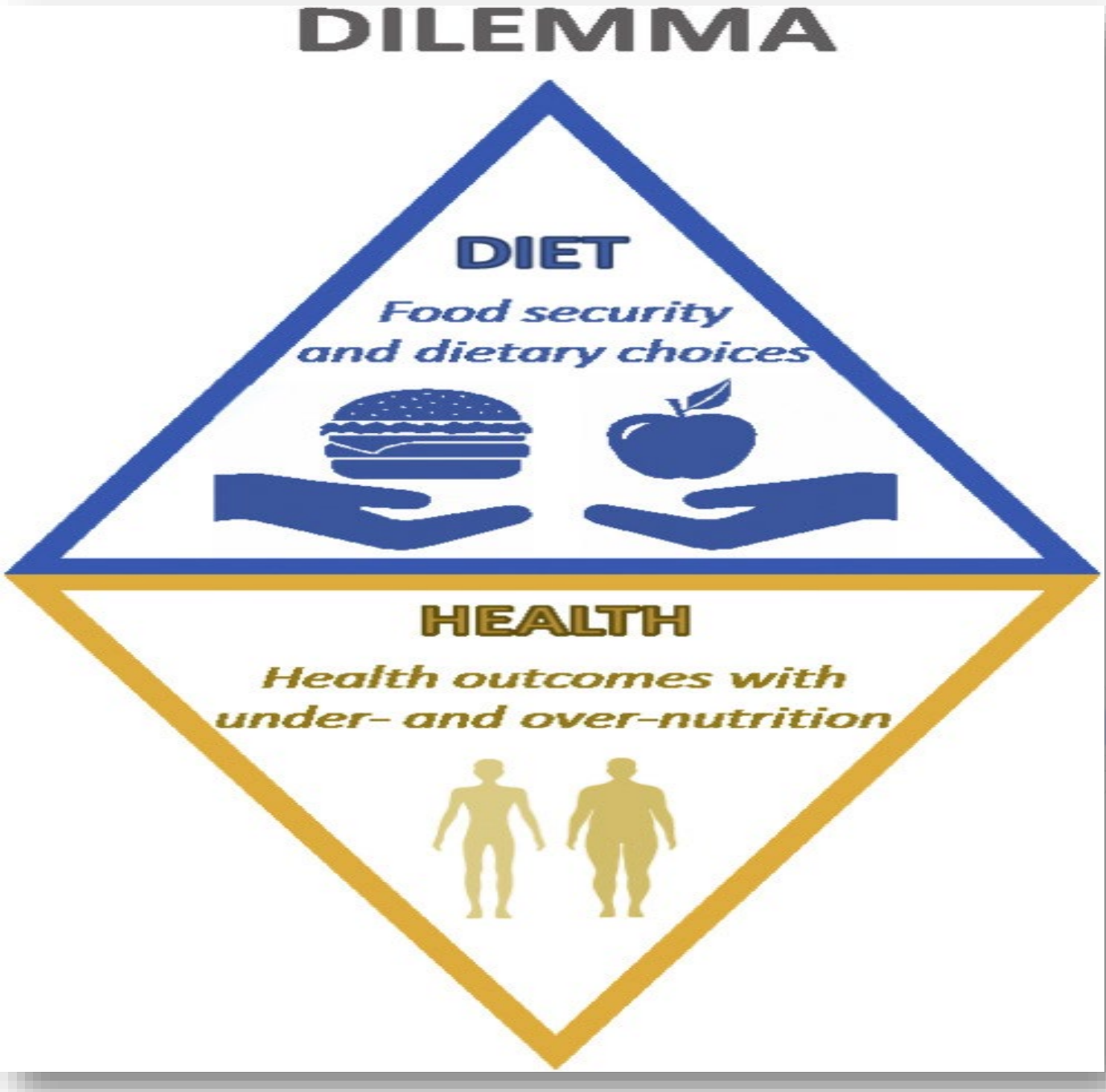


Manual for Malnutrition

During this module, you will be asked some questions to simply provoke thought and test your current knowledge please have a notepad or supervision workbook to hand to make notes. Your performance will only be measured by 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.

Acknowledgment 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 and 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 in 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

Basic essentials for life encompass both food and fluid. According to the Human Right Act (1998), individuals possess the fundamental right to access sufficient nourishment and hydration, making it an integral aspect of providing care for clients. Unfortunately, there is an increasing number of accounts concerning undernourished or at-risk individuals in hospitals and healthcare settings.

The impact of malnutrition or undernutrition is not constrained by factors such as age, race, or gender. The reasons behind this condition can be intricate, with reduced food intake due to acute or chronic illnesses, lack of awareness regarding clients' dietary requirements, and potential staff shortages all playing significant roles.

Estimates suggest that malnutrition incurs an annual cost of at least £13 billion to the health and social care budget (BAPEN 2009). Therefore, it is in everyone's best interest to promptly identify clients at risk and implement effective measures to improve their overall nutritional care.

Aside from the physical aspect, food and drink hold great psychological, emotional, and social significance, as they are associated with nurturing and care.

Balanced-Diet definition

Essential for growth, energy, health, and protection against illness are foods and fluids. Maintaining both physical and mental health and fitness relies significantly on consuming a balanced diet. Energy is required for all physical activities, be it intense activities like running or minor ones like blinking. Even the act of thinking utilizes calories, which serve as units of energy measurement. To ensure all vital functions, body tissues' building and maintenance, and regulation of body processes, adequate nutrition is indispensable. Nutrition encompasses the process of ingesting food, breaking it down, and producing the energy necessary for the maintenance and function of all living cells (Field & Smith 2011).

A nutritionally balanced diet comprises the following components:

- Carbohydrates, Protein, Fat
- Fruit & Vegetables
- Fluids
- Milk & Dairy
- Dietary Fiber
- Vitamins & Minerals

Any surplus, shortage, or disproportion in these vital elements may result in an inadequate nutritional state and, in certain instances, malnutrition (Lewis et al 2004). The NHS has introduced straightforward healthy eating guidelines, actively promoting them on their website www.nhs.gov.uk.

They put all foods into five groups:

Fruit and vegetables should be predominantly chosen to look after yourself, along with starchy foods like rice, pasta, bread, and potatoes, as well as meat, fish, eggs, and beans, and milk and dairy foods. Foods high in fat and sugar, on the other hand, should only be consumed occasionally to maintain a healthy lifestyle (NHS 2013).

Fruit and Vegetables

Likely, you are familiar with the 'five a day' initiative promoting the consumption of a diverse selection of fruits and vegetables; indeed, consuming at least 5 portions is likely the recommended minimum. Fruits and vegetables offer numerous advantages and, when certain fundamental guidelines are adhered to, they can be consumed with almost no adverse effects.

Fruits and vegetables offer a wide array of essential vitamins and minerals; several of them are rich in antioxidants, which may aid in lowering the risk of developing certain cancers; they are generally low in fat, especially saturated fats; and they serve as a valuable source of dietary fiber.

