



Project Milkshake Information Pack

NHS Greater Glasgow and Clyde Care Home Dietitians



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About Project Milkshake

Fortified milkshakes are a key part of the nutritionally fortified food and fluid options mentioned in the MUST Step 5 pathway. Most milkshake recipes used in care homes feature a range and variety of different ingredients, which can have a significant impact on the calorie and protein content. The Care Home Dietetic Team has reviewed a range of recipes used within different health boards and care homes.

The recipes were adapted and trialled to meet the increased protein needs of the older adult population (Bauer et al, 2013). From the testing, fourteen recipes were created. In addition, milk alternatives have been incorporated in order to support residents who dislike milk, or are unable to tolerate it.

This project was piloted within the NHS Greater Glasgow and Clyde (NHSGGC) area to test whether residents enjoyed the milkshakes. In addition, introducing milkshakes had a positive impact in maintaining residents weight, reducing risk of malnutrition and reduced falls.

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MUST and MUST Step 5

Within NHSGGC, the Malnutrition Universal Screening Tool (MUST) is used to screen residents for risk of malnutrition. Once MUST scoring is complete, care homes use a MUST management plan known as MUST Step 5. Please note in other places nutritional intervention may be started with a MUST of 2, however in GGC, the MUST pathway is started by care staff for residents with a **MUST score of 1 or above**. MUST Step 5 helps highlight nutritional risk and supports the creation of an action plan. This is based on food fortification, weekly weight and MUST review, and the completion of food and fluid charts. This ensures all dietary needs are being met, and that alternative options are available if required. Nutritional aims are set and then reviewed at 4 weekly intervals. At the review, the decision is made whether further intervention (or involvement from other healthcare professionals such as the Care Home Liaison Nurse (CHLN) or Dietitian) is appropriate. Once a referral has been made to the CHLN or Dietitian, it is the care home's responsibility to continue with 4 weekly reviews until the resident no longer needs a MUST Step 5.

MUST and MUST Step 5 Resources:

MUST and MUST Step 5 Videos:

<https://www.nhsggc.scot/your-health/care-homes/nutrition-in-care-home/>



MUST Step 5 Guidance Notes:

<https://www.nhsggc.scot/downloads/must-Step-5-guidance-notes/>



MUST Step 5 Documentation:

<https://www.nhsggc.scot/downloads/mjust-Step-5-documentation/>



Malnutrition



Malnutrition is a condition that can result from getting too much or too little of certain nutrients. This can lead to negative effects on the body including how it functions, overall health and quality of life.

What are some of the common signs and symptoms of malnutrition?

- Unplanned weight loss - which can cause clothing, dentures, belts or jewellery to become loose
- Loss of appetite and lack of interest in food or fluids
- Reduced energy levels, leading to a feeling of lethargy and fatigue
- Reduced muscle strength and therefore reduced mobility
- Reduced independence and ability to carry out daily activities
- Alterations in mood which might cause feelings of depression
- Increased risk of infections/ recurrent infections, taking longer to recover and poor wound healing
- Reduced quality of life

Why is food fortification important?

When someone has a reduced appetite, food fortification can help prevent malnutrition. Those who are malnourished or at risk of malnutrition are not receiving enough calories and essential nutrients like protein and vitamins to meet their body's needs. The food and fluids provided should aim to supply all necessary nutrients to minimise weight loss and malnutrition. Fortifying regular foods with nutrient-dense options high in calories, protein, and other nutrients can achieve this goal without increasing portion sizes.

What foods and fluids are useful to fortify a resident's diet?

In order to reduce the risk of malnutrition for residents, care homes are advised to fortify meals with cream, butter, cheese and other high energy foods as part of the MUST Step 5 pathway. The aim is to increase a resident's energy intake with an additional 500-600 calories daily by using the suggested options in section 3 of the MUST Step 5 paperwork. It is helpful to review a resident's food and fluid preferences along with their food record charts to see what the resident enjoys eating and drinking.



MUST Step 5

This is the first page of NHSGGC MUST Step 5 documentation to be used in homes for residents with a recent MUST score of 1 or above.

