

## **INDI RESOURCE: Nutrition in Residential Care Settings: A Guide for Healthcare Professionals.**

**“Good quality nutritious food is crucial to maintaining the health, wellbeing and independence of older people” (Mulvihill, M. and Pyper, S., 2001). Nutrition is increasingly being recognised as a vital component in the care of older people in residential care. Ireland’s Health Information and Quality Authority (HIQA) in 2008, produced the National Quality Standards for Residential Care Settings for Older People, to help improve and to assure quality and safety of residential care. In addition, there are numerous guidelines and policies developed at local level.**

The aim of this resource is to address issues which commonly arise in residential care facilities, such as:

- Malnutrition, Nutrition screening and monitoring.
- Menu development, provision of an adequate diet, food fortification and oral nutritional supplements (ONS).
- Team approach to nutrition provision.
- Training and education needs.

### **What causes poor nutrition in older people?**

Malnutrition arises when a person's dietary intake is not sufficient to meet their nutritional requirements. Reduced nutritional intake can be attributed to factors such as poor dentition, swallowing difficulties, altered taste receptors (change with aging), poor appetite, use of certain medications and constipation. Other factors contributing to malnutrition include malabsorption, an increase in nutritional requirements due to infection or underlying disease and excess losses (vomiting and diarrhoea). There are many other causes that are not related to illness, such as poor nutrition habits and poor nutrition education, social isolation, or an inability to buy or prepare food. The risk of malnutrition is increased by factors such as age, impaired cognition or function.

### **What is malnutrition?**

Disease related malnutrition is a state of nutrient deficiency which produces a measurable change in body function and is associated with worse outcome from illness. To keep a person’s body healthy, a balanced diet is required, i.e. one which provides adequate energy (kcal), nutrients (protein, fat, carbohydrates, vitamins, minerals), and fluids. Having an inadequate diet can in turn lead to malnutrition, which is associated with delayed wound healing, weight loss, increased risk of infection, increased morbidity and mortality, and dehydration.

## How common is disease-related malnutrition in Ireland?

BAPEN Nutrition Screening Week 2010 and 2011 found that 1 in 3 patients admitted to Irish hospitals were found to be at risk of malnutrition. This suggests the vast majority of malnourished patients are living in the community. Disease-related malnutrition affects those with diseases like cancer, COPD, dementia, neurological diseases (e.g. multiple sclerosis, motor neuron disease), and people with conditions that affect digestion/absorption (e.g. cystic fibrosis, Crohn's disease). It is possible to reduce this incidence of malnutrition with the proper nutritional care, but in order to implement this, roles and responsibilities of staff should be clearly identified, education and training needs identified and delivered, and a team approach adopted.

## How do I identify a poorly nourished patient, or a patient who is at risk of malnutrition?

Identifying a patient who is malnourished, or is at risk of malnutrition as early as possible is vital. We may be aware of some of the signs and symptoms of disease related malnutrition such as:

- Poor appetite/disinterest in food reported.
- History of decreased intake/poor appetite, portion sizes changed.
- Altered taste/smell.
- Change in food preferences avoiding food e.g. meat.
- Obviously thin/wasted appearance.

However, the most effective method of identifying disease related malnutrition is to use a nutrition screening tool. Ideally, this should be done when patients are first admitted to a care facility to establish at an early point the patients particular care needs. This also gives information to compare against if their condition changes during their stay. A nutrition screening tool is only effective if the results are linked to a pathway of actions or interventions appropriate for the patients care which can be followed.

## There are so many nutrition screening tools available. How do I know which is best?

The main things to consider when choosing a nutrition screening tool are that it is evidence based, validated, reliable, practical and linked to specified protocols for action, e.g. referral of those screened and identified as 'at risk' to an expert for more detailed assessment, i.e. a dietitian.

### Four main principles of screening tools:

1. What is the condition now? Height and weight allow calculation of current BMI.
  2. Is the condition stable? Assess for recent weight loss.
  3. Will the condition get worse? Check if food intake is not meeting requirements.
  4. \*Will the disease process accelerate nutritional deterioration? In addition to decreased appetite, the disease process may increase nutritional requirements causing nutritional status to worsen more rapidly.
- \* Variable 4 is relevant mainly to acute care facilities (ESPEN 2006).

### **What screening tool is appropriate for community based adults?**

The Malnutrition Universal Screening Tool (MUST) was developed for use in both hospital and community settings. It uses factors such as Body Mass Index (BMI), rate of weight loss and presence of acute disease factors, to detect disease related malnutrition. See [http://www.bapen.org.uk/must\\_tool.html](http://www.bapen.org.uk/must_tool.html) for more information on MUST.

