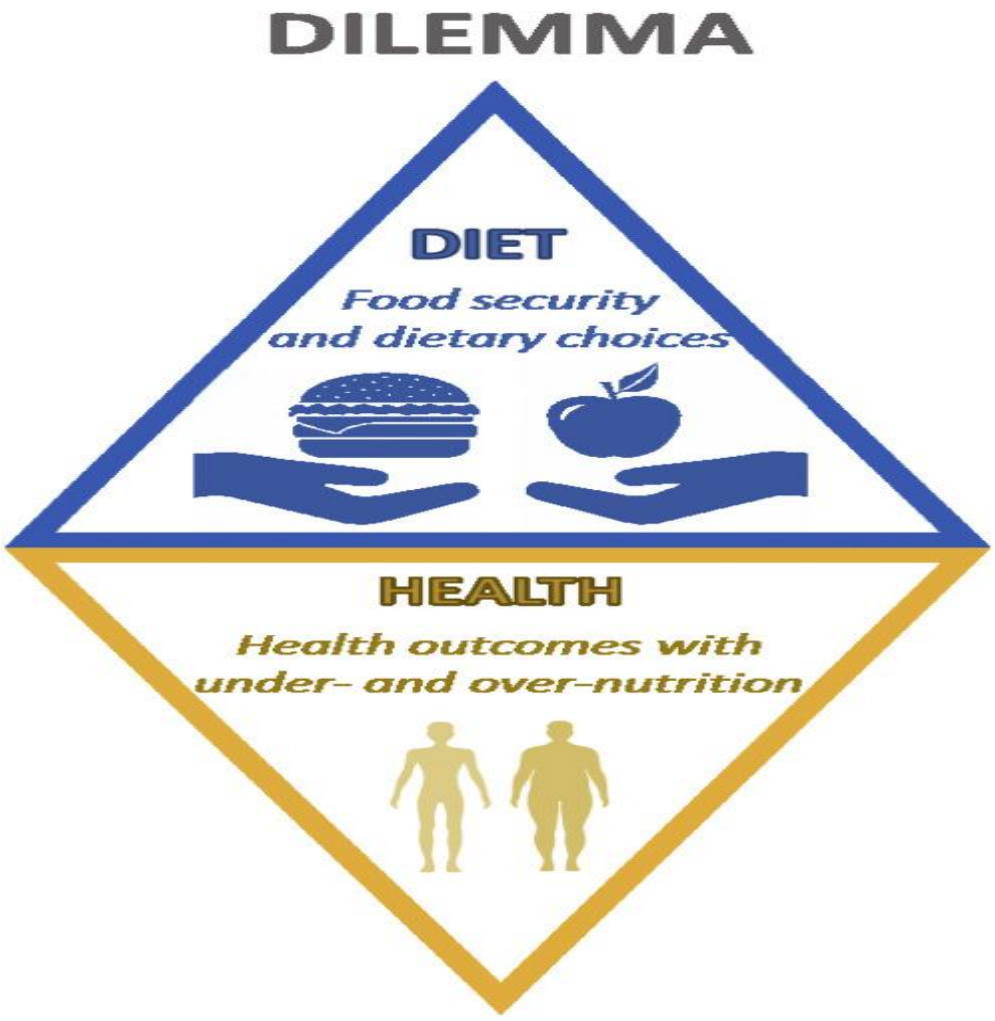
Medicare Training



Manual for Malnutrition

During this module you will be asked some questions to simply provoke thought and test your current knowledge please have a note pad or supervision workbook to hand to make notes. Your performance will only be measured on the answers you select when completing the knowledge test at the end of the module.

The 'Malnutrition Universal Screening Tool' ('MUST') is reproduced here with the kind permission of BAPEN (British Association for Parenteral and Enteral Nutrition). For further information on 'MUST' see www.bapen.org.uk.

Acknowledgement and grateful thanks to Christine Russell from BAPEN for kindly peer reviewing this manual.

Contents

Learning Outcomes

- Understand the importance of creating a person centered environment which supports the person to make choices and encourages eating and drinking.
- Be aware of the importance of appropriate preparation and presentation of food and drink.
- Understand the role and responsibilities of the care worker in monitoring eating and drinking in the person.
- Identify types of diets specific dietary requirements need for nutritional supplements.
- Identify what are the elements of a well-balanced diet.
- Be aware of the risk factors, cost, and consequences of malnutrition on the person.
- Know how to assess and screen for potential malnutrition on the person using nutritional screening tools such as 'MUST' (Malnutrition Universal Screening Tool).

Complementary Manuals

- Dementia awareness
- Diet and nutrition
- Food hygiene and safety

Chapter One

Balanced-diet elements

Introduction

Food and fluid are basic essentials for life. Under the Human Right Act (1998) access to adequate nutrition and hydration is a fundamental right and providing clients with food and drink is an integral part of care. Unfortunately, we are increasingly hearing stories of people in hospitals and healthcare settings who are under nourished or placed at risk of malnutrition and dehydrated.

Malnutrition or under nutrition can affect anyone, regardless of age, race or gender. The causes for this can be complex but the main reasons are associated with reduced food intake due to acute or chronic illness, lack of awareness of client dietary needs and a potential shortage of staff needed to support people to eat and drink.

It has been estimated that the effects of malnutrition costs the health and social care budget at least £13 billion a year (BAPEN 2009). It is therefore in everyone's interest that efforts are made to identify promptly clients who are at risk of malnutrition and ensure that effective and appropriate measures are put in place that improve the overall nutritional care of the client.

In addition to the physical importance of nutrition, food and drink has significant psychological, emotional and social meaning to people and is associated with nurturing and care.

Balanced-diet definition

Foods and fluids are essential for growth, energy, health and repair and for protection against illness. Eating a balanced diet is one of the most important things we can do to maintain both physical and mental health and fitness.

All physical activities whether vigorous, such as running, or small, such as blinking require energy. Even thinking uses calories (the units in which energy is measured). Adequate nutrition is necessary to provide energy for all vital functions; provide for the building and maintenance of body tissues; and to regulate body processes such as temperature control.

Nutrition is the process whereby food is taken into the body and broken down, allowing for production of energy necessary for the maintenance and function of all living cells (Field & Smith 2011).