Carbohydrate

In all cultures, there exists a fundamental starchy food that forms the basis of their diet. This staple food is typically the one that can be grown most easily, such as wheat, utilized for making bread and pasta in some countries, or rice and potatoes in others. Other sources of starchy carbohydrates include pulses and cereals.

Carbohydrates, like starch, are present in varying amounts in most foods. Similarly, sugars, also carbohydrates, are found in the majority of the items we consume. Root vegetables contain high levels of starch, but as they mature, these starches transform into sugars. Conversely, fruits are initially high in sugar, but as they ripen, this sugar converts to starch. For a balanced diet, unprocessed starchy carbohydrates should comprise at least 50 percent of your food intake, with vegetables also contributing to this portion. It's essential to avoid filling half your plate solely with potatoes.

The nutritional value of starchy foods largely depends on their processing level. Less processed starchy foods contain more fiber and nutrients while having fewer added fats and sugars. Therefore, opt for whole-wheat pasta and bread, brown rice, wholegrain cereals, and potatoes with their skins.

If you haven't already, make a habit of reading food labels to know what you're consuming. Some breakfast cereals labeled as 'wholegrain' and 'low fat' may still have unacceptable levels of added sugar and misleading serving guidelines. The relatively low fat content in cereals doesn't necessarily outweigh the negative impact of refined sugar.

For a healthier breakfast, choose options like porridge oats and wheat biscuits that have minimal or no additives. It's better to add your own sugar in controlled amounts rather than purchasing products with excessive sugar added by manufacturers, often up to 3 teaspoons per 40g serving.

Fiber

Both soluble and insoluble forms of fiber play a crucial role in maintaining our body's health. They aid in blood sugar regulation and act as a natural cleanser, adding bulk that remains undigested but facilitates the movement of food through our intestines. For those experiencing constipation, increasing fiber intake can often be more beneficial than resorting to medications or food supplements.

Despite its significance in a balanced diet, fiber isn't categorized as a separate food group since it is already abundantly found in fruits, vegetables, and unprocessed starchy carbohydrates.

Meat, fish, eggs and beans

These are the primary protein sources that must be incorporated into your diet. Protein plays a crucial role in body growth and repair, but its daily intake should not exceed 15%. If you follow a vegetarian diet, ensure a diverse consumption of eggs, dairy products, pulses, nuts, and grains to meet your nutritional requirements. For non-vegetarians, healthier choices can be made by following these guidelines:

- Consume fish at least twice a week, with one portion being oily, as it provides essential fatty acids.

- Limit red meat intake to no more than 70g per day, as it contains high levels of saturated fat.
- Choose lean white meat and poultry that has had its skin removed.
- Consider trying vegetarian alternatives; it is not obligatory to consume meat daily.

Milk and Dairy Products

Skimmed or semi-skimmed milk should be opted for if you are aiming to restrict saturated fat intake because they still offer good protein sources and supply calcium for promoting strong bones.

Foods high in fat and sugars

Most of us consume excessive amounts of the wrong kind of foods, which are typically processed and high in added fat and sugar. These foods lack significant nutritional value, have more calories per gram compared to bulkier starchy carbohydrates, and often incorporate artificial ingredients that can pose health risks. Foods that should be restricted are biscuits, cakes, sweets, chocolate, fizzy drinks, sweetened breakfast cereals, and cereal bars.

Fats

Fats, found in various foods, can be categorized into two groups: saturated and unsaturated fats. Saturated fat is predominantly found in red meat, dairy products, and processed foods, while unsaturated fat is abundant in oily fish, avocadoes, olive oil, and vegetable oils.

For an improved diet, consider increasing unsaturated fat intake and decreasing saturated fats, as the latter is linked to elevated cholesterol levels, leading to heart disease, blocked arteries, and other serious health conditions.

Including fats in a healthy diet is crucial since certain vitamins are fat soluble and can only be obtained from fat-containing foods. As with any dietary aspect, opting for less processed foods and a wider array of fresh options will yield greater health benefits.

Liquids (Water)

Life depends significantly on water. In fact, over half of an individual's body weight (approximately 50 to 70%) comprises water. Although water is not classified as a distinct nutrient like vitamins or minerals, failure to replenish our body's water reserves would lead to survival being limited to just 3 to 5 days.

The importance of water extends to numerous physical functions, encompassing:

- Regular body growth, maintenance, and repair.
- Regulation of body temperature.
- Proper kidney function.
- Maintenance of blood composition and the body's chemical equilibrium.
- Elimination of waste products.

Water is lost from the body through:

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

Three primary sources provide water:

- Regular drinking.
- Ingestion via the diet, especially through fruits and vegetables.
- Generation as a by-product of chemical reactions within the body.

For most healthy adults, a daily intake of one to one and a half liters of fluid is recommended, though this should be heightened in cases of physical activity or hot weather. Older individuals might need up to 2 liters.

Liquids (Other)

Although water undeniably remains the optimal choice for hydration, other fluids also offer various health benefits. Milk, juices, tea and coffee, and even alcohol can be incorporated into a well-balanced diet.

Chapter Two

Malnutrition and Dehydration Risk Factors

Malnutrition, characterized by inadequate or insufficient nutrition, encompasses the absence of essential proteins, energy, and other nutrients, resulting in discernible implications for an individual's health and overall welfare. The Department of Health presently emphasizes the repercussions of obesity and its societal challenges, but it is crucial to recognize that malnutrition can arise from both overeating and under eating. Particularly, the elderly often experience undernourishment, which imposes a considerably heavier burden on health and social care services.

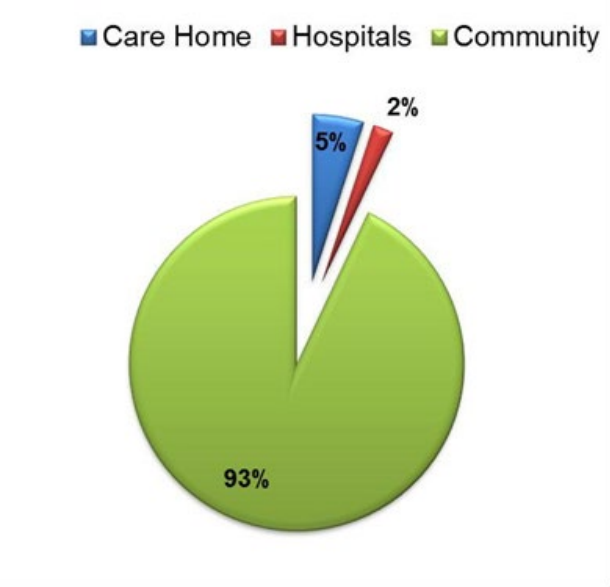
Malnutrition in the UK

According to the British Association for Parenteral and Enteral Nutrition (BAPEN), over 3 million individuals in the UK are affected by malnutrition or undernutrition, with approximately 1.3 million of them being over the age of 65. Based on BAPEN's nutrition screening week surveys conducted from 2007 to 2011, the estimated percentages of people at risk of malnutrition are as follows:

- 25-34% of hospital admissions
- 30-42% of care home admissions
- 18-20% of mental health unit admissions

The British Dietetic Association (2012) has also provided figures for individuals at risk of malnutrition, available at www.bda.uk.com.

