acute and Children’s Hospitals (2015) outlines the requirements for clear and focused communication of information relating to the patient’s condition, both urgent and routine. The results of the National Patient Experiences Surveys have highlighted the need to provide support, training and guidance in relation to interactive engagement of patients at the bedside. In response to this need a National Healthcare Communication Programme is been developed to improve communication skills of all staff in hospitals. The overall aim of this programme is to



improve the experience of patients and their relatives by supporting staff to take a sensitive and person – centred approach in all conversations with patients and their families. The programme is building a framework for the learning, development and ongoing maintenance of core communication skills in healthcare. This programme is recommended for all staff, clinical and non clinical. It is recommended that non clinical staff attend Module 1 and that all clinical staff attend all modules (1-4). This programme will provide the necessary training on good communication skills which is an essential component of food service. It also underpins the key elements of an efficient and effective team approach to delivery of food, nutrition and hydration care for patients.

Look out for this training in your hospital, for further information on this programme see <https://www.hse.ie/eng/about/our-health-service/healthcare-communication/>

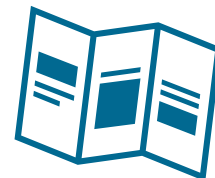
## 7.3 Tools to Strengthen and Improve Food Service Practices

**Tool 1** Communicating Food, Nutrition and Hydration Requirements at the Bedside

**Tool 2** Sample Food Record Chart

**Tool 3** Patient Information Leaflet “Food Nutrition and Hydration Care”

**Tool 4** Patient Information Leaflet “Eating Well on your Haemodialysis Days”



### 7.3.1 Communicating Food, Nutrition and Hydration Requirements at the Bedside

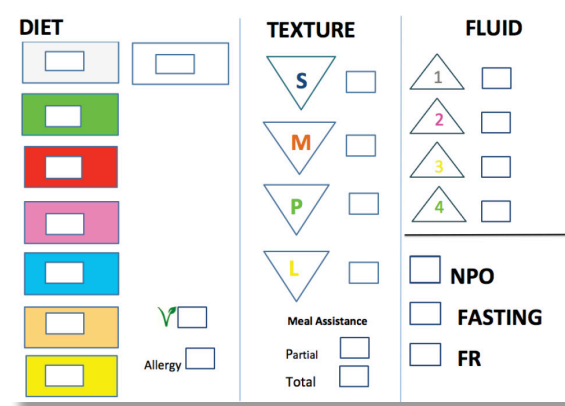
Following identification of food, nutrition and hydration needs on admission, it is necessary to have a process in place for communication with ward catering staff and other members of the multidisciplinary team. This will support the right patient receiving the right meal all of the time. It should also aid identification of:

- > Requirements for fluid restriction
- > Necessity to fast
- > Level of assistance with feeding (eating and drinking) required
- > If oral intake is not permitted, i.e. Nil orally



A suggested method of communication is signage over the bed. [Click here](#) for a sample bed sign. **Tool 1** outlines a sample procedure for bed signage.

## **Tool 1:** **Sample Procedure for Bed Signage**

|    |  |
|----|--|
| 1. | Set up a multidisciplinary working group to agree content of the bed signage using sample template provided  |
| 2. | Bed signs should be aligned with diet ordering procedure/ward diet list  |
| 3. | Install signs over all beds in durable holders   |
| 4. | Bed signs should be laminated and be easy to wipe clean  |
| 5. | Signs should only be completed by named nurse or clinical nurse manager  |
| 6. | Signs must be updated when new patient admitted and or when food, nutrition and hydration plan changes   |
| 7. | All relevant ward staff should be educated on the bed signage system   |
| 8. | <p>Key codes for sample bed sign are:</p> <div style="display: flex; align-items: flex-start;"> <div style="flex: 1;"> <p><b>Diet:</b></p> <p><b>Grey = Regular Diet</b></p> <p><b>Green = Healthy Eating</b></p> <p><b>Red = Energy Dense</b></p> <p><b>Pink = Renal</b></p> <p><b>Blue = Gluten Free</b></p> <p><b>Orange = Low Fibre</b></p> <p><b>Yellow = Light</b></p> <p>White = Ethnic, religious or cultural diet, check with CNM</p> <p>V = Vegetarian</p> <p>Allergy - for clarity check with Nurse in charge</p> </div> <div style="flex: 2;">  </div> </div> <p><b>Texture:</b></p> <p>Letter colours are specified by IDDSI</p> <p><b>S = Soft Bite Sized Level 6</b></p> <p><b>M = Minced and Moist Level 5</b></p> <p><b>P = Pureed Level 4</b></p> <p><b>L = Liquidised Level 3</b></p> |

## Tool 1: Sample Procedure for Bed Signage

8.

### Meal assistance:

Partial = requires some assistance with feeding (eating and drinking) for example cut up food, buttering bread

Total = totally dependent on nursing assistance with nutritional activities - spoon feeding by nurse

### Fluid:

Number colours are specified by IDDSI

**1 = slightly thick**

**2 = mildly thick**

**3 = moderately thick**

**4 = extremely thick**

NPO = Nil Orally

Fasting = No food or drink allowed for a defined period of time for a test or a procedure

FR = Fluid Restriction

### 7.3.2 Monitoring Patients Food and Fluid Intakes

Malnutrition can develop quickly in hospital, so it is important that there is on-going monitoring of food intake. Poor food and fluid intake, even in a nutritionally well patient, can extend their length of stay. Inadequate fluid intake can cause serious consequences such as delirium. Nutritional needs can change depending on medical condition and therefore monitoring is required. The food intake of all patients identified at risk of malnutrition and/or receiving oral nutrition support should be recorded by means of a semi-quantitative food record chart as demonstrated in **Tool 2**.

Click [here](#) to download.





### 7.3.3 Patient Information Leaflets

The Hospital should provide written information on food and hydration (food services information) to the patient. In addition, information should be provided to patients on nutrition screening in a format that is patient centred and in plain English so that it can be understood by all. Two patient information leaflets have been developed for use nationally as shown in **Tool 3** and **4**.