A nutritionally balanced diet includes:

- Carbohydrates, Protein, Fat
- Fruit & Vegetables

- Fluids
- Milk & Dairy
- Dietary Fiber
- Vitamins & Minerals

An excess, deficiency or imbalance of any of these essential components can lead to poor nutritional status and in some cases malnutrition (Lewis et al 2004).
The NHS have issued simple guidelines for healthy eating which they are promoting on their website www.nhs.gov.uk

They put all foods into five groups:

- Fruit and vegetables.
- Starchy foods, such as rice, pasta, bread and potatoes.
- Meat, fish, eggs and beans.
- Milk and dairy foods.
- Foods high in fat and sugar. (NHS 2013)

To look after yourself you should mainly be choosing foods from the first four categories; foods from the final category should only be eaten occasionally.

Fruit and vegetables

You are probably aware of the 'five a day' campaign to get people eating a variety of fruit and vegetables; in fact 5 is probably the minimum number of portions of fruit and vegetables we should be eating. Fruit and vegetables have many benefits and, if you follow some basic rules, they can be almost freely eaten without causing harm.

Fruit and vegetables provide a range of vitamins and minerals; many contain antioxidants which may help to reduce the likelihood of cancers; they are generally low in fat, particularly saturated fats; and, they are a good source of fibre.

Carbohydrate

All cultures have a 'staple' starchy food which is the foundation of their diet; this tends to be whatever they could grow most easily, so in some countries it's wheat, used to make bread and pasta; in others it's rice, or potatoes. Other starchy carbohydrate sources include pulses and cereals.

Starch is a carbohydrate found in varying amounts in most foods; sugars are also carbohydrates, and these too are present in the majority of things we eat. Root vegetables have high levels of starch but, as they age, these turn to sugars; fruits are high in sugar but as they get older this converts to starch. Unprocessed starchy carbohydrates should represent at least 50 per cent of your diet; remember that vegetables contribute towards this; you don't want a plate half full of potatoes.

The less processed a starchy food is, the more fibre and nutrients it will contain with fewer added fats and sugars. This means that, ideally, you should have whole-wheat pasta and bread, brown rice, wholegrain cereals and potatoes in their skins.

If you don't do it already, start reading food labels so that you know what is in the food you are eating. For example, many breakfast cereals which advertise themselves as 'wholegrain' and 'low fat' contain unacceptable amounts of added sugar and base their daily guidelines on a very small bowlful. It shouldn't really be a surprise that these products are low fat, cereals aren't known for their fat content anyway and the benefits of the wholegrain are probably outweighed by the refined sugar.

Good breakfast cereals include porridge oats and wheat biscuits which contain few, if any, additives. It's far better to add your own sugar than to buy products with sugar added as you will probably be more restrained than manufacturers who add up to 3 teaspoons per 40g portion

Fibre

Fibre in both soluble and insoluble forms is vital to the health of our bodies; it helps to regulate blood sugar levels and works as a kind of cleanser for our system as it provides bulk which we don't digest but which helps food to be pushed through our intestines. If people who are suffering from constipation are able to increase the amount of fibre they eat this will often be better for them than taking medication or using food supplements.

Although fibre is such an important part of a healthy diet, it's not represented as a separate food group because it's present in good amounts in fruit, vegetables and starchy carbohydrates (particularly unprocessed).

Meat, fish, eggs and beans

These represent the major protein sources that need to be included in your diet. Protein is vital for body growth and repair but it doesn't need to make any more than 15% of our daily diet. If you are vegetarian you should be eating a variety of eggs, dairy products, pulses, nuts and grains to meet your nutritional needs. Non-vegetarians should try to make healthier choices as follows:

- Eat fish at least twice a week, one portion of which should be oily as this is a good source of essential fatty acids
- Eat less red meat (no more than 70g a day); red meat has high levels of saturated fat
- Choose lean white meat and poultry with the skin removed
- Try vegetarian options; it's not necessary to eat meat every day

Milk and dairy products

These are also good protein sources and provide calcium for healthy bones. Unless you are trying to gain weight you should have skimmed or semi-skimmed milk to limit your intake of saturated fat.

Foods high in fat and sugars

These are the foods that most of us eat too much of and in the wrong form. Processed foods containing large amounts of added fat and sugar have little or no nutritional value, contain more calories per gram than bulkier starchy carbohydrates and often include artificial ingredients which can be harmful to health.

Foods to limit include:

- Biscuits
- Cakes
- Sweets and chocolate
- Fizzy drinks
- Sweetened breakfast cereals
- Cereal bars

Fats

Fats can be split into 2 groups, saturated and unsaturated, and they both occur in varying amounts in all fat containing foods. Saturated fat is a major ingredient of red meat, dairy products and many processed foods; unsaturated fat is present in significant amounts in oily fish, avocadoes, olive oil and vegetable oils.

To improve your diet you may need to raise your intake of unsaturated fats and reduce the amount of saturated fats you eat, as these are associated with increased cholesterol which causes heart disease, blocked arteries and other serious health conditions.

Fat is an essential part of a healthy diet as certain vitamins are fat soluble and are, therefore, only found in foods containing fat. As with everything else, you are going to get greater health benefits from eating less processed food and a wider variety of fresh foods.

Liquids (Water)

Water is absolutely essential for life. The water content in a person makes up over half of their body weight (50 to 70%) and while is not considered as a specific nutrient such as a vitamin or mineral if we don’t replenish our bodies water supplies we would not survive for more 3 to 5 days.

- Water is necessary for a variety of physical functions these include:
- Normal body growth, maintenance and repair.

- Temperature control.
- Kidney function.
- Blood composition and the body's chemical balance.
- Removal of waste products.

Water is lost from the body through

- Urine, faeces.
- Sweat.
- Respiration.
- Blood loss

Water is obtained from three main sources

- Normal drinking.
- Through diet, particularly fruit, vegetables.
- As a by-product of chemical reactions within the body.

Most healthy adults require between one and one and a half litres of fluid a day, this needs to be increased if they are physically active or during periods of hot weather. Older people may require up to 2 litres.

Liquids (other)

While water is unarguably the best source of hydration other fluids also have health benefits. Milk, juices, tea and coffee, and even alcohol can form part of a balanced diet.