MUST Step 5: Nutritional Management Plan for Care Home staff

Completion of this form and insertion in the resident's care plan will provide evidence that you are managing their nutritional risk. It is designed for qualified staff to identify the risk factors, take suitable action if appropriate, and review progress (see local guidance notes)



DOB/CHI:	Name:	Care Home:
Height:	Current Weight:	Date:
Activity Levels:	Highest Weight past 6 months:	MUST Score:
		Assessed by:

**** COMMENCE FOOD AND FLUID CHART FOR 3 DAYS FOR ASSESSMENT AND TO ASSIST WITH THE COMPLETION OF SECTION 1 BELOW. ALSO REMEMBER TO WEIGH WEEKLY ****

1 – Problems affecting Nutritional Status (refer to local guidance notes)

Indicate any factors affecting the resident's ability to eat and drink or nutritional status. Indicate by circling yes or no

	Yes / No	Action taken if required	Signature / Date
a) Swallowing difficulties	Yes / No		
b) Dental problems	Yes / No		
c) Postural problems/requires support to eat & drink	Yes / No		
d) Recent acute medical issues e.g. infection, vomiting, diarrhoea, constipation, pressure sores	Yes / No		
e) Mental health issues/ challenging behaviour	Yes / No		

**** Following completion of Section 1, consider if disease progression is recognised and discuss with GP (see guidance notes) ****

Further nutritional intervention no longer appropriate Signed: _____

2 – Establish Nutritional Aims (tick those appropriate to resident). Review these aims using progress chart overleaf

Nutritional Aim (s)	Date	Signature
1) Promote weight gain back to healthy BMI range <input type="checkbox"/>		
2) Maintain current weight/nutritional status <input type="checkbox"/>		
3) Optimise nutrient intake during period of illness <input type="checkbox"/>		
4) Increase and promote adequate fluid intake <input type="checkbox"/>		

3 – Commence Food Fortification for 4 Weeks and Record on Food/Fluid Charts

- Aim for 3x energy dense meals and 3x nourishing snacks daily
- Implement a minimum of 3 – 4 interventions below
- Inform chef / kitchen of interventions and resident's current dietary requirements (use dietary notification form if available)

ADDITIONAL GUIDANCE - FOOD FORTIFICATION

Date commenced: _____

Dietary intervention	Energy content (kcal)	Protein (g)	Implemented daily
Fortified milk (add x3-4 tablespoons of dried milk powder to 1 pint of milk – use in drinks, cereal, smoothies etc)	560-590kcal per pint	34-37g	Yes / No
Add extra butter / mayonnaise to potatoes, vegetables, sandwiches, biscuits at meals and snacks	75kcal per portion	n/a	Yes / No
Add single or double cream (50-60ml) to soups/puddings	95 – 248 kcal	n/a	Yes / No
Add additional sugar/jam/honey to drinks and puddings throughout the day	20-40 kcal per teaspoon	n/a	Yes / No
Offer 3 energy dense snacks a day (see snack list)	Aim for a minimum of 150 kcal per snack	6g per snack	Yes / No
High protein items should be encouraged from menu	Will vary	18-24g per meal	Yes / No
Offer homemade milkshakes/over the counter	200-550kcal per drink	8-20g per drink	Yes/ No

THIS DOCUMENT IS CURRENT, PLEASE DO NOT ARCHIVE UNLESS REQUESTED BY THE HCP
Produced by The Care Homes Nutrition Group

Review date: February 2017

Please consider the reasons why a resident has a reduced oral intake. These can be established using section 1 of the MUST Step 5 paperwork.

Fortified milkshakes are part of the MUST Step 5 pathway

Food fortification is an important part of managing malnutrition and milkshakes can support residents to receive extra calories and protein.



Implementation of Milkshakes

To support the planning and implementation of milkshakes in the care home, the following resources have been developed:

- A [recipe book](#) containing 14 milkshake recipes
- A [checklist](#) at the end of this information pack
- A series of [videos](#) with a Care Home Manager, Chef and Registered Care Home Nurse

Who should be involved?

Nutrition is everyone's business, so all staff in the care home should be involved. The whole team should have regular contact to review the use of milkshakes and help plan which recipes to make. It may also be useful to include housekeeping staff in the training. This can help them to see the value of prompting residents to finish milkshakes rather than clearing away their glasses. They may also see the importance of asking residents why they are not drinking them and offering alternatives.

