CITY HOSPITALS SUNDERLAND NHS FOUNDATION TRUST

HEALTH AND WELLBEING SCRUTINY COMMITTEE

NUTRITION AND HYDRATION OF PATIENTS

10 NOVEMBER 2010

BACKGROUND

City Hospitals Sunderland was established as an NHS Trust in April 1994 and became an NHS Foundation Trust in July 2004.

The Trust provides a wide range of hospital services to a local community of around 350,000 residents (including north Easington) along with an increasing range of more specialised services provided to patients outside this area, in some cases to a population as great at 860,000. The Trust operates from:

- Sunderland Royal Hospital
- Sunderland Eye Infirmary
- The Childrens Centre, Durham Road

There are around 945 acute hospital beds, the vast majority of which are all on the Sunderland Royal Hospital site with only 22 beds at Sunderland Eye Infirmary. The main hospital kitchen is also on the Sunderland Royal Hospital site.

The Trust employs just under 5000 staff and during 2009/10 the number of inpatients treated was 59,565 and 53,246 day cases.

INTRODUCTION

Prevention of Malnutrition at City Hospitals Sunderland

The prevention of malnutrition is a key priority for the Trust and staff from all relevant areas are working together to minimise the prevalence of malnutrition within our hospitals.

What is malnutrition?

Malnutrition is a state of nutrition in which deficiency, excess of imbalance of energy, protein and other nutrients causes measurable adverse effects on tissue/body form and function and clinical outcomes.

Malnutrition is usually associated with disease and by its very nature can be both a cause and a consequence of disease. It affects people of all ages, but those most at risk include individuals with acute disease or chronic long term

conditions. Older people are particularly vulnerable as they often suffer from multiple clinical conditions those with dementia being particularly at risk.
The aim of this paper is to identify the systems and processes that are in place within the Trust to ensure that patients are receiving appropriate and timely nutrition and hydration whilst they are a patient in hospital.

Catering Services

The main principles of the patient catering service are to:

- Recognise that it is not a support service, but an integral part of the patients treatment;
- Ensure that the process is everyone's responsibility and requires multi disciplinary involvement;
- Understand the patients needs;
- Ensure the availability of a full menu and information at all times;
- Recognise that this is a priority services; and
- Continually review services.

In 1992 the catering services were reviewed which identified the following key areas:

- Poor menu availability and complicated to use;
- Patients were required to make a menu choice more than 24 hours in advance;
- Fragmented service from food production to patients;
- Loss of temperature through hot food distribution as well as cold meals arriving warm;
- Time consuming and labour intense meal ordering process;
- Meal ordering process rarely in line with patients movement;
- High wastage – 30% production and 30% plate; and
- Food hygiene safety standards compromised.

As a consequence of the review a number of catering systems were analysed:

- Cook chill
- Cook freeze
- Cook service (traditional)
- Boil in the bag
- Chilled meal assembly

The Trusts preferred option was to introduce a chilled meal assembly production method which would:

- Focus on the ward service and not food production;
- Provide significant quality, hygiene, cost and space benefits;
- Reduce revenue costs from labour and overheads to food products; and
- Give improved information for patients.