### **What screening tool is appropriate for older people in residential care?**

MUST can also be used in residential care. Another tool that can be used is the Mini Nutritional Assessment (MNA). This was developed for use in older persons. It looks at the overall mental, physical and social health of the individual and therefore, is useful in identifying those at risk of developing malnutrition at an early stage. MNA incorporates two parts. Part (A) is undertaken by nursing staff, and if scoring indicates part (B) is an assessment undertaken by a dietitian. See <http://www.mna-elderly.com> for more information on MNA.

The National Institute for Health and Clinical Excellence (NICE), recommends that all patients should be screened for nutritional risk on admission to a hospital/care facility and should be re-screened regularly, using a validated screening tool. The Health Information Quality Authority (HIQA) in Ireland also recommends that nutrition screening is completed within forty eight hours of all new admissions to care homes.

### **What equipment might I need to use nutrition screening tools?**

To apply the nutrition screening tools like the MUST and MNA, an appropriate and accurate weighing scales and a measuring tape/stadiometer should be readily available. There should be awareness of how to accurately measure weight, height, BMI, and how to estimate weight and height using alternative measures, e.g. ulna length to estimate height and mid upper arm circumference to estimate BMI.

### **I have identified a patient with malnutrition, what should I do next?**

A nutrition screening tool is only effective if the results are linked to a pathway of action. Screening should not be considered in isolation, rather as part of a pathway of care. Nutrition care plans should be implemented for all patients identified as being malnourished, or at risk of malnutrition. Nutrition care plans should include clear treatment goals for the patient. It is also important that nutrition screening is repeated regularly as a patient's clinical condition and risk of nutritional problems can change, requiring the care plan to be adjusted. If your healthcare facility has a service from a dietitian, then contact him/her to determine your course of action. If you do not have such a service, but would like to employ a dietitian on a sessional basis, see the "Find a Dietitian" section of the INDI website.

### **What type of diet is typically recommended for a patient who is identified as malnourished or at risk of malnutrition?**

When a patient is identified as being malnourished, a high calorie diet is normally recommended by the dietitian (usually called high protein high energy diet), and is often used in conjunction with food fortification. A high calorie diet is designed to

provide a person with a regular intake of foods that are high in both calories and protein. This type of diet can help to:

- improve appetite,
- heal wounds,
- maintain or increase weight and promote growth,

This helps optimise a person's nutritional status. Foods commonly contained in a high calorie diet are protein sources, e.g. meat/fish/eggs, full fat dairy products, oils and sugars, and any foods that can be readily fortified.

### **What is Food Fortification, who is it for and how can it be done?**

Enriching a diet using calorie rich foods is commonly referred to as 'food fortification'. Food fortification is a useful method, as it allows an increase of calories without increase of food volume.

If a person is eating smaller amounts than usual due to a small appetite, has recently lost weight unintentionally, or has increased energy requirements, adding extra calories to their daily diet will help maximise their nutritional intake.

Examples of Food Fortification include adding:

- skimmed milk powder to whole milk, drinks, cereals, soups, puddings and sauces;
- extra cream, butter, cheese, cream cheese where appropriate;
- calories in the form of sugar, honey, jams & spreads.

It is imperative that food fortification is tailored to a person's needs, likes and dislikes, and suited to an individual's eating pattern and abilities.

Snacks should be provided after evening tea, at suppertime, or bedtime. Snacks are also useful in between meals, where a 'little and often' approach is required, particularly for small appetites and those with cognitive impairment impacting on regular eating patterns.

Some snack ideas include:

- Yoghurt, fresh fruit and yoghurt.
- Malted drink, hot chocolate, warm fortified milk.
- Piece of cake, malt loaf, fruit cake.
- Scone, butter and jam.
- Cheese and crackers.
- Custard pot, rice pudding pot, chocolate mousse.
- Stewed fruit and custard.
- Sandwich, toast, butter and spread (meat/fish pate, peanut butter).
- Jelly/ fruit jelly/ milk jelly.
- Fruit trifle.
- Teacakes, muffins, mini pancakes.
- Biscuits.

Any food fortification/snack recommendations should be well documented both in nursing notes and at catering level, to ensure continuity of provision.

There should be a good menu cycle in place, ideally a 3-6 week cycle, which should be reviewed six monthly. Menus should provide for modified consistency diets and therapeutic diets with a good choice built in. Feedback mechanisms should be in place to allow for frequent feedback from patients to ensure ongoing improvement.