Which residents should be offered fortified milkshakes?

Any resident identified with a risk of malnutrition should be offered fortified diet and milkshakes. This includes residents with a MUST score of 1 or above on an active MUST Step 5.

Recipe Planning

There is no 'right way' to implement the milkshakes. Milkshakes can be made daily in the home, or every two days and stored in the fridge. It's useful to make different varieties of milkshake each time to test the most popular flavours in the home.

It is recommended testing all of the recipes with residents, to ensure individual preferences are met. Each recipe should be tested several times as it may take time for residents to get used to different flavours. Initially, offering 50ml 'shots' can support the introduction of the milkshakes and help residents determine which flavours they enjoy the most.

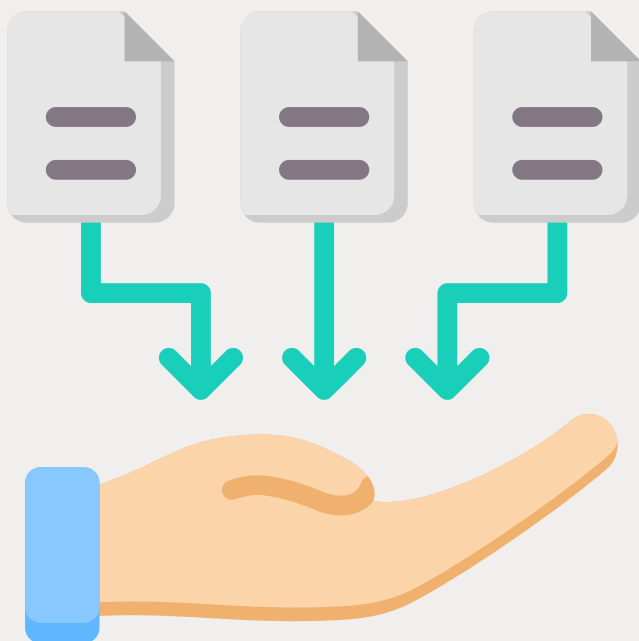


How Do I Know the Milkshakes Are Helping My Residents?

MUST is a very useful tool to identify nutritional risk, but when starting residents on milkshakes other methods can be used to track progress.

Please note, the following data collection methods are suggestions to help support tracking of milkshakes:

- **MUST scores, weights and BMIs** - these can be monitored every month and tracked by care home staff.
- **MUST Step 5 tracker** - it may be useful to monitor this to review the progress of MUST Step 5 and oral nutritional supplement (ONS) usage.
- **Daily milkshake tracker** - this can be completed by care staff who are offering milkshakes and should include volume offered, volume taken and flavour. This tool can be used to support implementing milkshakes for residents for a few weeks and once this is set up can transfer this to the residents food and fluid charts
- **Recording of milkshakes**- as with all fortified food and fluids, if a resident is on an active MUST Step 5, all milkshake intake should be recorded on food and fluid charts.



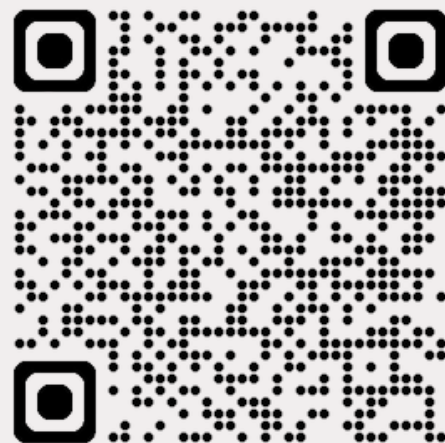
A blank milkshake volume tracker can be found on the appendix section of this information pack. Other examples of data collection tools can be found on the website alongside the other project milkshake resources. This can support tracking if the milkshakes are helping residents.