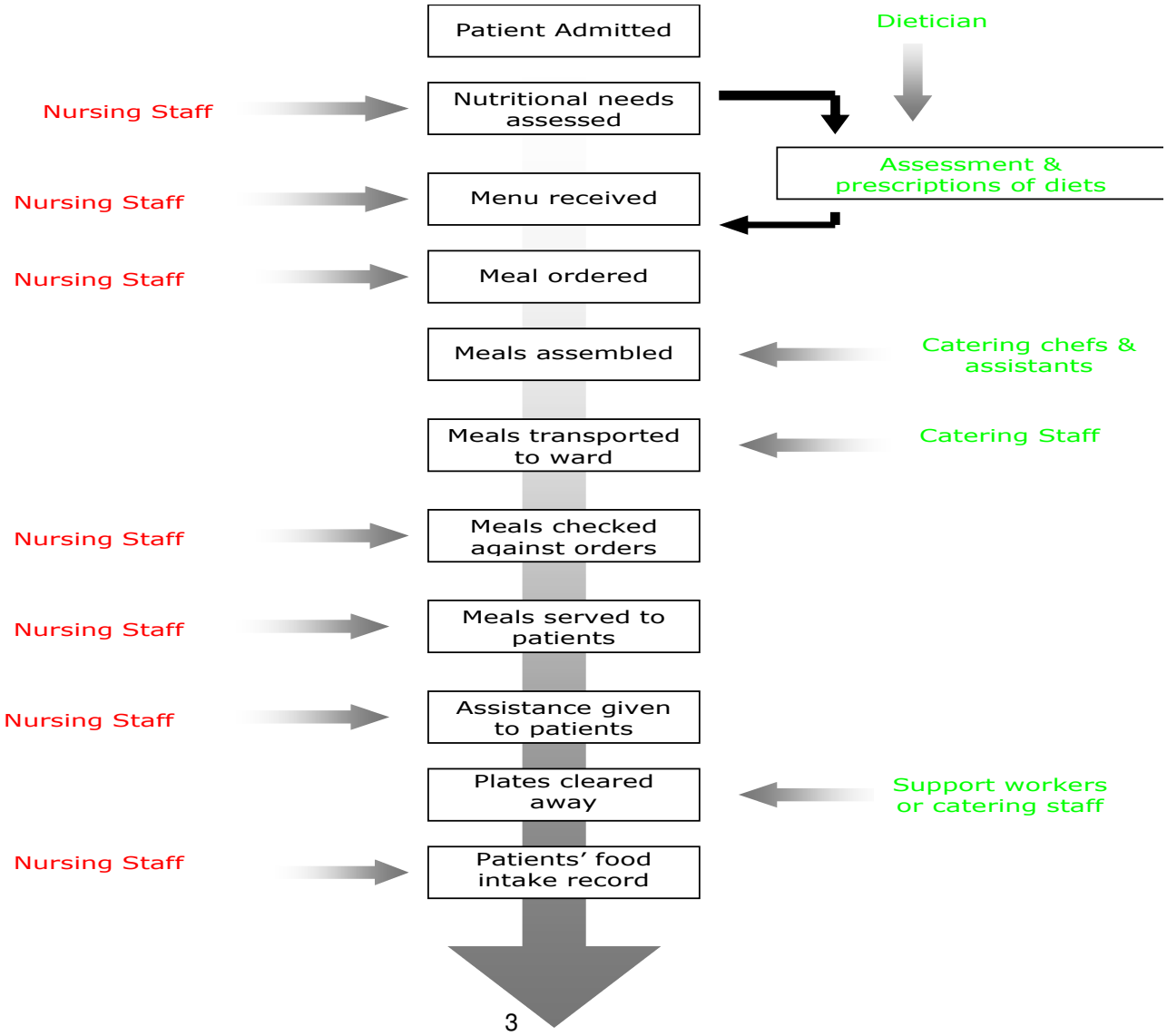
Chilled Meal Assembly

The chilled meal assembly process means that food products are purchased directly from companies either frozen/chilled in hygienically sealed units.

As the products arrive into the Trust they are stored and distributed chilled under controlled conditions. The food is delivered chilled to ward zonal kitchens by catering staff where it is then regulated and set up for service by catering staff.

The main advantages of the system are:

- Patients choose at the point of service and not 24 hours in advance;
- Food is hot and fresh as it is prepared near to point of service;
- Improved presentation due to plate presentation at the point of service;
- Reduced wastage of resources (production and unused meals);
- No requirement for food production equipment;
- Reduced risk in food production process;
- Safe and modern frozen/chilled food storage facilities (year on year clean bill of health from environmental health inspections); and
- Temperature controlled from CHS receipt to delivery to ward.



Ward hostesses will deliver the food trolley regulated and set up for service to the ward. It is then the responsibility of nursing/ward staff to take the meal trolley and to serve meal to patients.

Further details of the specification of services for catering services are attached at Appendix 1.

An example of patient feeding costs are attached at Appendix 2 and also an example of a patient satisfaction, costs and wastage report at Appendix 2a.

These reports which are shared with wards and departments highlight:

- Patient meals ordered;
- Number of patients on each ward;
- Patient meal cost; and
- Patient satisfaction survey results.

Protected Meal Times

In order to ensure that meal times become an integral part of treatment, protected meal times have been introduced within the Trust and a copy of the procedure is attached at Appendix 3.