**Tool 3** contains four versions of the Food, Nutrition and Hydration Patient Information Leaflet. This leaflet provides the patient with information on nutrition screening and food services which can be made hospital specific e.g. meal times. Each leaflet has been adapted to describe the different food production and service models used in the majority of acute hospitals:

- > Cook fresh and centrally plated. Click [here](#) to download
- > Cook fresh and buffet trolley service. Click [here](#) to download
- > Cook chill and centrally plated. Click [here](#) to download
- > Cook chill and buffet trolley service. Click [here](#) to download



## Tool 3: Food, Nutrition and Hydration Patient Information Leaflet



**Tool 4** contains a patient information leaflet which provides information on food provision during haemodialysis.



## Tool 4: Eating Well on Your Haemodialysis Days Patient Information Leaflet

**Plain English**  
November 2016

**INDI**  
Irish Nutrition +  
Dietetic Institute  
Renal

### Eating well on your haemodialysis days

**It's important to eat enough protein**  
Research shows that some people don't eat enough on dialysis days. This is because you can often miss a main meal and have a very long period of time when you are away from home.  
During your dialysis session your protein requirements increase and you lose protein in the fluid that is removed. You need to eat enough protein-containing foods to keep your muscles strong, and fight infection.  
We recommend that you try to eat foods that contain protein during your dialysis session.  
For example:  
● Meat,  
● Fish,  
● Chicken, or  
● Eggs.  
Some patients cannot tolerate eating while on the dialysis machine. Your doctor, nurse or dietitian will advise you about this. If you cannot tolerate food during dialysis, they will arrange for you to have something to eat either before, or after your dialysis.

**What should I eat during haemodialysis?**  
During haemodialysis we encourage you to have a nutritious sandwich to ensure you get enough protein that day.  
We recommend that you should be offered a sandwich during dialysis that contains one of these:  
● Turkey  
● Chicken  
● Tuna mayonnaise  
● Beef  
● Chicken and stuffing  
● Egg mayonnaise

**Specific dietary needs**  
If you have specific dietary needs (for example if you need gluten-free bread), please discuss this with your dietitian.

**Restrict fluids**  
You should restrict your fluid intake to one small cup of tea or water (150-200mls) per dialysis session. When you are on dialysis, all fluids that you drink, both at home and during dialysis need to be removed from your blood. If you drink too much during dialysis, it may not be possible to remove all the fluid from your blood during the treatment.

**Bring your phosphate binders**  
When you come to dialysis, please remember to bring your phosphate binders with you to take with your sandwich.

**What about potassium? Is it safe to eat high potassium snacks on dialysis, for example chocolate or crisps?**  
**No, it is not safe.**  
This is because the potassium contained in the snack may not be removed from your blood during that particular dialysis session.

**If you have any questions or queries, please ask your dietitian.**

Support by the Irish Kidney Association, 01 4220200/LoCall: 1890 543 630. © Irish Nutrition and Dietetic Institute, INDI.

(Click [here](#) to download)

### NOTES

- > **All nutrition related patient information for use in all locations by all members of the multidisciplinary team in the hospital, for example, nutritional information on stoma leaflets, dietary advice for tests or procedures must be reviewed and approved for use by the Nutrition and Hydration Steering Committee with input from a registered dietitian**



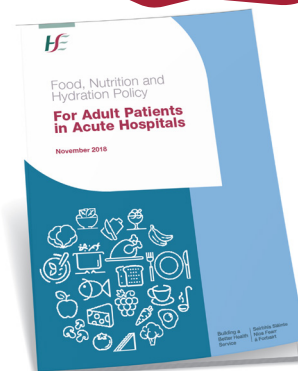
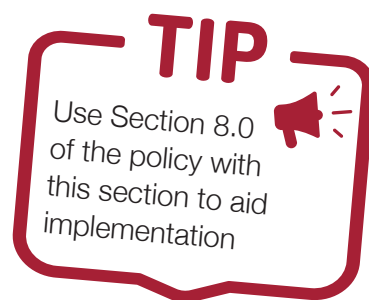
# Section 8.0

## Making Mealtimes Matter

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# Section 8.0

## Making Mealtimes Matter



### 8.1 Introduction

The following tools are designed to support staff to make patient mealtimes matter. The aim is that patients have the best possible experience at mealtimes and that nutrition & hydration are optimised in line with patient care and treatment.

### 8.2 Mealtimes Matter Tools

The tools are not written in order of priority, each component is considered of equal importance. If a patient has an individual nutrition care plan, reflect on same prior to each meal service and after the meal to assess if further changes and or referrals to health care professionals are required.

#### **Tool 1: Before Mealtimes (Assess and Plan)**

|    |  |
|----|--|
| 1. | Is there a communication plan that prepares for mealtimes up to 10 minutes in advance of meals arriving to the ward – e.g. is an announcement made? Is there verbal communication with patients, staff and visitors? |
| 2. | Is there a plan in place to ensure the right numbers of staff are available to support making mealtimes matter? For example how are breaks for staff organised?  |
| 3. | Have patients placed an order for food and is the correct order available?   |
| 4. | Is there a system in place that highlights patient’s dietary requirements inclusive of specific nutritional, therapeutic and cultural need?  |
| 5. | Has the level of assistance required been assessed so that patients have the right level of support to eat their meal, that is, *Partial Assistance, Total Assistance?   |

### Tool 1: Before Mealtimes (Assess and Plan)

|     |  |
|-----|--|
| 6.  | Is there a procedure in place to alert staff as to the level of assistance required by the patient, for example “red tray system” alerting those that need total assistance with feeding?  |
| 7.  | Is the environment set up to allow every patient to have their meal comfortably? (refer to Tool 4), for example, is the bed space de-cluttered including table or dining area?   |
| 8.  | Is each patient prepared so they can enjoy their meal comfortably? For example hand hygiene, toileting needs, seating, positioning. Ensure patients glasses, dentures and/or hearing aids are worn (as all senses are required to enjoy, taste and smell food) |
| 9.  | Is there a plan in place to ensure patients get help on time to have their meal, for example, Staff, Family, Volunteer?*   |
| 10. | Are all patients present on the ward for this mealtime?  |
| 11. | What provisions are made if patients are not on the ward at this mealtime? For example, is there a meal put aside, is there a meal replacement available if food service has ended?  |
| 12. | Is there a plan to stop non urgent activity for example, cleaning?   |
| 13. | Is there a plan to limit ward rounds or non urgent interventions?<br>e.g. Physiotherapy, Diagnostics   |
| 14. | Have visitors not involved in assisting with mealtimes been requested to leave the ward?   |
| 15. | Provide stimulation to the Patient prior to the meal time. Ensure that Patients are awake and/or alert. Inform them that it is mealtime  |



### NOTES

**\*Partial Assistance = requires some assistance with feeding, for example, opening packages, cutting up food, buttering bread, repositioning.**

**Total Assistance = fully dependent on assistance to eat, for example patient requires staff, family member or a volunteer to feed them.**

**\*\*All staff, family members and or volunteers involved with providing assistance with feeding should be aware of importance of hand hygiene (wash hands before and after assistance provided) and should comply with specific patient infection control precautions required, for example, requirement to wear an apron).**