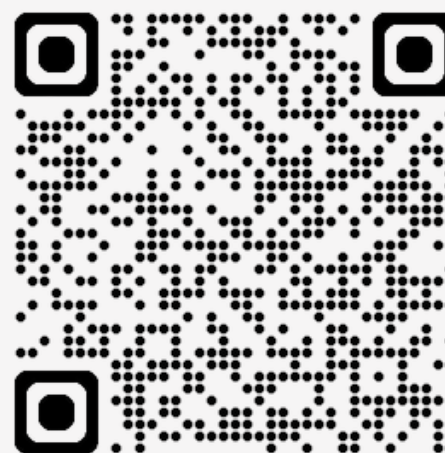
Supporting Information Videos

Below are the links to information videos to support implementation of milkshakes. The videos are question and answer style with a Care Home Manager, Chef and Registered Care Home Nurse.

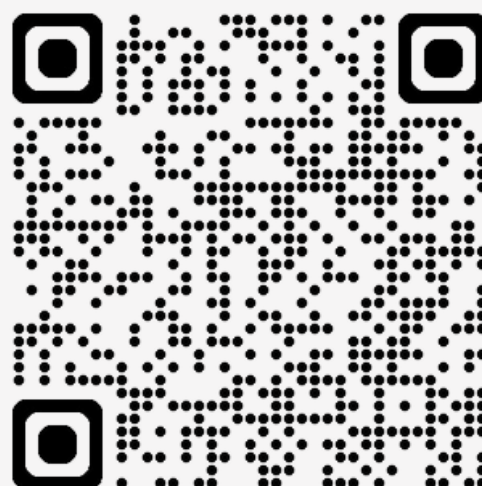
Care Home Manager Video:



Chef Video:



Registered Care Home Nurse Video:



Frequently Asked Questions (FAQs)

What volume of milkshake should residents be offered?

Initially, offering 50ml 'shots' can introduce the milkshakes and help residents determine which flavours they prefer. Gradually increase the volume as per the resident's acceptance and tolerance. Aim to increase up to 200ml as a snack option, with a maximum of 400ml daily. This can be especially useful if a resident enjoys drinking fortified fluids more than eating solid food. This increase can be done in as little as 2-3 weeks, resident dependent. The amount of milkshake provided will be individualised to the resident and should be reviewed on an ongoing basis.

If someone is on thickened fluids what should they be offered?

The milkshakes can be thickened using a prescribed thickener, following the instructions for the advised IDDSI (International Dysphagia Diet Standardisation Initiative) level. Milkshakes should **always be tested** for the correct level after preparing and prior to serving. For testing methods, please refer to the [IDDSI website](#). Fluid thickening instructions and testing methods can also be found [here](#). Please mix thickener and 200ml milkshake in a shaker for at least one minute, then beat with a fork for a further minute. Leave the drink to stand for **at least 5 minutes** (as milk based drinks can take longer to thicken) until the desired consistency is achieved and consume within 2 hours. It should also be noted here that all recipes should be put through a strainer/ sieve so there are no lumps and they are one formed consistency. The recommended funnels for flow testing can be found on the [IDDSI website](#).

What should I do if somebody experiences an upset stomach?

Consider other factors that may be causing an upset stomach (e.g. nausea, diarrhoea, vomiting) such as: medications, any current bowel conditions that may have flared up, current fluid intake, and prescribed ONS intake. Please also think about the amount of fortified options selected as part of the MUST step 5, limit these to 3-4 at a time.

If there is a resident presenting with lactose intolerance, please note that recipe 6 (Chocolate Peanut Butter Shake) and recipe 10 (Fortified Fruit Juice) are cow's milk free. Due to the fat and fibre content of Recipe 6: Chocolate Peanut Butter Shake, limiting the total volume to 200ml per day is recommended.



Frequently Asked Questions (FAQs)

What should I do if there are concerns with a resident becoming overweight?

If a resident is steadily gaining weight and has become overweight, we would suggest reviewing the need for a fortified milkshake. In the recipe book there is a 'healthier choice milkshake' recipe which can be used for residents who don't need to gain weight, but do enjoy their milkshake/ want to be included in the milkshake round. Alternatively, milkshakes can just be gradually reduced and discontinued. Please note, if the milkshakes are being changed to the healthier choice version, or been discontinued, continue to monitor the residents weight and MUST score monthly to ensure this does not drop significantly.

When should milkshakes be offered?