All patients have a personal bedside menu which rotates weekly. A copy is attached at Appendix 4. The menu offers the following diet options:

- Suitable for diabetics
- Healthy choice
- Chefs choice
- Vegetarian society approved
- Halal
- Kosher

The following standards of food provision are al contained within the menu:

- Fresh fruit and vegetables available daily as choices;
- Wholemeal bread and four varieties of high fibre cereals to be offered and breakfast time;
- Wholemeal or white bread sandwiches to be available at lunch/evening meal;
- A choice of low fat spread, polyunsaturated margarine or butter and yoghurts to be offered low in fat;
- Milk puddings made with skimmed milk and the milk available on the ward is also semi-skimmed;
- Low calorie sweeteners are available as an alternative to sugar; and
- Soups to be low in fat.

DIETETIC SERVICE

What is a Dietitian?

Registered Dietitians are the only qualified health professionals that assess, diagnose and treat diet and nutrition problems at an individual and wider public health level. Dietitians use the most up to date public health and scientific research on food, health and disease, which they translate into practical guidance to enable people to make appropriate lifestyle and food choices.

Dietitians are educated to degree level and are statutorily regulated and governed by an ethical code to ensure they always work to the highest standard. The title Dietitian can only be used by those appropriately qualified professionals who have registered with the Health Professions Council (HPC).

Further information can be found by visiting the British Dietetic Association (BDA) website at www.britishdieteticassociation.co.uk.

The Nutrition and Dietetic Service

The service is managed as one department covering both community and hospital settings, facilitating a seamless transition of patient care between primary and secondary care. The team includes 24 Dietitians, 6 Dietetic Assistants and 5 clerical support staff and is based at Sunderland Royal Hospital.

In July 2010, a nutrition specialist nurse was appointed to facilitate a nutrition support team for patients requiring intensive nutrition support. The team includes a consultant gastroenterologist, two senior specialist dietitians, a clinical pharmacist and the nutrition specialist nurse (terms of reference are attached at Appendix 5).

The aim of the Nutrition and Dietetic service is to offer effective dietetic treatment for people with nutrition related diseases.

Hospital Dietitians

The Dietitians in the hospital are able to provide support and advice for all types of patients. The main areas of dietetic intervention include the provision of:

- Nutrition support to those patients who are unable to meet their nutritional requirements; and
- Therapeutic diets to those people who have conditions that benefit from special diets. Eating more of certain foods or avoiding others may help to control symptoms.

The Dietitians work closely with the catering team to ensure that appropriate food is provided to all patients requiring dietetic input and are heavily involved in the nutritional planning of hospital menus.

The Referral Process

Dietitians receive referrals from many sources including nursing staff, medical staff and other health care professionals. Patients will be referred for a variety of reasons but for the purpose of this report the focus will be on the role of the Dietitian in promoting adequate nutrition.

Assessment and Treatment Planning

Assessment of all patients should be undertaken by the nursing staff using the Malnutrition Screening Tool (MUST) within 24 hours of admission and at least weekly thereafter. A score of 2 or more triggers a referral to the dietetic service.

Once a referral has been received the Dietitian will attend the ward within 24 working hours. They will liaise with appropriate health care professionals and gather initial information about the patient from medical and nursing records. They will then talk to the patient, if possible, to try to find out more information about their usual eating habits, any loss of appetite prior to admission, social issues, weight loss history etc.

If the patient has been referred regarding poor nutritional intake nursing staff will have been asked to commence a food record chart (Appendix 6). The Dietitian will use this information to assess their approximate calorie intake. The patient's daily calorie requirements will then be calculated by the Dietitian with any deficits made up through the use of additional snacks, nutritional supplementation and in some cases artificial nutrition. Normal food will always be promoted as first line treatment and Dietitians liaise with the catering staff to ensure that patients are provided with appropriate meals and snacks where possible.

If patients are not able to meet their nutritional requirements through food alone then they will be encouraged to try nutritional supplementation, usually in the form of drinks, a variety of types and flavours are available and patients are given the opportunity to taste several varieties to make their preference.

Specialist Nutrition Support

In some cases patients will require more intensive nutrition support through the route of feeding via a tube into the stomach or parenteral nutrition (intravenous artificial nutrition) Dietitians are responsible for calculating nutritional requirements and deciding upon the appropriate feeding regimen for these patients.