People at risk of under nutrition in the UK.



Although obesity falls under the category of malnutrition, BAPEN employs the term "under nutrition" to refer to malnutrition.

Dehydration is characterized by an inadequate amount of water in the body, hindering the body's ability to manage and regulate its usual physical processes.

Take note of the potential causes of Malnutrition and Dehydration as presented in the table below and jot down your thoughts on the reasons behind each of them.

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 has the potential to impact anyone, it is notably prevalent in older individuals and those who experience conditions such as;

Social Isolation	Poor Mobility	Health Problem

As evident from the completion of the table above, certain clients face a higher risk of malnutrition compared to others. While it's essential to monitor all clients, some will require more frequent assessments.

Risk factors that should be taken into consideration are as follows:

- Health conditions or infections
- Recent surgical procedures
- Feelings of nausea and pain
- Dependency on alcohol
- Dementia
- Difficulty swallowing (dysphagia)
- Reduced appetite
- Episodes of diarrhea

As per the National Institute for Health and Clinical Excellence (NICE), a person is considered malnourished if they exhibit:

- A body mass index (BMI) lower than 18.5 kg/m2
- Unintentional weight loss exceeding 10% in the last three to six months.
- A BMI below 20 kg/m2 combined with unintentional weight loss exceeding 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

The calculation of a person's BMI involves their weight and height (refer to the chart on page 20). It serves as a dependable indicator for discerning whether an individual falls within the normal weight, overweight, or underweight categories.

Symptoms of Malnutrition and Dehydration

NICE suggests the consideration of nutritional support for individuals at risk of malnutrition, such as those who have experienced little or no food intake for more than five days or those who face difficulties in nutrient absorption. The typical indicators of malnutrition comprise:

- Weight reduction
- Decreased appetite
- Fatigue and reduced energy
- Lack of interest in consuming fluids and foods
- Reduced concentration ability
- Alterations in mood

What signs can you observe?

- Scrutinize the mouth - searching for indications of soreness and redness, manifestations of thrush or yeast infection, lips that are dry and cracked, a tongue that is sore, swollen, and red (glossitis), and gums that are reddened, swollen, or receding.
- Examine the condition of the skin – is it exhibiting dryness with poor coloring, pallor, and, in some cases, yellowing?
- Is the hair appearing dry, brittle, or experiencing thinning?
- Assess the eyes – are they displaying redness or inflammation, appearing glassy and sunken?
- Are clothes, dentures, and jewelry fitting more loosely than usual?

Among the more severe consequences of malnutrition on an individual's well-being are:

- Slower wound healing
- Increased vulnerability to infections
- Feelings of depression
- Heightened state of confusion

Dehydration

Maintaining proper hydration is essential for various aspects of our well-being, including body temperature regulation, mental acuity, blood chemistry balance, and oral health. Additionally, it plays a crucial role in preventing falls, pressure sores, constipation, and urinary tract infections. Elderly individuals face a higher risk of dehydration, especially when exposed to infections or experiencing diarrhea and vomiting outbreaks. Due to age-related factors, they typically have around 10% less fluid content than younger adults, as well as a potentially diminished sense of thirst and appetite. Furthermore, dehydration can be triggered by factors like medication side effects (e.g., laxatives), high temperatures, and elevated blood sugar levels.

Dehydration test:

Gently apply pressure to the skin on the client's forearm using your index-finger and thumb. The skin should promptly bounce back to its original state; if it takes an extended period or remains pinched, dehydration is probable.

For elderly clients with reduced skin elasticity, employ the same technique on their forehead rather than their forearm.

Preventing dehydration necessitates promoting the intake of at least six to eight glasses of fluid daily. Make sure fluids are easily accessible and available throughout both day and night, and they can be consumed in the form of tea, soups, etc.

Ways to enhance hydration:

1. Consume approximately 1.5 to 2.5 liters of fluids daily, which may include 6 - 8 glasses of water.
2. Diversify the types of liquids ingested, such as beverages, juices, ice creams, and soups.
3. Elevate fluid intake during hot weather.
4. Enhance the taste of water by incorporating fruit juice or squash.
5. Avoid excessive consumption of high-sugar fizzy drinks.
6. Keep alcoholic beverages to a minimum.
7. If necessary, keep a record of fluid intake.
8. Ensure easy accessibility to fluids.

Dehydration Treatment

Should the initial indications of dehydration be detected, it is imperative to implement a fluid care plan.

In the circumstance where a client experiences severe dehydration, it becomes essential to admit them to the hospital promptly for emergency medical intervention.

Chapter Three

Nutritional Requirements

Ensuring your clients receive sufficient food and drinks is an essential duty of care. Providing a balanced and nutritious menu is just the first step; the crucial aspect is ensuring that clients actually consume it. While the catering team bears the responsibility of food provision, their efforts must be complemented by collaborative work from managers, caregivers, and kitchen staff to meet the client's nutritional requirements adequately.

By working together, you, your employer, and your colleagues can collectively meet the expectations of compliance with Regulation 14 of the Health and Social Care Act 2008, as set by the Care Quality Commission. Demonstrating compliance involves maintaining records of dietary preferences, menu planning, food and fluid charts, and client satisfaction surveys.

Outcome 5. Meeting Nutritional Needs (Regulation 14).

The registered person must guarantee the safeguarding of service users from the hazards of insufficient nourishment and dehydration when providing food and hydration as part of the regulated activity. This shall be accomplished by providing:

a. A selection of appropriate and nourishing food and hydration in adequate amounts to meet the needs of the service users.
b. Food and hydration that accommodates any reasonable requirements arising from a service user's religious or cultural background.
c. Assistance, as needed, to enable service users to consume sufficient quantities of food and drink for their necessities.

"For the regulation's intent, the term 'food and hydration' encompasses, if relevant, parenteral nutrition and the dispensation of dietary supplements as prescribed. (Source: Essential Standards of Quality and Safety at www.cqc.org.uk)"Nutritional requirements assessment

When striving to avert undernutrition in a client and ensuring they receive the foods and beverages they relish, it becomes crucial to inquire about specific aspects of their unique dietary background. This customary practice takes place during the initial evaluation and must be diligently documented 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.

Effective nutritional care for a client necessitates effective communication among the client, their relatives, care providers, catering staff, and other healthcare team members. By gathering a comprehensive and personalized dietary history, one can formulate a detailed and individualized nutritional care plan.

The care plan serves as a flexible framework that can be adjusted to cater to the evolving requirements of the client.