Milkshakes should be offered after mealtimes to avoid reducing a residents appetite before their next meal. They can be a useful option if someone does not manage much of their meal or snack, and they are also helpful if someone is looking for a snack during the night.

When should my resident stop the fortified milkshakes?

The discontinuation of a residents MUST Step 5 doesn't necessarily mean that milkshakes should be discontinued as well. If the milkshakes are supporting the resident to maintain their weight, then it may be appropriate to continue to offer these. If a resident no longer enjoys a milkshake, try a different flavour that they may prefer.

What should I do if there are concerns with a resident who has diabetes?

If a resident meets the criteria to be offered fortified milkshakes, but they also have a diagnosis of diabetes, it would be recommended to offer one of the lower sugar milkshake options (e.g. low volume milkshake). Where high blood glucose levels are noted in a resident receiving milkshakes, it may be necessary to adjust diabetes medication to achieve optimum blood glucose levels. Discuss with the resident's diabetes team or GP for more guidance. Here are some useful resources for further information about diabetes in care homes:

- Diabetes UK: <https://www.diabetes.org.uk/for-professionals/improving-care/good-practice/diabetes-care-in-care-homes>
- British Dietetic association resources for Type 1 and Type 2 Diabetes: Type 1 - <https://www.bda.uk.com/resource/diabetes-type-1.html> and Type 2 - <https://www.bda.uk.com/resource/diabetes-type-2.html>



Frequently Asked Questions (FAQs)

How do I know the nutritional content of the milkshakes?

In the recipe book there is a breakdown of the nutritional content of each of the recipes per 50ml, per 100ml and per 200ml. This includes calories, protein, fat, carbohydrates and fibre. There is also a page that details any allergens in the milkshake at the end of the recipe book.



Can I change the recipes or ingredients?

Making changes to the recipes is not recommended. One of the main aims of introducing the recipe booklet was to create standardised milkshakes with known nutritional content that can be used as part of the MUST Step 5 pathway. The 14 recipes have been adapted and tested to ensure they offer choice, meet individual preferences and support residents to meet protein and calorie requirements. The only exception to this may be trialling the use of decaffeinated coffee for 'Recipe 9: Coffee Shake' if offering this to residents in the evening or night time.

What do I do if I need support implementing milkshakes?

Use the supporting resources provided on the website and detailed throughout this information booklet:

- [Checklist](#) to support milkshake implementation
- [3 information videos](#)
- [Data collection tools](#)
- [Recipe book](#)

All of this information should support successful implementation of milkshakes in the home. If further support is required, please complete a [contact form](#) to access support from the Care Home Dietetic Team via the Care Home Collaborative.



Frequently Asked Questions (FAQs)

What is the shelf life of a jug of milkshake if refrigerated on the unit?

Once made up and refrigerated, milkshakes can last up to **48 hours**. That being said, to reduce waste, the exact amount of milkshakes needed for residents should be prepared so therefore these are usually served within **24 hours**.

How can I make the milkshakes a social activity and do I need to have a 'milkshake launch event'?

Any themes can be used to incorporate the milkshakes - use your imagination!

One example that has previously been used is a 1950's diner/ Grease theme. Using social activities for tasting sessions, involving residents in activities and changing the environment can increase intake. A 'milkshake launch' is not compulsory, but we strongly recommend it so everyone in the home is aware of the milkshakes and has the opportunity to try them. If you do decide to go ahead with a launch, it is recommended that the planning is completely led by care home staff and involving the residents where possible.

How do you start and rotate the flavours in your home?

As mentioned above, a launch event can be useful to offer a trial of all the different milkshake flavours. Some homes choose the higher calorie or protein options (e.g. mini energy boosting) mainly as they are the favourites. This should also be linked to resident preferences in the home as it should be person centred care. For example in one of the pilot care homes, one resident only liked the strawberry flavour so they received this every day. It is recommended to trial milkshake flavours with residents up to three times before determining they dislike a flavour as if it is something new it can take a little while to get used to.

Can the milkshakes be served in different ways?

Milkshakes can be served in different ways that aim to meet residents preferences (for example hot, cold, shot form). If your residents don't like cold drinks, only hot drinks, try serving some of the milkshake recipes hot for example the chocolate fortified milkshake, the malted milkshake or the coffee milkshake. In the summer, milkshakes can also be served via ice pop moulds, but please note this can be messy as they melt quickly.