Additional Responsibilities

In addition to their clinical workload Dietitians have many other responsibilities to ensure and promote effective patient care. All members of the dietetic team are encouraged to be involved in clinical audit.

Dietitians are also involved in the training of other healthcare professionals, including medical and nursing staff, in the role of nutrition in disease management and the prevention of malnutrition and are active members of all groups which involve nutrition, including; the catering review group, nutrition steering group, nutrition support group, nutrition link group and tissue viability steering group.

NURSING PERSPECTIVE

This paper describes the process that occurs from a nursing perspective to ensure patients are receiving appropriate and timely nutrition and hydration whilst they are in hospital.

On admission to hospital patients are assessed using the Roper, Logan and Tierney Nursing Tool[1]. This assessment tool enables nursing staff to take a holistic view of the patient's care requirements and is based on the activities of daily living we all undertake to maintain optimum health. When a patient is unwell their activities of living may be compromised as a consequence of physiological changes emanating from their illness/disease process.

The activities of daily living consist of:

- Maintaining a safe environment
- Communication
- Breathing
- Eating and Drinking
- Elimination
- Washing and Drinking
- Controlling Temperature
- Mobilisation
- Working and Playing
- Expressing Sexuality
- Sleeping
- Death and Dying

Eating and drinking are essential to our survival as humans, with nutritional status being influenced by general health, chronic disorders, mobility and

[1] Roper, Logan and Tierney (1980)
The Elements of Nursing, Churchill Livingstone.

Roper, Logan and Tierney (2000)
The RLT Model of Nursing: Based on Activities of Living
Elsevier Health Sciences, Edinburgh.

psychological or socio-economic factors as well as age. Activities of daily living are closely related and when illness compromises one activity then this will impact on others. For example if a patient has difficulty with their breathing due to a chest infection they may struggle to eat or drink. Nursing staff therefore play a vital role in working with the multi-disciplinary team to ensure patients receive adequate food, fluids and nutrition whilst they are inpatients.

As part of the assessment patients are asked whether they have any problems with feeding themselves or if they require assistance. If patients are unable to communicate this information will be gathered from a family member or carer. Should the patient be alone with no advocate to provide information the nursing staff will use their professional judgement based on the patient's activities of daily living assessment and diagnosis.

Patients also have a Malnutrition Universal Screening Tool assessment completed on admission, also referred to as the MUST. This is a tool to identify adults who are malnourished; at risk of malnutrition or who are obese It includes management guidelines which can be used to develop an individualised care plan for a particular patient.

The MUST assessments are carried out by a qualified nurse, within 24 hours of admission or at pre admission assessment clinics for those patients attending for elective surgery. The information contained in the tool includes:

- Date of assessment
- Has the patient has had any unplanned weight loss over a period of time
- Have they an existing acute disease
- Details of the patient's weight and height

The information is entered into the computer along with the patients BMI and a score is calculated of between 0-2.

A score of 0 indicates that the patient is well nourished and only requires assessing once per week.

A score of 1 indicates that the patient needs to have a strict record of their intake for three days and if there is no improvement they should be referred to the dietician.

A score of 2 immediately indicates that the patient is suffering from some kind of malnutrition and needs referral to the dietetic service for further advice and management plan.

Information is documented in the nursing assessment and the care planned appropriately according to the patient's choices and needs. This information

is then relayed to the multidisciplinary team, consisting of medical, nursing and Allied Health Professionals[2]

Information is shared with the nursing team to ensure they are aware of the needs of the individual patient. This information is communicated verbally during the handover so that all nursing staff are aware of the individual patient's status; the information is also stored in the electronic patient record for nursing staff to access to assist in the provision of holistic nursing care. This occurs at each shift handover so the new nursing team on duty has an overall picture of the patient's specific nursing requirements, support required and any changes that have occurred during the preceding span of duty.
If a patient does require assistance then this is offered during all meal times. Assistance can take many forms for instance:

- Patient's being assisted to sit in a specific position to enable them to access their meal;
- Food being cut into bite size pieces;
- General encouragement to eat and drink;
- Patient's being assisted to eat their meal by being fed by a relative or member of the nursing team.