Chapter Two

Malnutrition and dehydration risk factors

Malnutrition means poor or under nutrition. It can be defined as a lack of protein, energy and other nutrients causing measurable effects on a person's health and wellbeing. Both under eating and overeating may lead to malnutrition currently the Department of Health is focusing on the impact of obesity and the problems this causes society, however, under nourishment which commonly affects the elderly puts a far greater strain on the health and social care services.

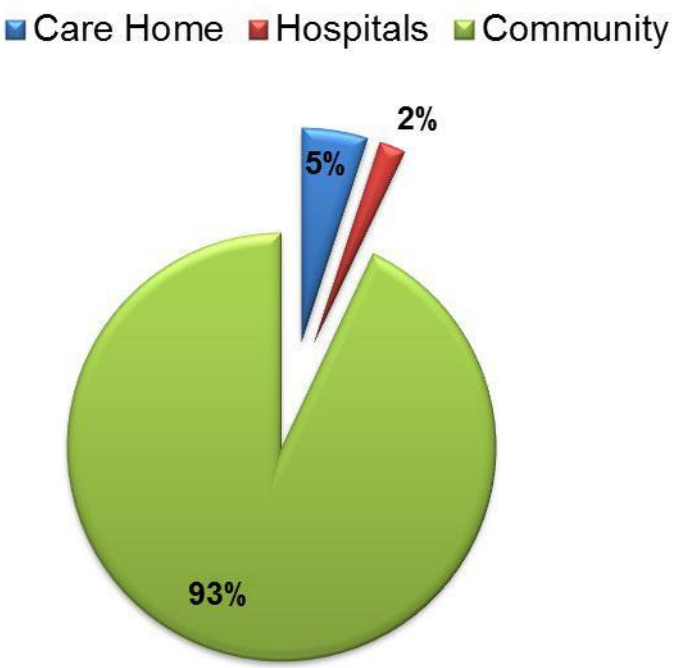
Malnutrition in the UK

The British Association for Parenteral and Enteral Nutrition (BAPEN) estimates that malnutrition or under nutrition affects over 3 million people in the UK (Elia & Russell (2009. Of these about 1.3 million are over the age of 65. From its nutrition screening week surveys (2007-11) BAPEN estimates that:

- 25-34 % of people admitted to hospital are at risk of malnutrition.
- 30-42% of people admitted to care homes are at risk of malnutrition.
- 18-20% of people admitted to mental health units are at risk of malnutrition.

The British Dietetic Association (2012) has produced figures of people at risk of malnutrition with the following www.bda.uk.com

People at risk of under nutrition in the UK.



The term malnutrition does include obesity, however BAPEN uses the term under nutrition in regard to malnutrition.

Dehydration can be defined as having an insufficient quantity of water in the body in order to control and regulate the body's normal physical functions.

The table below gives a number of potential causes of Malnutrition and Dehydration. Grab your note pad and make a note of what you think the reasons for these would be.

Potential Causes of Malnutrition and Dehydration
Poor dietary / fluid intake
Difficulty in eating and dinking
Lack of access to food and drink
poor absorption / metabolism of foods
Excess losses of food and fluid

Identifying Clients at Risk of Malnutrition

While malnutrition can affect anyone, it is particularly common amongst older people and those who suffer from;

Social Isolation	Poor mobility	Health problems

As you may have identified in completing the table above, some of your clients are likely to be at greater risk of malnutrition than others. Although all clients should be monitored some will need more regular assessment.

Risk factors to be aware of include:

- Illness / infection
- Recent surgery
- Nausea and pain
- Anxiety and depression
- Alcohol dependence
- Dementia
- Dysphagia (difficulty swallowing)
- Loss of appetite
- Diarrhoea

According to the National Institute for Health and Clinical Excellence (NICE) a person is malnourished if they have:

- A body mass index (BMI) of less than 18.5 kg/m^2
- Experienced unintentional weight loss greater than 10% in the last three to six months.
- A BMI of less than 20 kg/m^2 coupled with unintentional weight loss greater than 5% within the last three to six months.

Body Mass Index (BMI) VALUES (kg/m^2)

UNDERWEIGHT:	BMI less than 18.5
NORMAL WEIGHT:	BMI 18.5 – 24.9
OVERWEIGHT:	BMI 25 – 29.9 – 29.9
OBESE:	BMI 30-39.9
VERY OBESE:	BMI Greater than 40

A BMI is calculated from a person's weight and height (see chart on page 20). A BMI is a reliable measure to determine whether a person is normal weight, overweight or underweight.

Symptoms of malnutrition and dehydration

NICE also recommends that nutritional support be considered for people at risk of malnutrition such as those who have eaten little or nothing for more than five days or who are unable to take in nutrients properly. **The following can be seen as common signs of malnutrition**

- Weight Loss
- Loss of Appetite
- Tiredness and Loss of Energy
- Disinterest in Fluids and Foods
- Poor Concentration
- Changes in Mood

What signs can you look for?

- Examine the mouth - look for soreness and redness, signs of thrush or yeast infection, dry and cracked lips, sore swollen red tongue (glossitis), reddened, swollen or receding gums.
- Look at skin condition – is it dry with poor coloring, pallor and in some cases yellowing.
- Is hair dry, brittle or thinning?
- Look at eyes – are they reddened or inflamed, looking glassy and sunken.
- Do clothes, dentures, jewelry fit more loosely than usual?

Some of the more serious effects of malnutrition on a person's health include:

- **Delayed wound healing**
- **Risk of infections**
- **Depression**
- **Confusion**

Dehydration

Good hydration plays a vital role in maintaining body temperature, mental performance, blood chemical balance and oral health. It is also important in the prevention of falls; pressure sores; constipation and urinary tract infections. Elderly clients are at greater risk of becoming dehydrated particularly if they are exposed to

an infection or outbreak of diarrhoea and vomiting. They have around 10% less fluid content than younger adults; and possibly reduced sense of thirst and loss of appetite. People can also become dehydrated because of the effects of medicines such as laxatives, high temperatures and having a high blood sugar.

Dehydration test:

Gently squeeze the skin on the client's forearm between your index-finger and thumb. The skin should return to its normal position quickly; if the skin takes a long time to return to normal or remains in the pinched position, the person is most likely dehydrated.