This primary communication is crucial since it aids in identifying potential risk factors and signs and symptoms indicating the client's susceptibility to malnutrition or dehydration.

Case Study

Mary, a recent admission, sought respite care while her primary caregiver recovered from surgery. Since the passing of her husband, her appetite has diminished, and she copes with neuralgia, necessitating regular codeine treatment. Additionally, she relies on sleeping tablets and is not fond of physical activity.

At a routine doctor's appointment, a month ago, Mary's BMI measured 24, but upon admission, it decreased to 22. Her cousin contributes to her diet by providing weekly supplies of chocolate, crisps, and small bottles of whiskey.

As a habitual smoker, Mary prefers solitude and frequently skips breakfast, choosing to stay in bed later. She abstains from water consumption and rarely ingests any fluids other than coffee and alcohol.

Given the information provided in the scenario above, ponder the following questions and feel free to jot down any notes that might aid your understanding:

1. What factors might expose Mary to the risk of malnourishment?
2. Does Mary presently suffer from malnourishment, and how can you ascertain this?
3. Propose a set of actions that you or your colleagues could implement to enhance Mary's nutritional well-being.

Chapter Four

Significance of Nutritional Screening

In case a client's eating and drinking habits are recorded and it is determined that they might be susceptible to malnutrition, it is considered best practice to conduct nutritional screening. Health and social care have specific measurement tools that aid in such screening. According to the National Institute for Health and Clinical Excellence (NICE), the use of a validated tool like the 'Malnutrition Universal Screening Tool' (MUST) is recommended.

The 'Malnutrition Universal Screening Tool' ('MUST') was developed by the British Association for Parenteral & Enteral Nutrition (BAPEN) and is widely used in both hospital and community settings throughout the UK. It offers a quick and user-friendly method to identify individuals at risk of malnutrition and provides clear guidance for appropriate action. Additionally, 'MUST' acknowledges both over and under-nutrition, allowing for the creation of personalized nutritional care plans for each client.

Regular monitoring and review of the client care plan are essential to ensure its effectiveness. Goals should be measurable, achievable, and agreed upon with the clients and their families. Clients who are well-informed about their nutritional status and educated about diet and health are more likely to make the necessary changes to improve their 'MUST' score.

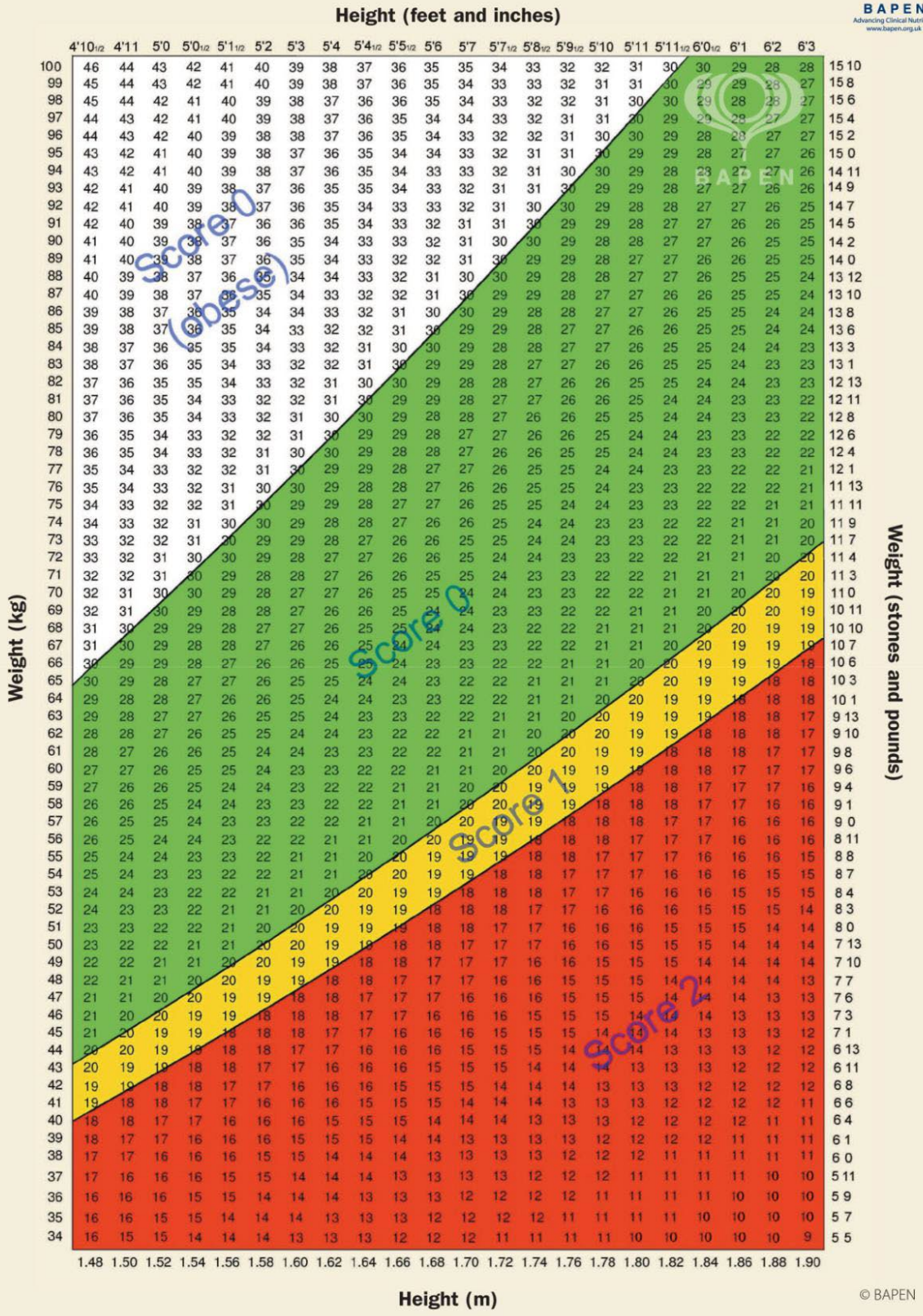
To effectively use the 'MUST' tool, measurements of weight and height are required. In cases where obtaining weight and height is not feasible, the tool provides alternative guidelines using measurements like ulna length or estimating BMI category through mid-upper arm circumference. These alternative methods are cost-effective, non-invasive, and yield reliable results.

The primary purpose of the 'MUST' tool is to detect malnutrition or the risk of malnutrition by considering a person's BMI, the percentage of recent unplanned weight loss, and the impact of acute illness. BMI is calculated by dividing weight in kilograms by height in meters squared.