Process

If a patients nursing assessment identifies the risk of them becoming dehydrated and/or malnourished, requiring assistance to feed or be prompted to eat, the 'red serviette' system is implemented. This entails the wrapping of cutlery in red serviettes prior to food service and thereby raises staff awareness of the need for assistance. This also ensures that the patient's intake of food and drink is closely assessed, monitored, and then documented on a food chart.

Food charts are available to record the intake patients have consumed in any 24 hour period, this allows the medical, nursing and dietetic staff to assess on a regular basis that the patient is getting the nourishment that they need during their hospital stay (Appendix 6).

Nursing staff are taught how to feed patients either during their training as a student nurse or during the health care assistant development programme either at or shortly after induction. (Copy of HCA programme attached at Appendix 7).

Protected Mealtimes

As identified earlier in the report staff follow the procedure outlined in Appendix 3.

[2] Allied Health Professionals – Physiotherapist; Occupational Therapist; Speech Therapist; Dietitian.

Meal Service

The patient's meals are served at approximately 08:00, 12:00 noon and 17:00.

Breakfast consists of a choice of hot and cold food.

At lunch time the patients are offered soup accompanied by sandwiches, jacket potatoes with various fillings are also available on request.

Dinner consists of a two course hot meal; the staff offer the patient a choice of what they would like to eat.

The Care of the Elderly wards have recently reviewed meal provision and have introduced a two course hot meal at lunch time and sandwiches/soup at tea time. This reflects the mealtime habits of the majority of the local population and is popular with in-patients.

Prior to meals being served patients are requested and prompted to wash their hands prior to eating, and the food is served at their bedside.

The patient's named nurse is responsible for ensuring that she is aware of how much is eaten by the patient at meal times and throughout the day. (This information can be relayed via the health care assistant, house keeper or ward hostess).

Nursing staff serving the meals offer the patient a choice of menu and portion size depending upon their appetite and will be guided by the patients response and the recommendations made by the Dietitian involved in the patients care.

If a patient does not like the food they are offered then alternative choices are available from the catering department. If a patient has not eaten their food then the nursing staff must explore the reasons why and resolve any issues there may be.

Liquid refreshments are offered seven times daily and all patients are supplied with a jug of water and a glass on admission (assuming their condition allows them to drink) and it is refilled twice daily and on request.

Patients who have delirium and dementia require additional support to tempt and reinforce their need to eat.

Two areas have developed luncheon clubs ensuring adequate nutrition is provided in a therapeutic environment with great success. The two clubs which have been set up within the Trust are on the dementia unit (E56) and Care of the Elderly (COTE) ward (E52). Staff and volunteers facilitate these clubs, and they are seen as integral to the patient's rehabilitation by promoting normality as they enable patients to sit at the table with others.

Homely crockery is used and the table is set with a table cloth, which seems more conducive to successful nutrition. Patients are offered alternative meals i.e. salads and during summer are sometimes treated to strawberries and cream.

During this time social activities also take place, when the patients can either watch movies, play games or do some craft work. The lunch club on E52 has been running approximately two years and just recently received the Board of Governors Award at the Trust's Reward and Recognition Celebration in September 2010.

Different patient groups have different nutritional needs, those who are ill or have had surgery (all of our patients fall into one of these categories), the elderly, pregnant women, diabetic patients, children naming just a few. The nursing staff aims to meet the nutritional needs of all of these inpatients following initial assessment.

Patients who have any physical disability or with sensory impairment will be identified through the MUST assessment and nursing staff will provide the necessary assistance.

Up to 45% of patients who have been admitted following a CVA (a stroke) have some degree of dysphagia, the inability to swallow. Dysphagia is associated with poor outcome and can cause dehydration, starvation, weight loss, malnutrition, silent aspiration, chest infections and pneumonia. The nurse's role is to observe and assess using the adult Oral Nutritional Support Guidelines (attached at Appendix 8).

A swallowing assessment is carried out within 24 hours of admission by either a dysphagic trained nurse or by a member of the SALT (Speech and Language Therapy) team. Once assessed the SALT team/nursing staff decide whether our patients require further intervention from the Dietetic team.

Nursing staff are committed to providing excellent nutrition to patients in our hospital and combined with the wider team strive to nourish our patients to aid a more speedy recovery.

MONITORING

A number of mechanisms are in place within the Trust to monitor the processes in place.