## Tool 2: During Mealtimes (Implement)

|     |  |
|-----|--|
| 1.  | Are food, drinks, condiments and utensils within easy reach and available for the Patient?   |
| 2.  | Is food at the right temperature, that is, not too hot or cold?  |
| 3.  | Is there timely help for the Patient to open packaging if required?  |
| 4.  | Is there timely help for the Patient to cut up food if required?   |
| 5.  | Is there timely help to feed patients unable to feed themselves if required?   |
| 6.  | Did the Patient get the meal they ordered? Be available to answer and assist with any Patient queries on food received, for example, how was my meat cooked? |
| 7.  | Is there appropriate assistance for patients with specific needs for example, swallowing impairment and/or cognitive impairment?                             |
| 8.  | Has non urgent activity stopped, for example, ward cleaning?   |
| 9.  | Have ward rounds or non urgent interventions been limited, for example, Physiotherapy, Diagnostics?  |
| 10. | Have visitors that are not involved in assisting with mealtimes left the ward?   |
| 11. | Have patient's sufficient time to eat their meal?  |




### Tool 3: After Mealtimes (Evaluate)

|    |   |
|----|---|
| 1. | Have you checked that the patient enjoyed their meal?   |
| 2. | Has the patient had enough to eat and enough time to eat their meal?  |
| 3. | If meals are unfinished have you checked the reason, for example, poor appetite, dissatisfied with food quality, inadequate assistance?   |
| 4. | Is food intake documented in the relevant notes, that is, in nursing notes or food record chart?  |
| 5. | If a patient has missed a meal, is there a robust plan in place to replace this meal as a priority?   |
| 6. | In partnership with the Patient is there a revised plan of care to take account of poor nutritional intake, for example, dietitian referral, help with ordering, initiation of oral nutritional supplements   |
| 7. | If the Patient is having physical and or cognitive difficulties, consider referral to the occupational therapist. If the Patient has a feeding, eating, drinking and swallowing disorder (FEDS), consider referral to the speech and language therapist |

**Tool 4** contains some tips which may be considered by ward staff in conjunction with occupational therapists to facilitate feeding when patients function is compromised. The table below is intended as a checklist which is not exhaustive. An occupational therapy assessment of the patients function is recommended for detailed advice which is specific to patient's individual needs.

 **Tool 4:**  
**Special Assistance at Mealtimes Checklist**

|                                    |   |
|------------------------------------|---|
| <p><b>Seating</b></p>              | <p>Upright and centred</p> <p>Feet supported on floor or footplate</p> <p>Back and thighs supported by chair</p> <p>Reclining chair should be put in upright position where possible for feeding</p>  |
| <p><b>Upper Limb Function</b></p>  | <p>Table and Tray should be within reach</p> <p>Consider utensils such as:</p> <ul style="list-style-type: none"> <li>&gt; Lightweight/padded handles on cutlery</li> <li>&gt; Angled cutlery</li> <li>&gt; Plate guard</li> <li>&gt; Slip resistant mat under plate</li> <li>&gt; One handed knife &amp; fork</li> <li>&gt; Cups may have two handles/spout/insulation/angled</li> </ul> <p>Orthotics/splints may help stabilise joints to increase independence when self-feeding e.g. wrist brace</p> <p>Feeding systems may be recommended for longer term use in some cases</p>                                      |
| <p><b>Cognitive Impairment</b></p> | <p>Alertness/Arousal/Attention/Memory will impact on patient's ability to initiate and continue feeding (either independently or with assistance)</p> <p>Reduce clutter on table/tray</p> <p>A quiet environment may minimise distractions where possible</p> <p>Simple presentation</p> <p>Contrasting colours between crockery and tray/table</p> <p>Avoid patterned tablecloth/plates</p> <p>Allow plenty of time - food may need to be kept warm</p> <p>Consider providing finger food</p> <p>A non-spill cup with a lid may be useful</p> <p>Patient may need prompting to recognise previously familiar objects</p> |




## Tool 4: Special Assistance at Mealtimes Checklist

|  |   |
|--|---|
| <p><b>Environmental considerations</b></p> | <p>A dining room may promote social aspect which can promote feeding</p> <p>Table position and height may need to be adjusted to suit individual patients</p> <p>Apron/bib may be used - consider patient dignity, types of fasteners, material and length depending on patient need</p> <p>An individual's culture, values and rituals should be respected at mealtimes and when promoting independent feeding</p> |
| <p><b>Visual Impairment</b></p>            | <p>Bright colours are easier to see</p> <p>Contrasting colours e.g. between liquid and cup</p> <p>Textures/patterns to help locate items</p>  |

### 8.3 Raising Awareness for Making Meal Times Matter

**Tool 5** contains a sample poster which has been devised to help you raise awareness for Making Mealtime Matter. This sample poster can be adapted for local requirements. Click [here](#) to download.



## Tool 5: Making Mealtime Matter



**HE**  
Huddersfield Health Services  
Health Service Executive

### MAKING MEALTIMES MATTER

Please do not interrupt patients' mealtimes.

We operate a ward environment that helps people to enjoy and to safely eat and drink as much as possible. Help us help our patients.

**Breakfast: \_\_am to \_\_am**  
**Lunch: \_\_pm to \_\_pm**  
**Tea: \_\_pm to \_\_pm**

During mealtimes all non-urgent activities will stop so that our nursing staff are available to help our patients to eat.

Visitors are welcome to stay during mealtimes to help a relative or friend with their meal.  
Please respect these times and ask us any questions you may have once the mealtime is over.

# Section 9.0

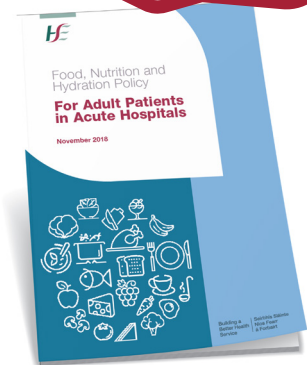
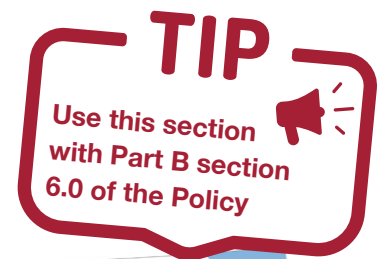
## Getting Started with Monitoring and Evaluation

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# Section 9.0

## Getting Started with Monitoring and Evaluation



### 9.1 Introduction

Audits and quality improvement projects are vital aspects of clinical governance and continued service improvements for delivery of food, nutrition and hydration care.