If the client is elderly and their skin has lost its elasticity use the above method on their forehead instead of their forearm.

To avoid dehydration, it is important to encourage a fluid intake of no less than six to eight glasses of fluid per day. Fluids must be both readily available and easily accessible throughout the day and night. Fluid can be taken in tea, soups etc.

Methods to increase hydration

- Drink between 6 – 8 glasses or around 1.5 and 2.5 liters of water per day.
- Vary the types of fluids taken. E.g. beverages, juices, ice creams and soups.
- Increase fluid intake in hot temperatures.
- Add favor to water with fruit juice or squash.
- Avoid high-sugar fizzy drinks.
- Keep alcoholic drinks to a minimum.
- Record fluid intake if necessary
- Allow easy access to fluids.

Dehydration treatment

If the early signs of dehydration are identified a fluid care plan should be introduced.

In the event of a client becoming severely dehydrated they should be admitted to hospital for emergency treatment.

Chapter Three

Nutritional requirements

Your duty of care for your clients means that you are responsible for ensuring that they receive enough to eat and drink.

It's one thing to serve a balanced and nutritious menu; it's another to make sure it is actually being eaten. While the catering team are responsible for the provision of food, they cannot work in isolation. Managers, care givers and kitchen staff must work together to ensure that clients' nutritional needs are appropriately met.

Through teamwork your employer, your colleagues and you can help to meet the Care Quality Commission's expectations of compliance with Regulation 14 of the Health and Social Care Act 2008 as detailed below. Evidence of compliance can be shown in records of dietary preferences, menu planning, food and fluid charts and client satisfaction surveys.

Outcome 5. Meeting Nutritional Needs (Regulation 14).

Where food and hydration are provided to service users as a component of the carrying on of the regulated activity, the registered person must ensure that service users are protected from the risks of inadequate nutrition and dehydration, by means of the provision of—

a) A choice of suitable and nutritious food and hydration, in sufficient quantities to meet service users' needs;
b) Food and hydration that meet any reasonable requirements arising from a service user's religious or cultural background; and
c) Support, where necessary, for the purposes of enabling service users to eat and drink sufficient amounts for their needs.

For the purposes of this regulation, "food and hydration" includes, where applicable, parenteral nutrition and the administration of dietary supplements where prescribed. (Essential Standards of Quality and Safety available from

www.cqc.org.uk)

Nutritional requirements assessment

In attempting to prevent under nutrition in a client and to provide them with the food and drink they enjoy it is important to ask some key questions about their individual dietary history. This is normally performed during the initial assessment and should be accurately recorded in the client's care records.

Dietary History: Key Questions to Ask	
Foods and Fluids	When do they eat? What foods the person likes or dislikes. Do they have good or bad appetite? What do they like to drink, tea, coffee, juice, water etc? How much do they drink? Does the person wear dentures? Do they fit well? Do they have any problems with their eyesight?
Eating habits and any Special diets	Any food allergies Any special diets due to a medical condition e.g. diabetes. Does the client suffer from swallowing problems which requires them to have a textured modified diet? Does the client have any food preferences because of religious restrictions?
Movement/activity	Is the person independent with feeding? Does the person need support with eating and drinking? Can the person mobilize to the dining room or not?
Medication Review	Is the person on any tablets which may cause drowsiness, nausea or constipation e.g. codeine? Some tablets can leave an unpleasant taste in the mouth or make the mouth dry? Medication such as aspirin can irritate the stomach.

Nutritional care of a client requires good communication between the client, their relatives, care givers, catering staff and other members of the health care team. By obtaining a comprehensive and personalized dietary history you can create a detailed and person-centred nutritional care plan.

This care plan will act as a framework which should always be adaptable to meet the changing needs of the client.

This initial communication is vital as it will help to identify possible risk factors and signs and symptoms showing the client may be at risk of developing malnutrition or dehydration.

Case study

Mary is a new admission who has come in for respite care while her usual care giver recovers from an operation. Since Mary's husband died her appetite has been poor. She has neuralgia which requires treatment with regular codeine, takes sleeping tablets and doesn't enjoy exercise.

She was weighed a month ago at a routine doctor's appointment and her BMI was 24; on admission her BMI was 22. She has a cousin who brings in chocolate, crisps and small bottles of whiskey weekly.

Mary is a regular smoker, prefers her own company and regularly misses breakfast because she refuses to get out of bed early. She won't drink water and rarely has fluids other than coffee and alcohol.

Consider the following questions using the information you are given in the scenario above: You can make a note if it helps.

1. Which factors would put Mary at risk of becoming malnourished?

2. Is Mary currently malnourished? How do you know?

3. Suggest some actions you or your colleagues could take to improve Mary's nutrition.

Chapter Four

Significance of nutritional screening

Following the recording of a client's eating and drinking habits if it concluded that the client could be at risk of malnutrition then it is good practice to undertake nutritional screening. Within health and social care there are measuring tools that assist with this form of screening. Current guidance from the National Institute for Health and Clinical Excellence (NICE) recommends the use of a validated tool such as the 'Malnutrition Universal Screening Tool' ('MUST').

The 'Malnutrition Universal Screening Tool' ('MUST').

- 'MUST' was developed by the British Association for Parenteral & Enteral Nutrition (BAPEN) and is a validated screening tool widely used both in hospital and community settings throughout the UK

- It is quick and easy to use and as well as identifying those at risk of malnutrition and gives simple guidance for suitable action to be taken. The 'MUST' tool recognizes both over and under nutrition and can be used to develop a person-centered nutritional care plan for each client.

- A client care plan must be monitored and reviewed on a regular basis to ensure that they are working. Goals should be measurable and achievable and agreed with clients and their families. Clients who are kept fully informed about their nutritional status and who are educated about diet and health are more likely to make the changes necessary to improve their 'MUST' score.