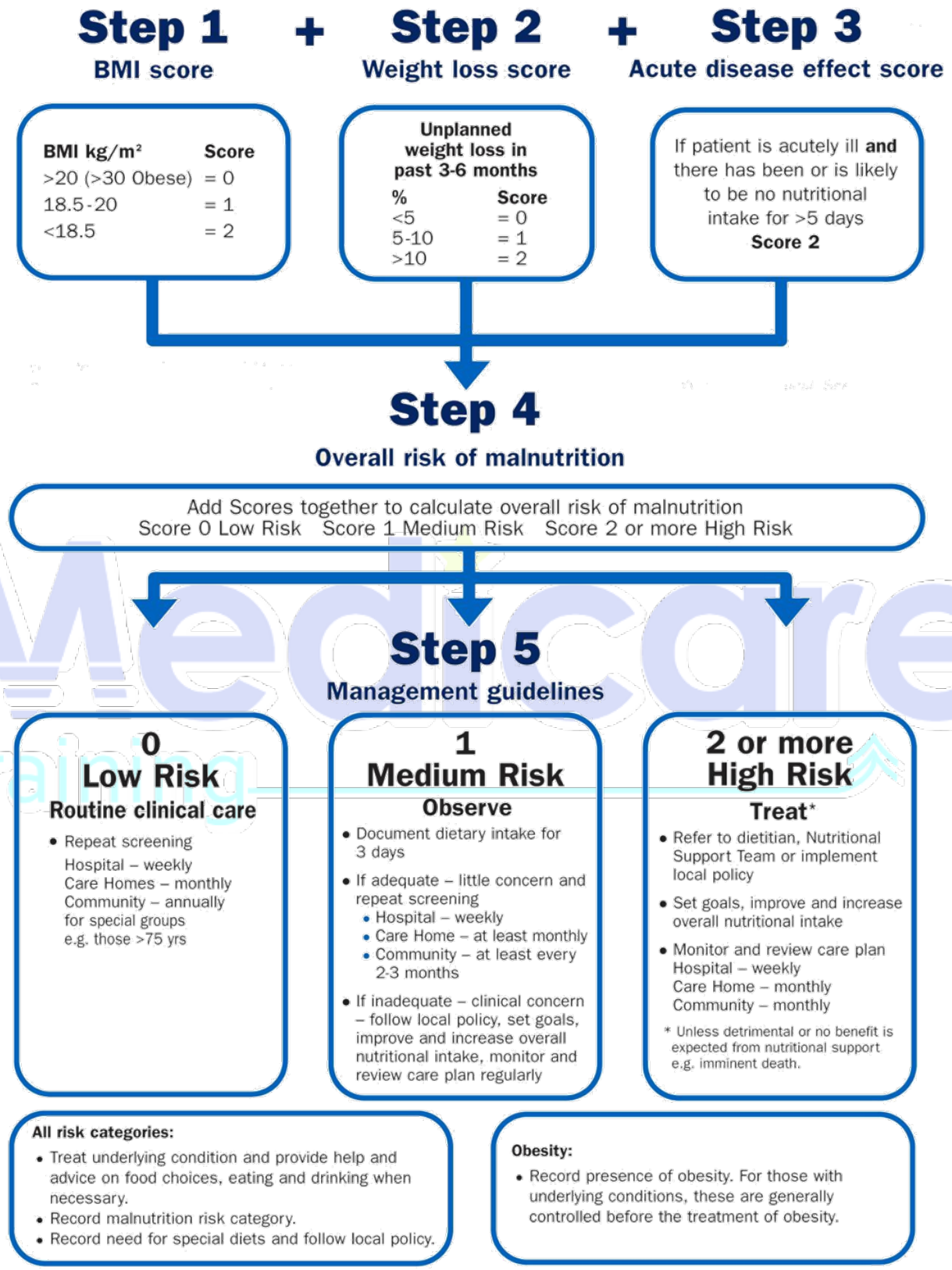
Should you desire additional details regarding the 'MUST' tool or explore alternative measures, get in touch with your training consultant or visit www.bapen.org.uk.

Step 1 – BMI score (& BMI)

BAPEN
Advancing Clinical Nutrition
www.bapen.org.uk



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
BMI score
+
Step 2
Weight loss score
+
Step 3
Acute disease effect score
BMI kg/m²
Score
>20 (>30 Obese) = 0
18.5-20 = 1
<18.5 = 2
Unplanned weight loss in past 3-6 months
%
Score
<5 = 0
5-10 = 1
>10 = 2
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

In the event that a client's 'MUST' score is 2 or higher, it is preferable to recommend them to their GP for professional intervention and support. Adhering to local policy, the GP will require the following details:

- The client's present BMI and their BMI during the past three months.
- The client's current weight and weight changes over a specific time frame, indicating any weight loss trends.
- The current MUST score or risk category.
- The client's existing food and fluid intake.

Upon receiving this information, the GP will either conduct an assessment of the client or, if content with the provided data, may suggest referral to a dietician for guidance. In the case of any evidence indicating dysphagia (swallowing difficulties), the GP will promptly direct the client to the speech and language therapy team (SALT).

The Salt

The Salt will have the capability to conduct a swallowing assessment and offer recommendations on the appropriate types of foods and necessary modified textures to avoid malnutrition and aspiration risks.

In case of concerns related to oral health, a referral to a dentist might also be deemed necessary.

Chapter *Five*

Eating and Drinking Environment

An emotional response to eating and drinking is common among people. Various factors like specific foods, aromas, and occasions can trigger nostalgic memories. Caregivers should be mindful that the capacity to enjoy meals and the social aspects of dining remains intact.

The mealtime experience should be pleasant and tailored to individual preferences and expectations. While some individuals eat out of necessity, for many, meals are a highlight of their day, and a positive experience greatly enhances their quality of life. It is essential to respect and support clients' choices, whether they prefer eating alone or in a group.

Encouraging social interaction during mealtimes is beneficial as it can have positive effects on mental and physical well-being. Nevertheless, it's important to acknowledge that certain clients genuinely prefer solitude and feel uncomfortable being observed while eating.

The layout of the dining room in care homes must prioritize client comfort while ensuring a clear and practical design that avoids an institutional feel. Creating an atmosphere that fosters enjoyment during mealtime is essential, with some homes opting for a restaurant-style ambiance, while others prefer a more familiar and homely setting.

In each care home room, including the dining area, it is crucial to reinforce the clients' sense of place and activity. This can be achieved by carefully selecting furniture, lighting, and decor that align with the activities taking place in the space.

An ideal approach involves involving clients in any redecoration or renovation processes, as their opinions hold significant value. Minutes from client consultation meetings can serve as evidence of their involvement and satisfaction, which is valuable information for the Care Quality Commission.

Obstacles

The well-being of the client must be upheld at all times, particularly during meal periods. The dining space should be devoid of any obstructions or potential stumbling hazards.

Falls Prevention

Greater risk of falling is faced by certain clients, especially those with limited mobility or impaired eyesight; hence, it is crucial to ensure the dining room floors are level and devoid of steps. To enhance safety and visibility, handrails should be readily accessible, and the floor surfaces ought to ideally possess the same color and pattern. Additionally, dining room tables should avoid pointed corners to mitigate the potential for injuries.