### **At my place of work, oral nutritional supplements (ONS) are often given to residents who are not eating well. Is this good practice?**

ONS are commonly used as a treatment for malnutrition in the residential care setting. However, they should not be used as a sole treatment and should always be given in combination with dietary advice and advice on food fortification. They should not replace meals. The times when ONS is offered to a patient are important. Offering ONS too near a meal may displace a person's natural eating pattern, due to feeling satiated. Conversely, offering ONS too soon after a meal may result in poor compliance, as the patient may be full from their meal. There are a number of proprietary products (manufactured products used to fortify foods) and ONS available, ranging from conventional sip-feeds to pudding, liquid and powder formulations. Best practice would recommend a full nutritional assessment be carried out by a Dietitian, who can then appropriately advise on ONS use.

### **What do monitoring and audit mean?**

Monitoring and documentation of an individual's nutritional intake allows for change to be measured easily. For example, weight loss in a patient whose weight is checked monthly and documented in a care plan will be more easily identified than a patient with infrequent weight checks, or poor on site documentation. Patterns of weight loss are important. Percentage weight loss should be calculated over a period of time. Regular monitoring and audit should be carried out in all care facilities. Audit criteria might include:

- assessment of the menu content and cycle;
- meal times;
- eating and assistance practices;
- snack provision;
- availability of therapeutic diets, e.g. low fat/sugar;
- catering practices;
- food wastage;
- nutrition screening;
- use of/compliance with ONS.

Regular audits allow staff to benchmark against standards and identify areas of practice that require attention by comparing to best practice guidelines. Training for staff to monitor residents' food intake more closely is paramount.

### **Staff at my place of work have varying amounts of nutritional knowledge – what can I do?**

Training and education is vital to implement nutritional guidelines successfully. Ideally, a programme for all staff, identifying roles and responsibilities in nutrition provision should be developed. Education and training can be an important factor in influencing best practice. Educational programmes should be supported by management, and cover areas such as:

- Nutritional needs of older people, particularly disease specific patients such as a person with dementia.
- Feeding practice, menu planning, therapeutic diets and nutrition screening.

### How do I begin to address nutrition at my healthcare facility?

A team approach, with each team member's roles and responsibilities clearly identified is vital to improving nutrition in residential care. You may want to consider establishing a nutrition team with representation from catering staff, management, nursing, attendants, residents and or family members, allied health professionals (e.g. Dietitian, Speech and Language Therapy).

A sample aim of a nutrition team is to examine menus putting a balanced, adequate 3-week cycle in place, incorporating therapeutic and modified consistency diets, and including resident's likes and dislikes. The latter allows for inclusion of favourite foods, addressing timing of meals, challenges faced at meal times, and the overall dining environment.

Two documents worth referring to when considering menu development are:

- Caroline Walker Trust - Eating well: Supporting Older People and Older People with dementia 2011, and
- UK National Association of Care Catering good practice guide "Menu Planning & Special Diets in Care Homes" 2006.

The latter gives a comprehensive look at catering for special diets, planning nutritionally balanced menus, and also gives examples of menu cycles and a tool to assist in evaluating menu cycles.

### Documents, which may be useful to refer to when considering nutrition and or menu development in your healthcare facility, are listed below:

- Caroline Walker Trust – Eating well: Supporting Older People and Older People with dementia 2011 <http://www.cwt.org.uk>
- Menu Planning and Special Diets in Care Homes, NACC 2006 [www.thenacc.co.uk](http://www.thenacc.co.uk)
- MNA <http://www.mna-elderly.com>
- MUST [http://www.bapen.org.uk/must\\_tool.html](http://www.bapen.org.uk/must_tool.html)
- FSAI – Recommendations for a national food and nutrition policy for older people, 2000  
[http://www.fsai.ie/resources\\_publications.html](http://www.fsai.ie/resources_publications.html)
- National Quality Standards for Residential Care Settings for Older People in Ireland, Health Information and Quality Authority (HIQA) 2008  
<http://www.hiqa.ie/publications.asp>
- ESPEN Guidelines 2006 <http://www.espen.org>
- NICE Guidelines 2006 - Nutritional Support in Adults <http://www.nice.org.uk>
- BAPEN Nutrition Screening Week 2010 and 2011  
<http://www.bapen.org.uk/screening-for-malnutrition/nutrition-screening-week/nsw-reports/nsw11>
- Food and Nutritional Care in Hospitals: Guidelines for Preventing undernutrition in Acute Hospitals. Published by the Department of Health and Children, 2009.