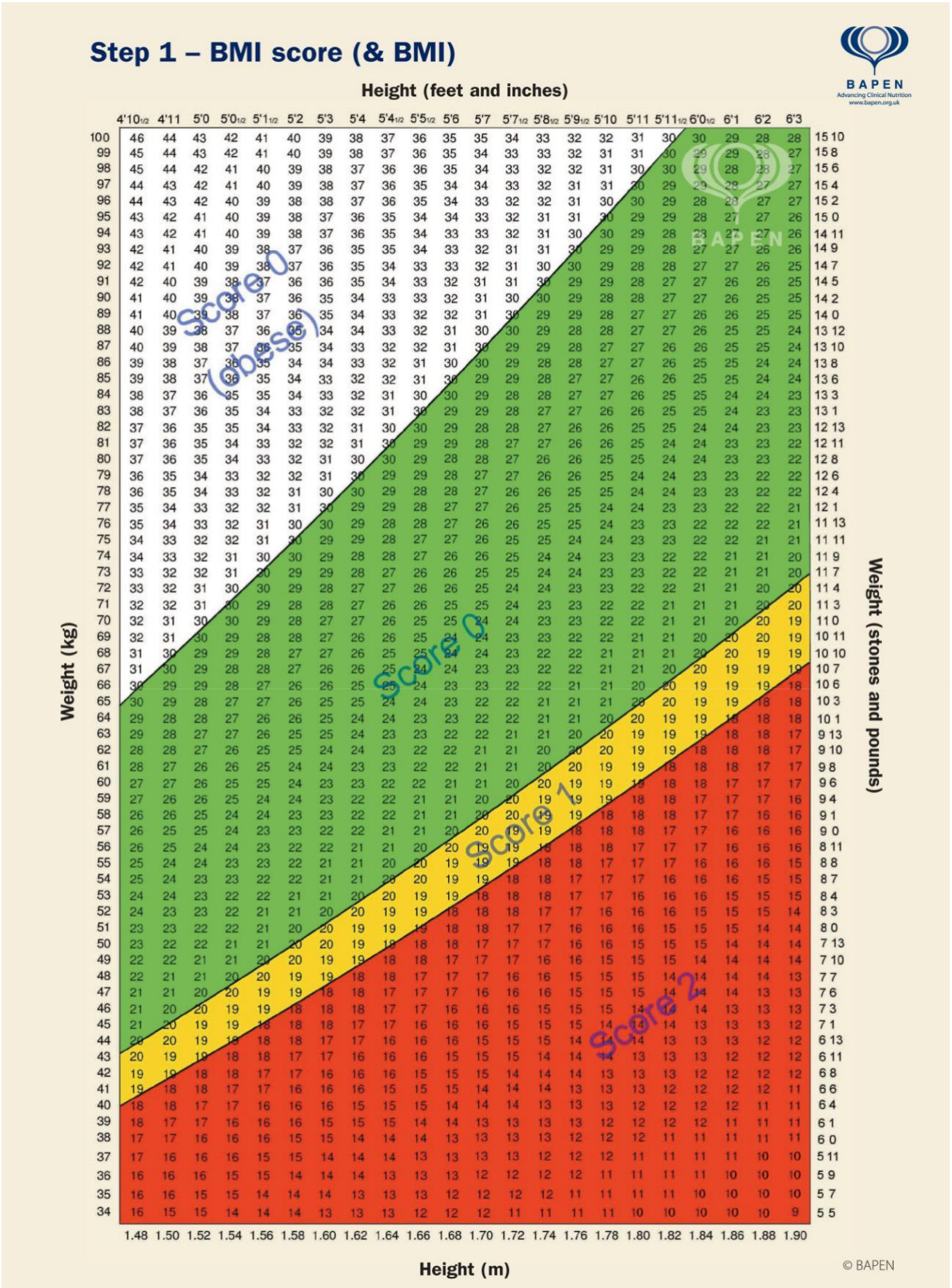
- To use the 'MUST' tool effectively you will need to take measurements of weight and height. In situations where a client's weight and height cannot be obtained, the 'MUST' provides guidelines for using alternative measurements such as ulna length or estimating a BMI category by measuring a client's mid upper arm circumference. These methods are inexpensive, non-invasive, and quick to use and provide reliable results.

- The purpose of the 'MUST' tool is to identify clients who are malnourished or at risk of malnutrition using a person's body mass index (BMI), the percentage of any recent unplanned weight loss as well as the effect of an acute illness.

- BMI is calculated by dividing weight in kilograms by height in meters squared.

If you would like further information about the 'MUST' tool or taking alternative measurements either contact your training consultant or look at www.bapen.org.uk

This BAPEN BMI chart is for training purposes only – not for clinical use



Note : The black lines denote the exact cut off points (30,20 and 18.5 kg/m²), figures on the chart have been rounded to the nearest whole number.

Step 1 + Step 2 + Step 3

Step 1 — BMI score

BMI kg/m²	Score
>20 (>30 Obese)	= 0
18.5-20	= 1
<18.5	= 2

Step 2 — Weight loss score

Unplanned weight loss in past 3-6 months

%	Score
<5	= 0
5-10	= 1
>10	= 2

Step 3 — Acute disease effect score

If patient is acutely ill **and** there has been or is likely to be no nutritional intake for >5 days

Score 2

Step 4

Overall risk of malnutrition

Add Scores together to calculate overall risk of malnutrition
Score 0 Low Risk Score 1 Medium Risk Score 2 or more High Risk

Step 5

Management guidelines

0 Low Risk

Routine clinical care

- Repeat screening
  Hospital – weekly
  Care Homes – monthly
  Community – annually
  for special groups
  e.g. those >75 yrs

1 Medium Risk

Observe

- Document dietary intake for 3 days
- If adequate – little concern and repeat screening
  - Hospital – weekly
  - Care Home – at least monthly
  - Community – at least every 2-3 months
- If inadequate – clinical concern – follow local policy, set goals, improve and increase overall nutritional intake, monitor and review care plan regularly

2 or more High Risk

Treat*

- Refer to dietitian, Nutritional Support Team or implement local policy
- Set goals, improve and increase overall nutritional intake
- Monitor and review care plan
  Hospital – weekly
  Care Home – monthly
  Community – monthly

* Unless detrimental or no benefit is expected from nutritional support e.g. imminent death.

All risk categories:

- Treat underlying condition and provide help and advice on food choices, eating and drinking when necessary.
- Record malnutrition risk category.
- Record need for special diets and follow local policy.

Obesity:

- Record presence of obesity. For those with underlying conditions, these are generally controlled before the treatment of obesity.