Safe and Sound Meal Taking

Open plan, multi-use areas have the potential to induce confusion and agitation in clients due to uncontrollable noise levels and visual stimuli. Clients may struggle to comprehend the purpose of the environment, engage in meaningful conversations, or process their surroundings effectively.

The considerable size of these spaces can also pose physical challenges for clients with mobility issues. To uphold client independence, it is essential to explore solutions like installing handrails on walls or minimizing the open space between walls and dining furniture.

Furthermore, the bustling atmosphere and commotion of a cafeteria-style dining environment can be stressful and disorienting for clients. As a consequence, their appetite might diminish, and they could exhibit challenging behaviors. The following scenarios illustrate some potential challenges: [you may list the scenarios here].

1. Mrs. Thomas, who suffers from dementia, occasionally exhibits outbursts and table-banging during meals, which can disturb other dining residents.
2. Mr. Groves requires assistance while eating due to his habit of throwing food at fellow residents, spitting it out, and refusing to chew or swallow.

Possible solutions to reduce distractions during mealtimes for clients:

1. Creating smaller sections in the dining room to minimize noise and movement, which would encourage interaction among different client groups and allow them to enjoy their meals peacefully.
2. Implementing a family-style dining setup, promoting a relaxed and sociable environment for clients, without being too regimented, thus enhancing their quality of life and physical performance.
3. Utilizing movable dividers, similar to those seen in restaurants, to create separate spaces for clients to ensure privacy and minimize distractions. This flexibility allows for adapting to different needs on different days.
4. Following the guidelines of the Care Quality Commission (CQC) to maintain uninterrupted mealtimes, unless clients express their preferences or an emergency situation arises.
5. Carefully managing the involvement of relatives and volunteers during mealtimes to avoid contributing to noise and confusion. While they can be helpful, proper coordination is essential.
6. Implementing a noise-reduction strategy within the dining area, such as using acoustic panels, to minimize disruptive sounds and maintain a peaceful atmosphere.
7. Providing individualized meal plans for clients, taking into consideration their dietary preferences and requirements, to ensure they enjoy their meals and are less likely to cause disturbances.
8. Incorporating soothing background music during mealtimes to create a calming ambiance, which can have a positive impact on clients' behavior and overall dining experience.
9. Assigning trained staff members to interact with clients during meals, engaging them in conversation and activities to divert attention from potential distractions.
10. Promoting mindfulness techniques for clients before meals, helping them stay focused and calm during dining, which could reduce the chances of disruptive behavior.
11. Implementing visual cues and signage to aid clients in understanding the mealtime routine and encourage appropriate behaviors during the dining process.
12. Designing the dining area with comfortable and ergonomic seating to enhance clients' comfort and minimize restlessness during meals.
13. Offering alternative dining areas for clients who prefer a quieter and more secluded environment to enjoy their meals without interruptions.
14. Providing mealtime activities or entertainment that align with clients' interests and preferences, keeping them engaged and less prone to disruptive behaviors.
15. Conducting regular staff training and workshops to raise awareness of dementia-related behaviors and effective strategies to manage and reduce disruptions during mealtimes.

The Caregiver's Role

During mealtimes, care givers will be engaged in practical tasks, including serving and clearing away food, as well as assisting clients during their meal. Their role in managing the dining area is also crucial to support good nutrition and eating habits, by reducing distractions and minimizing the likelihood of challenging behavior.

At mealtimes, it is essential for care givers to:

- Ensure that clients experience a calm and peaceful atmosphere, allowing them to enjoy their meals without feeling rushed.
- Encourage the use of finger food if clients face difficulties with cutlery.
- Serve food that looks visually appealing and is provided in manageable portions.
- Offer fresh water to clients regularly.
- Train staff to be friendly and attentive to the needs of the clients.
- Promote calm and polite communication among all staff members.
- Be open to providing alternative food options if clients change their preferences.

The primary objective is to create a comfortable and inviting environment that enhances the clients' dining experience and encourages them to look forward to mealtimes.

For many elderly individuals, especially those with dementia or increased frailty, unhurried meals are necessary, as they may take longer to eat due to challenges such as poor coordination, difficulty in swallowing or refusing to eat.

Chapter Six

The `Mealtime' Experience

This chapter will be divided into three primary stages, wherein we will deconstruct the mealtime experience.

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

The significance of each stage cannot be understated, as it is common to concentrate solely on the meal while neglecting the pre & post-food aspects that directly influence clients' well-being and their eating habits. For optimal results, assigning a senior staff member the role of a 'dining room champion' to coordinate all facets of the dining experience is highly recommended, ensuring seamless integration.

Pre-Meal Preparation

Preparing for meals involves ensuring that clients are adequately prepared for their dining experience. It is essential to consider their self-esteem and involve them in the process whenever feasible since it takes place in their home. This participation might include assisting in setting up the dining room or, with the right guidance on food hygiene, taking part in meal preparation and cooking. Such involvement can be integrated into organized social activities. Additionally, clients may express a preference for using their personal cutlery, drinking glasses, or plates.

Additional pre-meal tips:

- Providing menu choices remains crucial, respecting the clients' right to decide their preferred meal. It is vital to present the menu in a clear manner and at an appropriate time, considering some clients might need to review it well in advance, while others, especially those with memory issues, may require last-minute decisions. Some may even rely on sensory experiences like smelling, seeing, or tasting the options.
- Clients should be prompted to freshen up or assisted to the restroom if needed.
- Ensuring dentures are thoroughly cleaned and securely positioned.
- Recognizing mealtimes as social gatherings, encouraging clients to enhance their appearance by wearing makeup, jewelry, suitable clothing, or applying perfume.
- When appropriate, consider offering an aperitif, such as a sherry or a 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 background 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

After the clients have found their comfort in either the dining room or their designated rooms, the subsequent phase of the mealtime experience involves the actual consumption of food and beverages. This experience encompasses three fundamental components:

- The overall accessibility of food and drink.
- The variety and caliber of food and drink.
- The manner and appearance in which food and drink are presented.

Caring Clients to Ensure Their Choice

According to Outcome 5, which focuses on meeting nutritional needs following essential standards of quality and safety, the CQC emphasizes that clients should be provided with continuous access to snacks and drinks throughout the day and night. Additionally, mealtime intervals must be reasonably spaced and scheduled appropriately. The care staff's primary goal should be to assist clients in enjoying their meals with as much independence as possible.

Caring About the Client's Cultural, Religious Dietary Needs

Recognizing the individual's cultural or religious beliefs is a crucial aspect of upholding person-centered care. It is of utmost importance to ensure that clients' specific instructions related to their cultural or religious background are respected, particularly concerning their dietary habits. The CQC emphasizes in Outcome 5 that all meals should be tailored to meet the diverse cultural, religious, and dietary needs of the clients.