An audit assesses if a certain aspect of care is attaining a recognised standard, for example meeting the key recommendations listed in the food, nutrition and hydration policy. It provides information for all staff involved in the provision of nutritional care in relation to:

1. what is working well and
2. where improvements are required.

The overall aim of audit is to monitor and evaluate practice in order to improve outcomes for patients.

### 9.2 Food, Nutrition and Hydration Care Audits



#### Examples of Food, Nutrition and Hydration Care Audits

##### 9.2.1 Admission Practices

- > Did all patients have a food, nutrition and hydration needs assessment completed on admission to hospital?
- > Were all components of the food, nutrition and hydration needs assessment completed and documented on admission?
- > Was refeeding syndrome risk assessed in all patients identified at risk of malnutrition?
- > Were all patients provided with a leaflet/online information on food, nutrition and hydration care pre or on admission to hospital?

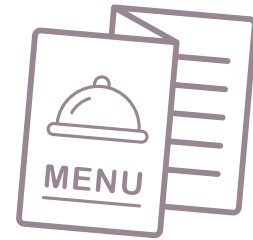




## Examples of Food, Nutrition and Hydration care audits

### 9.2.2 During Admission

- > Have all patients been given the opportunity to select food and fluids from a menu?
- > Is there a procedure in place to help patients understand and choose menu options (for example, picture menu)?
- > Have all patients received information on allergen information in written form before choosing their meals?
- > Where oral intake is allowed, did all patients receive three meals and two snacks each day?
- > Are snacks available that provide the nutrition standard?
- > Do all patients have access to an evening snack service?
- > Is there a four hour gap between meals?
- > Where a patient missed a meal, was a replacement meal available that provided the recommended nutrition standard?
- > Are water jugs replenished twice daily?
- > Are all patients weighed weekly?
- > Where dietary intake monitoring is recommended, is there documented evidence of monitoring in the last 48 hours?
- > Are there systems in place to provide assistance with meals for those identified with this requirement?
- > Is there a ward process in place to make mealtimes matter?
- > Are relatives/visitors allowed to visit during mealtimes to assist with eating and drinking at meals?



### 9.2.3 Discharge Practices

- > Is a discharge plan, including all relevant food, nutrition and hydration information, being provided as appropriate to all patients?
- > Is the patient's malnutrition screening result included in all medical discharge letters to the GP?
- > Is the patient's BMI (as appropriate) included in all medical discharge letters to the GP?





## Examples of Food, Nutrition and Hydration care audits

### 9.2.4 Provision of Food and Hydration

- > Is there a choice of food for all mealtimes?
- > Are standardised recipes used and is there documented evidence of portion control?
- > Do all menus provide the nutrition standards for energy and protein?
- > Has the nutritional content of all menus been analysed or supervised by a dietitian with expertise in nutritional analysis?
- > Is there up to date information available on the nutritional composition of all foods and recipes?
- > Have patients been involved in the menu planning process?
- > Do all snacks meet the nutrition standard set?
- > Is there documented evidence that all therapeutic diets provided meet the nutrition standards set?
- > Do all texture modified diets meet the nutrition standards set?
- > Have you benchmarked your food waste against the current Green Healthcare benchmark? (0.73kg food waste per in-patient bed day)
- > Have you conducted a survey of patient satisfaction and or experience at least annually?



### 9.2.5 Training

- > Have all staff involved in the provision of food, nutrition and hydration care access to regular specific nutrition training?

- Catering Managers**
- Kitchen staff**
- Chefs**
- Dietitians**
- Health Care Assistants**
- Medical**
- Nursing**
- Occupational Therapist**
- Speech and Language Therapists**
- Ward Catering Staff**

**Useful Resource for Monitoring and Evaluation:** *Guide to the Health Information and Quality Authority's review of nutrition and hydration in public acute hospitals, HIQA 2016.*

# Section 10.0

## References

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# Section 11.0

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# Section 11.0

## Appendices

### Appendix 1: Nutritional Analysis for Regular Hospital Meal Plan

|  | Quantity (g) | Kcal       | Protein (g) | Ca (mg)    | Fe (mg)     | Vitamin D (µg) | Folic acid (µg) | Vitamin C (mg) |
|--|--------------|------------|-------------|------------|-------------|----------------|-----------------|----------------|
| <b>Breakfast</b>                       |              |            |             |            |             |                |                 |                |
| Cornflakes                             | 30           | 113        | 2.1         | 0.9        | 3.5         | 1.4            | 51*             | 0              |
| Milk with cereal                       | 150          | 95         | 5.1         | 180        | 0.03        | 0              | 12              | 3              |
| White bread                            | 76           | 166        | 6.0         | 134        | 1.2         | 0              | 19              | 0              |
| Butter                                 | 14           | 104        | 0.08        | 2.5        | 0           | 0.13           | 0               | 0              |
| Jam                                    | 10           | 26         | 0.06        | 1.2        | 0.02        | 0              | 0               | 0              |
| Orange juice                           | 150          | 51         | 0.9         | 18         | 0.15        | 0              | 48              | 63             |
|  |              | <b>555</b> | <b>14.2</b> | <b>337</b> | <b>4.9</b>  | <b>1.53</b>    | <b>130</b>      | <b>66</b>      |
| <b>Main/large Meal</b>                 |              |            |             |            |             |                |                 |                |
| Vegetable soup                         | 150          | 83         | 2.1         | 21         | 0.5         | 0              | 9               | 3              |
| Roast Pork                             | 90           | 164        | 29.7        | 9          | 0.99        | 0.63           | 3.6             | 0              |
| Gravy                                  | 45           | 14         | 0.14        | 0.9        | 0           | 0              | 0               | 0              |
| Carrots                                | 80           | 27         | 0.4         | 21         | 0.16        | 0              | 6.4             | 1.6            |
| Potatoes (mashed with milk and butter) | 200+20+7     | 213        | 4.44        | 41         | 0.6         | 0.06           | 37.6            | 18.4           |
| Butter on the side                     | 7            | 52         | 0.04        | 1.25       | 0           | 0.065          | 0               | 0              |
| Ice cream                              | 55           | 93         | 1.8         | 52         | 0.03        | 0.28           | 3.3             | 0.55           |
| Jelly                                  | 100          | 61         | 1.2         | 7          | 0.4         | 0              | 0               | 0              |
|  |              | <b>707</b> | <b>40</b>   | <b>153</b> | <b>2.68</b> | <b>1.03</b>    | <b>60</b>       | <b>23.5</b>    |
| <b>Small/light Meal</b>                |              |            |             |            |             |                |                 |                |
| Grilled Tomato                         | 80           | 13.6       | 0.48        | 8          | 0.24        | 0              | 11.2            | 24             |