Re-assess subjects identified at risk as they move through care settings

Specialists role

If a client has a `MUST' score of 2 or above, they should ideally be referred to their GP for professional intervention and support. In line with local policy, the GP will need to know the following:

- The clients current BMI and their BMI over a three month period
- The client's current weight and weight over a period of time. (This will show a pattern of weight lost)
- The current MUST score or risk category
- Current food and fluid intake of the client

With this information the GP may visit and assess the client or, if satisfied with the information, may refer the client to a dietician for advice. If there is evidence of dysphagia (difficulty in swallowing) the GP would also promptly refer the client to the speech and language therapy team (SALT).

The SALT

The SALT would be able to perform a swallowing assessment and give advice on types of foods and any modified texture required to prevent the risk of malnutrition and aspiration.

A referral to a dentist may also be necessary if oral health is giving cause for concern.

Chapter five

Eating and drinking environment

People have an emotional response to eating and drinking. Certain foods, aromas, and occasions can evoke memories of times past. It is important for care givers to remember that the ability to enjoy eating and drinking and the social aspects of dining do not suddenly disappear.

The meal time experience should be made enjoyable and must take into account individual client's preferences and expectations. While some people eat because they have to for many people meals are a highlight of the day and a 'good' experience will significantly improve their quality of life. Whether clients want to eat on their own or in a group their choice should be respected and supported.

Social interaction at mealtimes is to be encouraged as people generally benefit both mentally and physically if they eat in company. However, you must also recognise that some clients genuinely prefer their own company and do not like to be observed while eating.

The layout of the dining room

- Care home dining rooms should make the clients feel comfortable, their purpose should be obvious and their design and layout should be practical but not institutional.
- The atmosphere in the dining room should encourage clients to take pleasure in eating their meals; some homes find that a restaurant type setting works; others prefer a more 'homely' feel.
- Each room in a care home should re-enforce clients' sense of place and activity; furniture, lighting and décor should be carefully chosen to reflect the activity within the space.
- Ideally clients should be involved in any redecoration or renovation processes as their views and opinions are important. Records of minutes of client consultation meetings can be used to provide the Care Quality Commission with evidence of client involvement and satisfaction.

Obstacles

The welfare of the client must be maintained at all times, especially during meal times. The dining area must be free of obstacles and any potential trip hazards.

Falls Prevention

Some clients, particularly those with poor mobility or eyesight are at greater risk of falling; therefore, the floors of the dining room should be level and free of steps. Handrails should be available and to aid visibility and color perception the floor surfaces should ideally be the same color and pattern free. To prevent the risk of injury the dining room tablets should not have pointed corners.

Safe and sound meal taking

Open plan, multi-use areas can cause clients to become confused and agitated as a result of noise levels and visual stimuli which cannot be controlled. They may be unable to recognise the function of the environment; hear well enough to have a conversation; or to process what is happening around them.

Large spaces also present a physical challenge to clients who find walking difficult; thought should be given to ways in which client independence can be maintained such as fixing handrails to walls or reducing the amount of open space between walls and dining furniture.

Clients can find the general noise and ‘businesses of a cafeteria style dining environment stressful and disorientating; this may reduce their appetite or even cause challenging behaviors. These may include the following scenarios;

`Mrs. Thomas has dementia and while eating she can suddenly begin to shout and bang the table. This disturbs the rest of the residents who are eating in the dining room’.

`Mr. Groves needs to be assisted with feeding in his own food because he often throws his food at the other residents, spits out his food and refuses to chew or shallow his food’.

If the room can be divided into smaller sections to reduce noise and movement this will encourage interaction between groups of clients and enable them to have their meals in peace.

While attempting to avoid meal times becoming regimented, care providers have found that having clients eating together in a family style provides a relaxed and sociable environment which improves quality of life and physical performance.

Spaces can be broken up using moveable dividers, similar to those found in restaurants. These dividers can be used to ensure privacy and reduce distractions. If they are easily moveable space can be divided according to the different needs on any given day.
The Care Quality Commission (CQC) want mealtimes to be uninterrupted unless the clients wish otherwise, or an emergency arises. While relatives and volunteers

can be useful extra pairs of hands at mealtimes their involvement must be managed carefully so that they are not just adding to the general noise and confusion.

Think of as many ideas of how you could reduce distractions at mealtimes for your clients. Make some notes.

The care giver's role

At mealtimes care givers are going to be carrying out practical tasks serving and clearing away food and assisting clients to eat. To support good nutrition and eating habits care givers will also have a role in managing the dining area; reducing distractions and limiting the likelihood of challenging behaviour.

At mealtimes care givers must ensure that

- The clients eat in an atmosphere which is calm and peaceful, and they are not rushed with their meal.
- Finger food is encouraged if clients have difficulty with cutlery.
- Clients are provided with food which looks attractive and in manageable portions.
- Fresh water is offered.
- Staff are friendly and observant to the needs of the clients.
- All staff communicate in a calm and polite manner.
- Encourage alternative food options if the clients change their minds and decide they do not wish to eat want is offered.

The goal must be to create a comfortable and appealing atmosphere which enables clients to have an enjoyable dining experience and encourages them to eat their meals. Clients should look forward to mealtimes.

Many elderly people, particularly those with dementia or increased frailty need to have their meals in an unhurried manner as they take longer to eat. This can be due to poor co-ordination, difficulty in swallowing or challenging behaviours such as refusing to eat or spitting out food.

Clients requiring assisted feeding can take up to 40 minutes. (See chapter 6 for further advice on feeding).

Chapter Six

The `Mealtime' experience

In this chapter we will break the mealtime experience down into three core stages:

1. Pre-meal **2. During the meal** **3. Following the meal**

Each of these stages is important; it's easy to focus on the meal itself and to lose sight of the fact that what happens before and after food is served will have an impact on clients' wellbeing and their likelihood of eating well. Ideally a senior member of staff will be given responsibility for co-ordinating all aspects of the dining experience so that everything works together. This person could be called the `dining room champion'.

Pre-meal preparation

Pre-meal preparation is about getting clients ready for their meal; it would be best for their self-esteem if they could be involved in this process whenever possible. Remember this is their home and the clients may like the opportunity to be involved in the laying up of the dining room or with support and appropriate food hygiene information may like to help in the preparation and cooking of meals; this could be as part of organised social activities. Clients may also wish to use their own cutlery, drinking glasses or plates.