Catering Department Questionnaires

The catering department issues as average of 100 questionnaires on a weekly basis and an example of the results are identified below.

Patient Catering Satisfaction Survey Results September – August 2010 i.e. 653 Patients

No	Question	Never (Score 0)	Sometimes (Score 1)	Always (Score 2)
1	Do you have access to the patient menu?	109 (17%)	66 (10%)	478 (73%)
2	Was the menu explained to you by a member of staff?	163 (25%)	89 (14%)	401 (61%)
3	Are you offered a choice of dishes?	148 (23%)	94 (14%)	411 (63%)
4	Do you think the choice is adequate?	13 (23%)	92 (14%)	548 (84%)
5	Are the portion sizes served adequate?	9 (2%)	126 (19%)	518 (79%)
6	Is your food well-presented on your plate?	72 (11%)	116 (17%)	465 (72%)
7	Are your meals hot enough?	8 (2%)	96 (14%)	549 (84%)
8	Was the person who served your food courteous & helpful?	2 (1%)	42 (6%)	609 (93%)
9	Is your crockery clean?	6 (1%)	26 (41%)	621 (95%)
10	Is your cutlery clean?	5 (1%)	32 (5%)	616 (94%)
11	Are you offered salt & pepper & other accompany-			
12	ments?	43 (7%)	123 (19%)	487 (74%)
13	Did you see a dietician (if applicable)?			
14	Did you receive the correct meal (if applicable)?	67 (11%)	34 (5%)	552 (84%)
15	Do you think the menu choice is healthy?	24 (4%)	41 (6%)	588 (90%)
16	Are you happy with the amount of beverages served?	9 (2%)	114 (17%)	533 (81%)
	Are you generally happy with the catering service	25 (4%)	113 (17%)	515 (79%)
17	provided?	8 (2%)	81 (12%)	564 (86%)
	Are you generally happy with the quality of meals	13 (2%)	99 (15%)	541 (83%)
18	served?			
19	Are the dirty crockery and cutlery collected promptly?	8 (2%)	89 (13%)	556 (85%)
	Is your meal served at a suitable time?	3 (1%)	47 (8%)	603 (92%)

The Trust has also introduced a real time feedback system which aims to survey 250 patients each month using hospital volunteers, governors and members of the Local Involvement Steering Group. Three of the fifteen questions asked of patients are specifically about mealtimes:

- Is your food well presented and hot enough?
- Are you offered a good choice of food?
- Did you get enough help from staff to eat your meals?

The results of all questionnaires are fed back to our Patient Environment Action Team (PEAT) and Catering Review Group the Matrons Environmental Meeting and the Patient and Public Involvement Steering Group to ensure that actions are identified and delivered. To date some of the key areas which have been identified include:

- Patient menus not always available;
- Insufficient advice on the catering service available from ward staff;
- Sometimes the food and beverage service is delegated to a junior member of staff; and
- Patients rarely choose with their eyes (point of service).

Key actions which are being developed as a result of feedback include:

- Extend menu availability both at the bedside, entrances to wards and also on the patient TV system;

- Programme of Directors/senior team experiencing patient menu with patients;
- Introduction of a modern beverage facility:
    - New smaller food trolleys to the bedside to further promote "choose with your eyes"; and
    - New beverage trolleys to offer an increased availability.
- Enhancement of quality assurance and monitoring by 'naming and shaming' and regular reporting to the Executive Board;
- Introduction of a more robust plate waste monitoring system to be included as part of patient care records to support the nutritional policy.

CONCLUSION

City Hospitals Sunderland consider the provision of food and drink for patients as an integral part of their treatment plan. The Trust adopts a multi professional approach to ensuring the menus meet the requirements of patients by Dietetic staff, the catering team and nursing staff working together.

As with all aspects of health care the provision of patients food/drink is constantly reviewed to ensure the highest quality of service is being provided. This takes the forum of engaging patients in real time feedback about food choice, service and quality. Regular food tasting sessions are arranged by the catering team where members of the Community Panel are invited to taste and comment on the quality of food provided to patients.

The opportunity to provide detailed information to the Health and Wellbeing Committee about the nutrition of patients in hospitals is welcomed by the Trust. We anticipate that the information provided will enable a dialogue to begin about patient nutrition in City Hospitals Sunderland and look forward to demonstrating and improving the service we provide to patients.

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