|  | Quantity (g) | Kcal        | Protein (g) | Ca (mg)     | Fe (mg)     | Vitamin D (µg) | Folic acid (µg) | Vitamin C (mg) |
|--|--------------|-------------|-------------|-------------|-------------|----------------|-----------------|----------------|
| Scrambled egg (full fat milk and butter added) | 120+15+7     | 218         | 16          | 77          | 2.0         | 3.8            | 57              | 0.3            |
| White bread                                    | 76           | 166         | 6.0         | 134         | 1.2         | 0              | 19              | 0              |
| Butter   | 14           | 104         | 0.08        | 2.5         | 0.15        | 0.13           | 0               | 0              |
| Marmalade/jam                                  | 10           | 26          | 0.06        | 1.2         | 0.02        | 0              | 0               | 0              |
| Full fat yogurt                                | 125          | 136         | 5           | 153         | 0.15        | 0.13           | 12.5            | 1.3            |
| Apple  | 120          | 61          | 0.72        | 6           | 0.12        | 0              | 0               | 7.2            |
|  |              | <b>724</b>  | <b>28</b>   | <b>382</b>  | <b>3.88</b> | <b>4.06</b>    | <b>99.7</b>     | <b>32.8</b>    |
| <b>Snacks x 2</b>                              |              | 300         | 4           |             |             |                |                 |                |
| <b>Milk</b>                                    |              |             |             |             |             |                |                 |                |
| Full fat milk with meals (2 glasses)           | 300          | 190         | 10.2        | 360         | 0.06        | 0              | 24              | 6              |
| Full fat milk with tea/coffee                  | 100          | 63          | 3.4         | 120         | 0.02        | 0              | 8               | 2              |
| <b>Meal Plan Total</b>                         |              | <b>2539</b> | <b>100</b>  | <b>1352</b> | <b>11.5</b> | <b>6.6</b>     | <b>322</b>      | <b>130</b>     |

Nutritional Analysis: McCance and Widdowson's The Composition of Foods Seventh Summary Edition.

\*Nutritional analysis from product labels.

The nutrition standard (energy and protein) for snacks is used in meal plan analysis. See section 3.3 for snack suggestions.



## Appendix 2: Nutritional Analysis for Sample Healthy Eating Diet Meal Plan

|                                 | Quantity | Kcal       | Protein (g) | Fat (g)     | SFA (g)    | Sugars (g)  | Na (mg)    | Ca (mg)    | Fe (mg)     | Vit D (µg) | Folic acid (µg) | Vit C (mg) | Fibre (g)* |
|---------------------------------|----------|------------|-------------|-------------|------------|-------------|------------|------------|-------------|------------|-----------------|------------|------------|
| <b>Breakfast</b>                |          |            |             |             |            |             |            |            |             |            |                 |            |            |
| Weetabix                        | 40       | 133        | 4.2         | 0.76        | 0.1        | 1.56        | 104        | 12         | 4.8         | 0          | 68              | 0          | 2.9        |
| Low fat milk                    | 150      | 69         | 5.3         | 2.6         | 1.6        | 7.0         | 65         | 180        | 0.03        | 0          | 13.5            | 3          | 0          |
| Wholemeal bread                 | 76       | 165        | 7           | 1.9         | 0.3        | 2.1         | 304        | 81         | 1.82        | 0          | 30              | 0          | 3.8        |
| Spread                          | 20       | 68         | 0           | 7.4         | 1.7        | 0.26        | 96         | 0.8        | 0           | 1.7        | 0               | 0          | 0          |
| Orange Juice                    | 150      | 51         | 0.9         | 0           | 0          | 12.8        | 25         | 18         | 0.15        | 0          | 48              | 47         | 0.3        |
|                                 |          | <b>486</b> | <b>17.4</b> | <b>12.7</b> | <b>3.7</b> | <b>23.7</b> | <b>594</b> | <b>292</b> | <b>6.8</b>  | <b>1.7</b> | <b>160</b>      | <b>50</b>  | <b>7.0</b> |
| <b>Main/large meal</b>          |          |            |             |             |            |             |            |            |             |            |                 |            |            |
| Vegetable Soup                  | 100      | 55         | 1.0         | 4.2         | 2.4        | 1.8         | 315**      | 14         | 0.33        | 0          | 6               | 2          | 0.93       |
| Roast Chicken                   | 100      | 153        | 30.2        | 3.6         | 1.0        | 0           | 60         | 7          | 0.4         | 0.3        | 10              | 0          | 0          |
| Carrots                         | 80       | 27         | 0.4         | 0.32        | 0.08       | 5.76        | 22         | 21         | 0.16        | 0          | 6.4             | 2.4        | 1.68       |
| Mashed Potatoes                 | 200      | 148        | 3.6         | 0.2         | 0          | 1.6         | 2          | 12         | 0.6         | 0          | 36              | 18         | 2.0        |
| Gravy                           | 20       | 6.2        | 0.09        | 0.24        | 0.13       | 0.08        | 77         | 0.4        | 0           | 0          | 0               | 0          | 0          |
| Spread (on the side)            | 20       | 68         | 0           | 7.4         | 1.7        | 0.26        | 96         | 0.8        | 0           | 1.7        | 0               | 0          | 0          |
| Fruit cocktail in natural juice | 113      | 51         | 0.45        | 0           | 0          | 13.2        | 3.4        | 10         | 0.45        | 0          | 6.8             | 16         | 1.1        |
| Low fat and low sugar yogurt    | 125      | 74         | 6           | 0.25        | 0.1        | 11.8        | 78         | 175        | 0.13        | 0          | 10              | 1.3        | 0.5***     |
|                                 |          | <b>582</b> | <b>42</b>   | <b>16</b>   | <b>5.4</b> | <b>34.5</b> | <b>653</b> | <b>240</b> | <b>2.07</b> | <b>2</b>   | <b>75.2</b>     | <b>40</b>  | <b>6.2</b> |
| <b>Small/light meal</b>         |          |            |             |             |            |             |            |            |             |            |                 |            |            |
| Roast Beef                      | 50       | 87.5       | 16.1        | 2.55        | 1.0        | 0           | 33         | 2.5        | 1.25        | 0.2        | 7               | 0          | 0          |
| Coleslaw                        | 50       | 87         | 0.4         | 8.2         | 0.8        | 3.0         | 148        | 18         | 0.15        | 0          | 28              | 0.5        | 0.85       |
| Lettuce                         | 30       | 3.3        | 0.36        | 0           | 0          | 0.42        | 2.7        | 7.2        | 0           | 0          | 18              | 0          | 0.39       |
| Tomato                          | 40       | 5.6        | 0.2         | 0           | 0          | 1.2         | 0.8        | 3.2        | 0           | 0          | 9.2             | 9          | 0.4        |
| Cucumber                        | 10       | 1.4        | 0           | 0           | 0          | 0.1         | 0.4        | 2.1        | 0           | 0          | 1.4             | 0          | 5.32       |