Care staff have the responsibility to ensure that clients' dietary requirements align with their cultural or religious beliefs, including their customary eating and drinking practices. This information must be effectively communicated to the entire care team, including the catering staff, and accurately documented 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 order to maintain a well-balanced diet, the care establishment has the responsibility to guarantee that all the food and beverages consumed by the client are both nutritious and appealing, while also prioritizing safety.

The home manager holds the duty to ensure compliance with relevant food hygiene legislation, including the Food Safety Act of 1990, during all food and drink preparation and storage. Moreover, the manager must verify the credibility of food suppliers when making purchases.

If a client necessitates a special diet, such as for a diabetic individual or someone with dysphagia (difficulty in swallowing), a dietician and a member of the speech and language team (SALT) must conduct an assessment.

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 ensure that food is presented with an emphasis on attractiveness and appetizing qualities. The manner in which food and beverages are offered and served plays a pivotal role in stimulating clients' appetite. According to the CQC regulations (2010), it is essential to present food in an appealing manner to promote enjoyment.

Catering staff must make an effort to prepare puree meals in a manner that is both attractive and appealing. The use of food molds can be instrumental in giving puree meals a structured appearance, mirroring that of a regular dish.

Before assisting a client with their meal, or before serving food as a caregiver, take a moment to consider whether you would personally enjoy eating the same meal. Should you find yourself answering negatively, take the opportunity to explore ways to enhance the food's appeal.

Cutlery and Tableware

Recent research has delved into the investigation of cutlery and tableware types to aid individuals with visual impairments or dementia during meals. Timlin & Rysenbry (2010) reached the conclusion that individuals with vision difficulties benefit from tableware that establishes a strong contrast between the plate, table, and the food on the plate. Notably, they discovered that serving food on blue plates, as opposed to white plates, increased food intake in clients with dementia. This advantage was particularly evident when lighter-colored foods, such as rice or potatoes, were served, as darker plates tended to provide better visibility of the foods. Similarly, using blue cups or glasses instead of clear ones proved beneficial for individuals with visual challenges.

To foster a relaxed and enjoyable dining environment, caregivers should identify potential triggers that could lead to confusion or agitation in clients. One helpful approach involves minimizing the assortment of cutlery, which may also

encourage clients to become more independent with their eating. Furthermore, it is recommended to use non-patterned plates, as clients tend to concentrate on the pattern rather than focusing on the food itself.

Supporting Clients to Eat

If there exists a means of introducing aids to support independent feeding, it should be implemented. In cases where clients require assistance, the following guidelines should be followed:

Preparation

- Ensure the client is completely alert and prepared to have their meal – their mouth should be clean, and dentures properly in place.
- Ensure the food is appealing, appetizing, and served at an appropriate temperature – ask yourself, 'Would I be willing to eat this?' If your answer is negative, don't expect the client to eat it either.
- Ensure the client's comfort and relaxation by providing support in an upright position, utilizing pillows if necessary.
- Sit adjacent to the client, ensuring they can see you – account for any visual impairments; avoid sitting on their blind side.

Eating

- Allow the client ample time, avoiding rushing, which could heighten the risk of choking and diminish the dining experience.
- If the client takes a long time to eat, consider offering food in smaller, more frequent portions instead of the usual three meals a day.
- Encourage the client's independence by enabling them to perform tasks on their own, such as taking the fork or spoon after you've placed food on it.
- While presenting the food, describe each dish to the client, providing them with an idea of what to anticipate with every bite.
- Serve small quantities at a time, perhaps using a teaspoon, ensuring the client finishes one mouthful before offering another.
- Uphold the client's dignity throughout the meal by engaging in conversation (while discouraging talking and eating simultaneously), helping them stay neat and tidy (without treating them like a baby or using bibs), and allowing them to dictate their food choices and pace.

After Eating

Provide fluids for rinsing their mouth and motivate them to maintain an upright position for thirty minutes to assist with digestion.

Post Meal

To prevent clients from feeling rushed, refrain from clearing tables until everyone has completed their meal. Clients should be given the option to assist if they wish.

Observe the waste on returned plates, as empty ones indicate clients' satisfaction with their meals, but an increase in leftovers might raise concerns. If significant amounts of food are left on plates, it may be necessary to notify the individual responsible for the dining room or the catering staff.

Caregivers must now fulfill all required documentation, including fluid intake and diet charts, and report any concerns to the responsible person. (Sample forms are available at the manual's end).

Chapter Seven

Diet Classification and Improvement

Identifying the factors leading to malnutrition and dehydration in vulnerable clients and understanding the significance of dietary supervision are vital responsibilities for care providers. The ultimate responsibility for assessing nutritional standards and compliance lies with the CQC, as specified in Outcome 5. This outcome mandates that all clients must have access to a variety of appropriate and nourishing food options, along with sufficient hydration to meet their requirements.

To cater to each client's unique dietary requirements, it is crucial to regularly monitor their nutritional status. According to Merriman (2011), consistently weighing residents and responding promptly to unexpected weight loss are crucial components of this monitoring process.

A full nutritional assessment is mandatory for all new admissions to ensure the planning of menus that are both balanced and appropriate for the client's health and food preferences. The development of food modifications, including special diets, must align with the advice provided by GP's, dietitians, and SALT members.

In delivering nutritionally balanced diets to clients, caregivers must adopt the "food first approach," as we have observed. Therefore, caregivers need to possess a fundamental understanding of the various types of diets available and techniques to enhance nutritional intake. Diets can vary in nature and come in different types, some of which include:

Diet Classification:

- A regular, well-balanced diet.
- Special modified textured diets are designed for individuals with swallowing issues, known as dysphagia. These diets come with specific dysphagia diet food texture descriptors that help inform the staff about the composition of the modified textured diets.
- These descriptors offer comprehensive information about the types and textures of foods necessary for individuals experiencing dysphagia, a condition that leads to difficulties in swallowing and puts them at risk of choking or aspirating food or liquid into their airways. The purpose of these descriptors is to establish a consistent vocabulary for all healthcare professionals and food providers when discussing 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

Clients with swallowing difficulties frequently opt for puree diets, which can lead to rapid weight loss due to the increased water content in the pureed meals. To counter this issue, regular weighing of clients is necessary, and their puree meals should be enriched with high-calorie ingredients like full-fat milk, cream, butter, and cheese. Additionally, traditional dishes such as stews and curries can be enhanced with supplements such as cheese and butter. The crucial aspect is to optimize the taste and flavor of pureed foods to enhance their appeal and palatability.

See the 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

Certain clients may be offered specialized diets, like Halal, Kosher, or gluten-free options, due to cultural, religious beliefs, or medical conditions. For instance, Buddhists commonly follow a vegetarian diet, while Hindus may consume dairy products provided, they are free of animal fat.

Finger Foods

For clients facing challenges with cutlery use, slow eating, or difficulty concentrating during meals, finger foods offer great utility. They not only present an appealing appearance but also enable easy handling.