Other pre-meal tips:

- Offering choice at mealtimes. This is essential as clients have a fundamental right to select what they want to eat. Menu choice should be offered in a format that the client can understand and at an appropriate time. Some clients will need to see the menu hours before they eat; others (particularly those with memory problems) will need to make their decision as close to eating as possible. They may even need to smell, see or taste what is on offer.
- Clients should be encourage to `freshen up', or assisted to the toilet.
- Dentures should be cleaned and held securely in place.
- Mealtimes should be regarded as a social event, therefore clients should be encouraged to wear make up, put on jewellery, clothes, or perfume.
- Where suitable, an aperitif could be offered, maybe a sherry or glass of wine.

If clients wish to remain in their own rooms, all of the above considerations should be offered. Remove any unappetizing objects, such as commodes and urinals. These are distasteful and would detract from the dining experience. The client may wish to have back ground music on or the TV.

Clients should be in a comfortable position for eating and drinking, ideally upright. Temperature comfort should be considered, remove blankets if too hot. Close windows if requested.

During the meal

Once the clients are settled and comfortable either in the dining room or their own room, the next stage in the meal time experience is the actual food and drink. There are three key elements to meal times.

- The overall availability of food and drink.
- The type and quality of food and drink.
- The style and presentation of food and drink.

Caring client to ensure their choice

In outcome 5: Meeting nutritional needs of the essential standards of quality and safety the CQC state that staff must ensure that clients have access to snacks and drinks throughout the day and night and mealtime periods should be reasonably spaced and at appropriate times. Care staff should make every effort to support the clients to enjoy their meals as independently as possible.

Caring about client's cultural, religious dietary needs

A crucial aspect of maintaining person–centered care is recognizing a person's right to uphold their cultural or religious beliefs. Ensuring a person's abides to particular instructions associated with their cultural or religious background is an extremely important element of eating and drinking. Again, in outcome 5 the CQC state that all meals should be appropriate for clients' diverse cultural, religious and dietary needs.

Care staff must ensure that clients individual dietary needs reflect the person's cultural or religious requirements including the manner in which the client is accustomed to eating and drinking. This must be communicated to the rest of the care staff including the catering staff and accurately recorded in the clients care records.

Care providers do not have to meet all dietary requirements, but they must be open about this as they may be unable to care for certain individuals.

Quality of food

In providing a balanced diet the care establishment must ensure that all the food and fluid the client consumes is nutritious, appetizing and safe.

The home manager must ensure that all food and drink preparation and storage complies with relevant food hygiene legislation such as the Food Safety Act 1990.

The manager must also make sure that whoever purchases food must ensure suppliers are reputable.
If the client requires a special diet in the case of a diabetic client or a textured modified diet for example if they suffer from dysphagia (difficult in swallowing) they must be assessed by a dietician and a member of the speech and language team (SALT).

This is to make certain that the food and drink is compatible with their dietary needs as well as their swallowing ability.

Food presentation

Care staff must make sure that food is presented in a way that looks both attractive and appetizing. By making an effort in how food and drink is offered and serviced is a crucial element in encouraging clients to eat. The CQC regulations (2010) state that food needs to be presented in an appetizing way to encourage enjoyment.
Catering staff must endeavor to prepare foods especially puree meals in a manner which is attractive and appealing. Food molds can be used to give puree meals structure and importantly the character of a normal looking dish.

As a care giver yourself before serving food, or helping a client to eat, ask yourself if you would be happy to eat their meal. If the answer is no, look for ways to make the food more appetizing.

Cutlery and tableware

In recent years research has been undertaken to identify the types of cutlery and tableware that assists people with visual problems or dementia in eating and drinking. Timlin & Rysenbry (2010) concluded that clients with vision difficulties need tableware that creates good contrast between both the plate and table and also the food and the plate. They found that in clients with dementia, food placed on blue plates rather than white plates increased a person's food intake.
This was particularly useful when using lighter colored foods such as rice, or potatoes as darker colored plates tended to show the foods more distinctly. Using blue cups or glasses instead of clear glasses was also found to be beneficial for clients with visual difficulties.

In an effort to ensure meal times are held in a relaxed and enjoyable atmosphere, care givers should identify any potential triggering factors that could cause a client to become confused or agitated. Limiting the items of cutlery could be helpful in this and could encourage them to become more independent with eating. In addition, the use of non-patterned plates was also advocated as clients tended to focus on the pattern rather than on the food itself.

Supporting clients to eat

If there is any way that aids can be introduced to aid independent feeding, then this should be done; if clients need assistance follow the guidance below:

Preparation

- Make sure the client is fully awake and ready to eat – mouth is clean , dentures are in
- Make sure the food is attractive, appetizing and a suitable temperature – ask yourself 'would I eat this?'; if the answer is no don't expect your client to eat it either
- Make sure that the client is comfortable and relaxed, support them in an upright position using pillows if necessary
- Sit by the client, where they can see you – make allowances for any visual problems, if they have a blind side don't sit on it

Eating

- Give the client as much time as they need, rushing will increase the risk of choking and make the meal an unpleasant experience
- If foods need to be warm and the client takes a long time consider having food 'little and often' instead of three times a day
- Make sure that the client is able to do as much as possible for themselves e.g. taking the fork or spoon from you when you have put the food on it
- Describe the food as you offer it so that the client knows what to expect with each mouthful
- Offer a small amount at a time (it may be best to use a teaspoon) and ensure that the client has finished one mouthful before offering another
- Maintain the client's dignity throughout; talk to them (but discourage them from talking and eating at the same time), help them to keep clean and tidy (but don't treat them like a baby, no bibs) and allow them to take the lead about what they are eating and when

After eating

- Offer fluids to rinse their mouth out and encourage them to remain upright for half an hour to aid digestion

Post meal

Avoid making clients feel rushed by attempting to clear tables before everyone has finished their meal. Allow clients to help if they would like to.