|                                     | Quantity | Kcal         | Protein (g) | Fat (g)   | SFA (g)     | Sugars (g) | Na (mg)     | Ca (mg)     | Fe (mg)     | Vit D (µg) | Folic acid (µg) | Vit C (mg) | Fibre (g)* |
|-------------------------------------|----------|--------------|-------------|-----------|-------------|------------|-------------|-------------|-------------|------------|-----------------|------------|------------|
| Wholemeal Bread                     | 76       | 165          | 7           | 1.9       | 0.3         | 2.1        | 304         | 81          | 1.82        | 0          | 30              | 0          | 3.8        |
| Spread                              | 20       | 68           | 0           | 7.4       | 1.7         | 0.26       | 96          | 0.8         | 0           | 1.7        | 0               | 0          | 0          |
| Banana                              | 100      | 81           | 1.2         | 0.1       | 0           | 18.1       | 0           | 6           | 0.3         | 0          | 14              | 9          | 0.8        |
| Low fat low sugar yogurt            | 125      | 74           | 6           | 0.25      | 0.1         | 11.8       | 78          | 175         | 0.13        | 0          | 10              | 1.3        | 0.5        |
|                                     |          | <b>573</b>   | <b>31</b>   | <b>20</b> | <b>3.9</b>  | <b>37</b>  | <b>663</b>  | <b>296</b>  | <b>3.65</b> | <b>1.9</b> | <b>118</b>      | <b>20</b>  | <b>6.8</b> |
| <b>Snacks x 2</b>                   |          | <b>300</b>   | <b>4</b>    |           |             |            |             |             |             |            |                 |            |            |
| <b>Milk</b>                         |          |              |             |           |             |            |             |             |             |            |                 |            |            |
| Low fat milk with meals (2 glasses) | 300      | 138          | 10.6        | 5.2       | 3.2         | 14.0       | 130         | 360         | 0.06        | 0          | 27              | 6          | 0          |
| Low fat milk with tea/ coffee       | 100      | 46           | 3.5         | 1.7       | 1.0         | 4.7        | 43          | 120         | 0.02        | 0          | 9               | 2          | 0          |
| <b>Meal Plan Total</b>              |          | <b>2,125</b> | <b>109</b>  | <b>56</b> | <b>17.2</b> | <b>114</b> | <b>2083</b> | <b>1308</b> | <b>12.6</b> | <b>5.6</b> | <b>389</b>      | <b>118</b> | <b>20</b>  |

Nutritional Analysis: McCance and Widdowson's The Composition of Foods Seventh Summary Edition.

\*Fibre (g) = Different methods give different estimates of the total fibre content of food. Values presented above are for total non starch polysaccharides (NSP).

AOAC Fibre (g) = 27g.

\*\*Na content of soup could be reduced by using a lower Na containing salt stock cube.

\*\*\*Nutrient data from product labels and therefore are for total dietary fibre (AOAC). AOAC determinations include resistant starch and lignin in addition to NSP in the estimation of total fibre content.

The nutrition standard (energy and protein) for snacks is used in meal plan analysis. See section 4.2 for snack suggestions.



## Appendix 3: Nutritional Analysis for Sample Energy Dense Diet Meal Plan

|   | Quantity (g) | Kcal       | Protein (g) |
|---|--------------|------------|-------------|
| <b>Breakfast</b>                          |              |            |             |
| Porridge (rolled oats)                    | 15           | 57         | 1.6         |
| High protein milk* for porridge           | 150          | 74         | 7.7         |
| Boiled egg                                | 50           | 71         | 7.7         |
| White bread                               | 36           | 83         | 3.0         |
| Butter                                    | 7            | 52         | 0.04        |
| Jam                                       | 10           | 26         | 0.06        |
| Orange juice                              | 150          | 51         | 0.9         |
|   |              | <b>414</b> | <b>21</b>   |
| <b>Midday meal</b>                        |              |            |             |
| Beef mince stewed                         | 60           | 82         | 15          |
| Fried onions                              | 40           | 38         | 0.48        |
| Gravy                                     | 45           | 14         | 0.14        |
| Carrots                                   | 40           | 14         | 0.2         |
| Potatoes<br>(mashed with milk and butter) | 100+10+4     | 107        | 2.2         |
| Butter on the side                        | 7            | 52         | 0.04        |
| Fortified Dessert**                       |              | 300        | 5           |
|   |              | <b>607</b> | <b>23</b>   |
| <b>Evening meal</b>                       |              |            |             |
| Baked beans                               | 40           | 32.4       | 2           |
| Baked salmon fishcake                     | 100          | 245        | 11.4        |
| White bread                               | 36           | 83         | 3.0         |
| Butter                                    | 7            | 52         | 0.04        |
| Marmalade/jam                             | 10           | 26         | 0.06        |
| Dessert                                   |              |            |             |
| Apple tart*                               | 130          | 271        | 3.2         |
| Custard                                   | 80           | 78         | 2.2         |
|   |              | <b>787</b> | <b>22</b>   |
| <b>Snacks x 2</b>                         |              | 300        | 4           |



|   | Quantity (g) | Kcal        | Protein (g) |
|---|--------------|-------------|-------------|
| <b>Milk</b>                                 |              |             |             |
| High protein milk with meals<br>(2 glasses) | 300          | 148         | 15.4        |
| High protein milk with tea/coffee           | 100          | 49          | 5.1         |
| <b>Meal Plan Total</b>                      |              | <b>2305</b> | <b>90.5</b> |

Nutritional Analysis: McCance and Widdowson’s The Composition of Foods Seventh Summary Edition. \*Nutritional analysis from product labels.

\*\*For example fortified mousse or milk pudding.

The nutrition standard (energy and protein) for snacks is used in meal plan analysis. See section 3.3 for snack suggestions.