Though maintaining a balanced diet is crucial for overall health, the British Dietetic Association (2013) provides valuable recommendations to enhance clients' nutritional intake:

1. Advise clients to eat and drink in smaller, frequent portions, particularly when they are alert, even if it deviates from regular meal times at home.
2. Enrich meals with high-energy foods. Incorporating protein-rich dried milk powder into milk for cereals, drinks, custard, porridge, yogurts, milk puddings, cream soups, and mashed potatoes can be beneficial.
3. To boost a client's nutritional intake, avoid low-fat/diet alternatives and encourage the consumption of high-calorie foods like biscuits, cheese, crisps, peanut butter, chips, and chocolate. Utilizing nutrient-dense liquids, such as milk or rich gravy to puree foods, can add both calories and flavor.
4. Choose full-fat milky drinks such as hot chocolate, Horlicks, Ovaltine, fruity milkshakes, and smoothies. To encourage improved intake, provide foods at a comfortable temperature.
5. While recognizing the importance of food and fluid intake, it's crucial not to overlook the social and psychological aspects of eating and drinking. Encourage group activities, such as cake and bread making, as part of social events or luncheon clubs.
6. Whenever possible, support clients in going on food shopping trips.
7. If needed, the GP could prescribe a vitamin/mineral supplement.

These recommendations can significantly improve the nutritional well-being of clients.

Snacks

If there is a concern about clients being undernourished, promoting snacking between meals could be a beneficial approach. Loved ones and acquaintances could bring in their preferred treats, while caregivers should ensure the availability of nutritious snacks throughout the day.

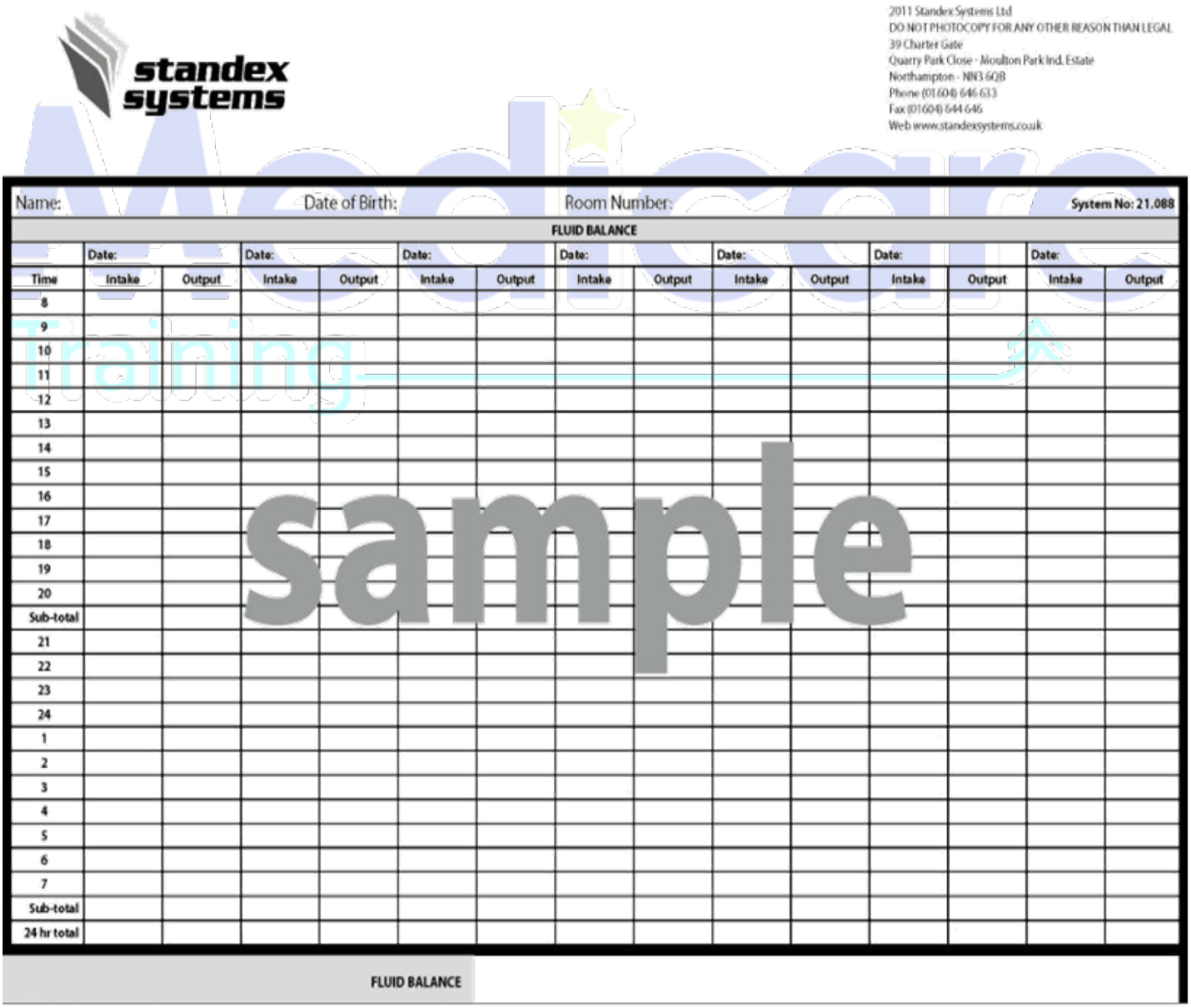
Individuals with smaller appetites, who may not consume large meals, might find snacks appealing. These snacks can be enjoyed between meals, such as mid-morning, mid-afternoon, and before bedtime. Options like cakes, fruits, biscuits, soups, smoothies, milky drinks, cheese, yogurts, and teacakes are excellent examples of suitable snacks.

The Use of Oral Nutritional Supplements (ONS)

Although ONS have demonstrated its ability to enhance people's nutritional status, it remains crucial to adhere to the 'food first' principle. Primarily, clients must always receive assistance and encouragement to consume their regular meals.

Oral nutritional supplements, available by prescription, come at a significant cost and are designed to 'supplement' an insufficient diet, not to replace meals.

If there are concerns about clients being at risk of malnutrition or dehydration, or if uncertainties exist regarding the appropriate support for an individual, discussing these matters with your manager is advised. In cases where clients have specific needs, seeking assistance from a GP, SALT, or other healthcare professionals might be necessary.



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FLUID BALANCE

	Date:		Date:		Date:		Date:		Date:		Date:		Date:	
Time	Intake	Output	Intake	Output	Intake	Output	Intake	Output	Intake	Output	Intake	Output	Intake	Output
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FLUID BALANCE

References and Further Reading

The 'Malnutrition Universal Screening Tool' ('MUST') is included here by the courtesy of BAPEN (British Association for Parenteral and Enteral Nutrition). Additional details about 'MUST' can be found at www.bapen.org.uk. This information was last accessed on 2.02.2013.

The following references provide valuable insights into nutrition and related topics:

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