Monitor waste as plates are returned; empty plates are a good sign that clients are enjoying their meals but an increase in leftovers may give cause for concern. It may be necessary to inform the person in charge of the dining room or the catering staff if large amounts of food are left on plates.
Care givers should now complete all the appropriate documentation, fluid intake and diet charts reporting any concerns to the person in charge.(Sample forms can be found at the end of this manual).

Chapter Seven

Diet classification and improvement

Recognizing the causes of malnutrition and dehydration in vulnerable clients and therefore the importance of dietary monitoring is an essential role of the care provider. Ultimately, it's the CQC that checks nutritional standards with outcome 5. According to this outcome all clients must be given a choice of suitable and nutritious food and hydration, in sufficient quantities to meet their needs.

In an effort to meet their individual dietary needs all clients must have their nutritional status monitored. Merriman (2011) maintains that weighing residents regularly and responding appropriately to unplanned weight loss is the key to this.

All new admissions must have a full nutritional assessment performed in order to plan menus that are balanced and appropriate for the client's health and food likes and dislikes. Food modifications, including any special diets need to be developed in accordance with the advice of GP's, dietitians and members of the SALT.

As we have already seen in providing clients with nutritional balanced diet care givers must attempt to follow the `food first approach. Therefore care givers should have a basic understanding of the different type of diet available and of ways in which nutritional intake can be improved. Diets can be varied in nature and therefore can come in different types. These diets include.

Diet classification:

- Normal balanced diet.

- Modified textured diets. Developed for clients with swallowing problems there are dysphagia diet food texture descriptors in place that inform the staff what is the makeup of modified textured diets.

- These descriptors detail the types and textures of foods needed by individuals who dysphagia (swallowing difficulties) and who are at risk of choking or aspiration (food or liquid going into their airway). The descriptors provide standard terminology to be used by all health professionals and food providers when communicating about an individual's requirements for a texture modified diet.

The food textures are:

- B = Thin Purée Dysphagia Diet
- C = Thick Purée Dysphagia Diet
- D = Pre-mashed Dysphagia Diet
- E = Fork Mashable Dysphagia Diet

Puree diets and food fortification

Puree diets are often used with clients with swallowing problems. However due to the extra amount of water needed to puree the meals clients can quickly lose weight. Therefore, clients must be regularly weighed and puree meals should be supplemented and fortified with high calorie foods such as full fat milk, cream, butter, cheese. Normal foods such as strews, curries, etc can also be fortified with supplements such as cheese and butter. It is important to maximise the taste and flavour of pureed foods to increase enjoyment and palatability.

See table below:

Effect on calorie content when food is pureed or fortified

Food	Kcal normal food	Pureed with water	Pureed with semi-skimmed milk	Pureed with fortified milk	Pureed with fortified milk plus butter
Fish Pie	300	150	220	350	400
Carrots	20	10	20	70	100
Broccoli	20	10	20	70	100
Jelly	70	70	140	250	250
Total	410	240	400	740	850

(Reference: Merriman 2011)

Conditional diets

Due to cultural, religious beliefs, or medication conditions some clients may be provided with special diets such as e.g. Halal, Kosher, gluten free. Buddhists for example enjoy a vegetarian diet. Hindus will accept dairy products as long as it’s free of animal fat.

Finger foods

For clients who may have difficulty with cutlery, may eat slowly or have problems with concentration while eating and drinking, finger foods are very useful. They can be made to look attractive and can be held easily.

While a balanced diet is essential for health and well-being, the British Dietetic Association (2013) provides some useful advice in improving the nutritional Intake of clients.

- Encourage clients to eat and drink `little and often' especially when the client is alert even though it may not be at the homes set meal time.

- Fortify meals with high energy foods. Dried milk power is a good source of protein and can be added to milk for cereals, drinks, custard, porridge, yogurts, milk puddings, cream soups, mashed potatoes.

- To increase a client's nutritional intake, you should avoid low fat/diet versions of foods and encourage other high calorie foods such as, biscuits, cheese, crisps, peanut butter, and chips, chocolate. Using nutrient dense liquid, e.g. milk, rich gravy to puree foods, this could add both calories and flavour.

- Choose milky drinks made with full fat milk, hot chocolate, Horlicks, Ovaltine. fruity milkshake and smoothies. Ensure foods are at a comfortable temperature as this will encourage uptake.

- Although food and fluid are essential, the social and psychological aspects of eating and drinking must not be forgotten. Group activities such as cake and bread making could be encouraged. This could be done as a social event or part of a luncheon club.

- Encourage where possible client food shopping trips.

- A vitamin / mineral supplement could be prescribed by the GP if required.

Snacks

If clients are at risk of being under nourished it may be a good idea to encourage snacking between meals. Friends and relatives might bring in favourite treats and care providers should make nutritious snacks available at all times.

People with small appetites who may not eat large meals may be tempted by snacks. These should be taken between meals, mid-morning, mid-afternoon and bedtime. Examples include cakes, fruit, biscuits, soups, smoothies, milky drinks, cheese, yoghurts, teacakes.

The use of oral nutritional supplements (ONS)

While the use of ONS have been shown to improve the nutritional status of people, it's important to ensure a `food first' principle. In the first instance, clients should always be given support and encouragement to eat their regular meal.

Available on prescription, oral nutritional supplements are expensive and are intended to 'supplement' an inadequate diet, they are not meal replacements.

If you are concerned that clients are at risk of malnutrition or dehydration; or if you are unsure what support an individual needs; discuss issues with your manager. If clients have special needs it may be necessary to get help from a GP, SALT, or other health professional.

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Name: Date of Birth: Room Number: **System No: 21.088**

FLUID BALANCE

	Date:		Date:		Date:		Date:		Date:		Date:		Date:	
Time	**Intake**	**Output**	**Intake**	**Output**	**Intake**	**Output**	**Intake**	**Output**	**Intake**	**Output**	**Intake**	**Output**	**Intake**	**Output**
8														
9														
10														
11														
12														
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14														
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16														
17														
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19														
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23														
24														
1														
2														
3														
4														
5														
6														
7														
Sub-total														
24 hr total														

References and further reading

The 'Malnutrition Universal Screening Tool' ('MUST') is reproduced here with the kind permission of BAPEN (British Association for Parenteral and Enteral Nutrition). For further information on 'MUST' see www.bapen.org.uk. Last accessed 2.02.2013

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