## Appendix 4: Nutritional Analysis for Sample Low Fibre Diet Meal Plan

|  | Quantity (g) | Kcal       | Protein (g) | Fibre (g)   |
|--|--------------|------------|-------------|-------------|
| <b>Breakfast</b>                               |              |            |             |             |
| Rice Krispies                                  | 30           | 112        | 1.7         | 0.27        |
| Full fat milk with cereal                      | 150          | 95         | 5.1         | 0           |
| White bread                                    | 76           | 166        | 6.0         | 1.44        |
| Butter   | 14           | 104        | 0.08        | 0           |
| Jam (no seeds)                                 | 10           | 26         | 0.06        | 0.12        |
| Orange juice                                   | 150          | 51         | 0.9         | 0.3         |
|  |              | <b>554</b> | <b>13.8</b> | <b>2.13</b> |
| <b>Main/large Meal</b>                         |              |            |             |             |
| Roast Chicken                                  | 100          | 153        | 30.2        | 0           |
| Gravy  | 45           | 14         | 0.14        | 0.01        |
| Carrots  | 80           | 27         | 0.4         | 1.7         |
| Potatoes (mashed with milk and butter)         | 200+20+7     | 213        | 4.4         | 2.0         |
| Butter on the side                             | 7            | 52         | 0.04        | 0           |
| Ice cream                                      | 55           | 93         | 1.7         | 0           |
| Jelly  | 100          | 61         | 1.2         | 0           |
|  |              | <b>613</b> | <b>38</b>   | <b>3.71</b> |
| <b>Small/light Meal</b>                        |              |            |             |             |
| Baked Potato Waffle*                           | 58           | 106        | 1.4         | 1           |
| Scrambled egg (full fat milk and butter added) | 120+15+7     | 218        | 16          | 0           |
| White bread                                    | 76           | 166        | 6.0         | 1.44        |
| Butter   | 14           | 104        | 0.08        | 0           |
| Jam  | 10           | 26         | 0.06        | 0.12*       |
| Smooth Yogurt                                  | 125          | 136        | 5           | 0.1         |
|  |              | <b>732</b> | <b>28.5</b> | <b>2.66</b> |
| <b>Snacks x 2</b>                              |              | 300        | 4           |             |
| <b>Milk</b>                                    |              |            |             |             |

|   | Quantity (g) | Kcal        | Protein (g) | Fibre (g)    |
|---|--------------|-------------|-------------|--------------|
| Full fat milk with meals<br>(2 glasses) | 300          | 190         | 10.2        | 0            |
| Full fat milk with tea/coffee           | 100          | 63          | 3.4         | 0            |
| <b>Meal Plan Total</b>                  |              | <b>2452</b> | <b>98</b>   | <b>8.5**</b> |

Nutritional Analysis: McCance and Widdowson’s The Composition of Foods Seventh Summary Edition.

\*Nutritional analysis from product labels.

\*\*Fibre (g) = Different methods give different estimates of the total fibre content of food. Values presented above are for total non starch polysaccharides (NSP).

The nutrition standard (energy and protein) for snacks is used in meal plan analysis.

Note snacks must contain minimal fibre, see section 4.7 for snack suggestions.

## Appendix 5: Nutritional Analysis for Sample Renal Diet Meal Plan (90g protein)

|                           | Quantity (g) | Kcal       | Protein (g) | Na (mg)    | K (mg)      | Phosphate (mg) |
|---------------------------|--------------|------------|-------------|------------|-------------|----------------|
| <b>Breakfast</b>          |              |            |             |            |             |                |
| Weetabix                  | 40           | 133        | 4.2         | 104        | 159         | 104            |
| Full fat milk with cereal | 100          | 63         | 3.4         | 42         | 157         | 96             |
| White bread               | 76           | 166        | 6.0         | 304        | 104         | 72             |
| Butter                    | 14           | 104        | 0.08        | 102        | 3.8         | 3.22           |
| Jam                       | 20           | 52         | 0.12        | 5.8        | 8.6         | 2              |
| Orange (small)            | 120          | 43.2       | 0.96        | 1.2        | 146         | 19.2           |
|                           |              | <b>561</b> | <b>14.8</b> | <b>559</b> | <b>578</b>  | <b>296</b>     |
| <b>Main/large Meal</b>    |              |            |             |            |             |                |
| Roast Chicken             | 90           | 138        | 27          | 54         | 324         | 225            |
| Gravy                     | 45           | 14         | 0.14        | 173        | 5           | 2.3            |
| Boiled Carrots            | 100          | 22         | 0.6         | 23         | 160         | 15             |
| Boiled Parsnips           | 50           | 33         | 0.8         | 2          | 175         | 38             |
| Double Boiled Potatoes    | 200          | 148        | 3.6         | 2          | 183         | 62             |
| Butter on the side        | 7            | 52         | 0.04        | 51.1       | 1.9         | 1.61           |
| Milk pudding              | 110          | 159.5      | 4.62        | 69.3       | 192.5       | 124.3          |
|                           |              | <b>566</b> | <b>37</b>   | <b>374</b> | <b>1041</b> | <b>468</b>     |
| <b>Small/light Meal</b>   |              |            |             |            |             |                |
| Boiled eggs               | 100          | 143        | 14.1        | 150        | 141         | 205            |
| White bread               | 76           | 166        | 6.0         | 304        | 104         | 72             |
| Butter*                   | 14           | 104        | 0.08        | 102        | 3.8         | 3.22           |
| Low fat Mayonnaise        | 30           | 86.4       | 0.3         | 39.3       | 2.1         | 3              |
| Apple                     | 120          | 61         | 0.7         | 0          | 120         | 8.4            |
|                           |              | 560        | 21          | 595        | 371         | 292            |
| <b>Snacks x 2</b>         |              |            |             |            |             |                |
| Iced Bun                  | 65           | 209        | 3.9         | 148        | 85          | 62.4           |
| Beef Sandwich             |              |            |             |            |             |                |
| 1 slice of white bread    | 36           | 83         | 3.0         | 152        | 52          | 36             |
| Butter                    | 7            | 52         | 0.04        | 51.1       | 1.9         | 1.6            |
| Roast Beef                | 25           | 44         | 8           | 16.5       | 98          | 57             |



|                        | Quantity (g) | Kcal        | Protein (g) | Na (mg)     | K (mg)      | Phosphate (mg) |
|------------------------|--------------|-------------|-------------|-------------|-------------|----------------|
| <b>Milk</b>            |              |             |             |             |             |                |
| Full fat milk with Tea | 100          | 63          | 3.4         | 42          | 157         | 96             |
| <b>Meal Plan Total</b> |              | <b>2138</b> | <b>91</b>   | <b>1938</b> | <b>2384</b> | <b>1309</b>    |

Nutritional Analysis: McCance and Widdowson's The Composition of Foods Seventh Summary Edition.

Phosphate/protein ratio = 14.4.



## Appendix 6: Nutritional Analysis for Sample Renal Diet Meal Plan (70g protein)

|                           | Quantity (g) | kcal       | Protein (g) | Na (mg)    | K (mg)      | Phosphate (mg) |
|---------------------------|--------------|------------|-------------|------------|-------------|----------------|
| <b>Breakfast</b>          |              |            |             |            |             |                |
| Cornflakes                | 45           | 169        | 3.1         | 202        | 40          | 21             |
| Full fat milk with cereal | 100          | 63         | 3.4         | 42         | 157         | 96             |
| White bread               | 76           | 166        | 6.0         | 304        | 104         | 72             |
| Butter*                   | 14           | 104        | 0.08        | 102        | 3.8         | 3.22           |
| Jam                       | 20           | 52         | 0.12        | 5.8        | 8.6         | 2              |
| Orange (small)            | 120          | 43.2       | 0.96        | 1.2        | 146         | 19.2           |
|                           |              | <b>597</b> | <b>14</b>   | <b>657</b> | <b>459</b>  | <b>213</b>     |
| <b>Main/large Meal</b>    |              |            |             |            |             |                |
| Baked Salmon              | 100          | 232        | 25.2        | 49         | 412         | 262            |
| Gravy                     | 45           | 14         | 0.14        | 173        | 5           | 2.3            |
| Boiled Broccoli           | 100          | 28         | 3.3         | 6          | 212         | 59             |
| Double Boiled Potatoes    | 200          | 148        | 3.6         | 2          | 183         | 62             |
| Butter on the side        | 7            | 52         | 0.04        | 51.1       | 1.9         | 1.61           |
| Full fat yogurt           | 110          | 136        | 5           | 72.5       | 213         | 120            |
|                           |              | <b>610</b> | <b>37.3</b> | <b>354</b> | <b>1027</b> | <b>507</b>     |
| <b>Small/light Meal</b>   |              |            |             |            |             |                |
| Roast Beef                | 50           | 70         | 12.8        | 26         | 156         | 92             |
| Coleslaw                  | 50           | 87         | 0.4         | 148        | 78          | 11             |
| Sliced Tomato             | 40           | 5.6        | 0.2         | 0.8        | 89          | 0.08           |
| White bread               | 76           | 166        | 6.0         | 304        | 104         | 72             |
| Butter                    | 14           | 104        | 0.08        | 102        | 3.8         | 3.22           |
| Pear                      | 150          | 65         | 0.45        | 1.5        | 158         | 14             |
|                           |              | <b>498</b> | <b>20</b>   | <b>582</b> | <b>588</b>  | <b>192</b>     |
| <b>Snacks x 2</b>         |              |            |             |            |             |                |
| Iced Bun                  | 65           | 209        | 3.9         | 148        | 85          | 62.4           |
| 3 gingernut biscuits      | 30           | 133        | 1.44        | 129        | 46          | 21             |
| <b>Milk</b>               |              |            |             |            |             |                |



|                        | Quantity (g) | kcal        | Protein (g) | Na (mg)     | K (mg)      | Phosphate (mg) |
|------------------------|--------------|-------------|-------------|-------------|-------------|----------------|
| Full fat milk with Tea | 100          | 63          | 3.4         | 42          | 157         | 96             |
| <b>Meal Plan Total</b> |              | <b>2110</b> | <b>80</b>   | <b>1912</b> | <b>2362</b> | <b>1091</b>    |

Nutritional Analysis: McCance and Widdowson's The Composition of Foods Seventh Summary Edition.

Phosphate/protein ratio = 13.6.

## Appendix 7: Sample Menu Assessment Checklist

### Regular Hospital Diet (can be adapted for other hospital diets)

| 1. | Meals, snacks and beverages (drinks)  | Yes/No/N/a | Comments |
|----|---|------------|----------|
| a. | Are 3 meals and 2 snacks provided daily?  |            |          |
| b. | Is there a choice of meals at each meal time?   |            |          |
| c. | Are all foods to avoid excluded?  |            |          |
| d. | Is a minimum of 8 cups of fluid provided daily?   |            |          |
| e. | Are beverages (drinks) provided with and between meals?   |            |          |
| 2. | Vegetables, salad and fruit   |            |          |
| a. | Is the total food offering including all meals and snacks capable of providing 5 portions of vegetables, salad and fruit throughout the day?                  |            |          |
| b. | Is the recommended portion size provided?   |            |          |
| c. | Is there a variety of vegetables, salad and fruit used throughout the week?   |            |          |
| d. | Is the cooking method used minimising the vitamin and mineral losses?   |            |          |
| e. | Is a glass of fruit juice provided every morning?   |            |          |
| 3. | Cereals and Breads, potatoes, pasta and rice  |            |          |
| a. | Is the total food offering including all meals and snacks capable of providing 5 portions of cereals and breads, potatoes, pasta and rice throughout the day? |            |          |
| b. | Is the recommended portion size provided?   |            |          |
| c. | Is there a choice of white and wholemeal bread at meal times?   |            |          |
| d. | Is there a choice of higher and lower fibre containing cereals at breakfast?  |            |          |
| e. | Is there a variety of potato types, rice and pasta provided throughout the week?  |            |          |
| 4. | Milk, yogurt and cheese   |            |          |
| a. | Is the total food offering including all meals and snacks capable of providing 3 portions of milk, yogurt and cheese throughout the day?                      |            |          |
| b. | Is the recommended portion size provided?   |            |          |
| c. | Are full fat dairy products provided?   |            |          |
| d. | Is milk provided with midday and evening meal?  |            |          |

| 5. | Meat, poultry, fish, eggs and beans  | Yes/No/N/a | Comments |
|----|--|------------|----------|
| a. | Is the total food offering including all meals and snacks capable of providing 2 portions of meat, poultry, fish, eggs and beans throughout the day? |            |          |
| b. | Is the recommended portion size provided?  |            |          |
| c. | Is there a variety of meat, poultry, fish, and egg types provided throughout the week?   |            |          |
| d. | Is the menu capable of providing fish twice weekly including oily fish once a week?  |            |          |
| e. | Are pulses and lentils provided where possible?  |            |          |
| 6. | Foods high in fat, salt and sugar  |            |          |
| a. | Is butter or full fat poly/monounsaturated spread available with all meals?  |            |          |
| b. | Is sugar provided as required?   |            |          |
| c. | Are salt sachets provided?   |            |          |
| d. | Is jam, marmalade available at breakfast and small meal service?   |            |          |
| d. | Are condiments available to complement meals e.g. parsley sauce, mint sauce, gravy, red sauce, brown sauce, mayonnaise, salad cream?                 |            |          |





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