Milkshakes can also be offered in a 50ml shot form more frequently for residents who prefer smaller volumes.



Frequently Asked Questions (FAQs)

What type of cream should I use in the recipes?

Either fresh or UHT cream can be used in the recipes. The chef in the pilot Care Home Lillyburn however advises use of UHT cream as this has a longer 'use by' date. Double cream should be used as opposed to single as this is higher in calories and fat content.

How are the milkshakes linked to oral nutritional supplement (ONS) usage?

During the pilot of the project, we discovered that overall, ONS prescriptions in the home reduced. This is linked to the fact that milkshakes together with food fortification can be commenced immediately by care home staff when a resident scores a MUST score of 1 or above, as there is no waiting upon an ONS prescription. If a resident is prescribed ONS and you think that they no longer require them, please do not discontinue these without speaking with the CHLN and dietitian. This decision will be made as a team between care staff, CHLN and dietitian and may be a gradual process changing over from ONS to homemade milkshakes.

During the pilot, what was the biggest benefit seen to residents and staff?

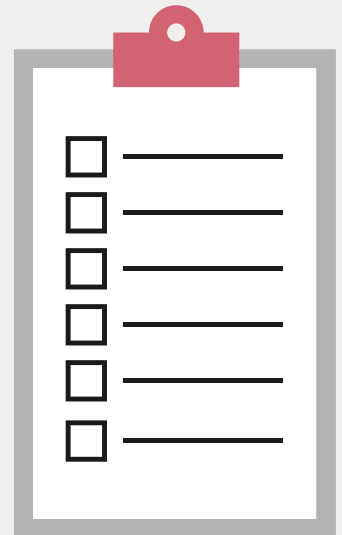
There were many benefits witnessed throughout the project. Staff were more confident to start milkshakes immediately and give them daily as part of MUST Step 5. Communication as a whole also improved throughout the home. In terms of residents, for some, their overall condition improved including less falls, improved mobility, less frequent illness etc. It should be noted that 'cause and effect' cannot be established here, however in some cases the only change to the care plan was addition of milkshakes.

What was the biggest challenge faced by Care Home pilot 2, Lillyburn?

There were a number of challenges faced, and these can be and were overcome. Mainly staff didn't have the confidence to stop MUST Step 5, this is where training through MUST [videos](#) or [webinars](#) is crucial to support the project. Another challenge was getting everyone on board with the project, but communication between the teams about the milkshakes was crucial. This was helped by having staff included in the daily flash meetings. In these meetings, the manager and chef would ask staff how the residents were getting on with the milkshakes and dealing with any problems (i.e residents not taking, disliking flavours, wastage).



Checklist for Care Home Managers



Here is a checklist of all the things that can be done to support the implementation of milkshakes within the care home. These can be marked off as things to help stay on track. Hover over the checklist items for further information and links.

Leadership team to read the [information pack](#) and share the [recipe book](#) with the kitchen team

All staff to complete the MUST training videos

Staff completing MUST Step 5 to read the guidance notes

Identify residents who are on a MUST step 5 pathway

Meet with kitchen team to review and order recipe ingredients

Gather staff to watch the supporting videos

Meet with kitchen team and care team to plan the launch of the milkshakes

Contact families to update on launch

Hold a launch event to

Display the 5 top tips poster in the kitchen or dining area

Discuss with team on the use of the [volume tracker](#) and identify who will complete this



Summary

Fortified milkshakes are a useful tool in supporting residents nutrition and hydration status. By using a variety of flavours and ingredients, residents can enjoy a nourishing and tasty drink.

Continue to support residents nutrition by providing fortified milkshakes (where indicated) on a daily basis. For more care home related nutrition advice please see our website:

<https://www.nhsggc.scot/your-health/care-homes/nutrition-in-care-home/>

Acknowledgements

- Thank you to Inchinnan Care Home, Manager Nicola Watt and Chef Ryan Traynor for support in the initial development and testing of the recipes.
- Thank you to Lillyburn Care Home, Manager Clare Selbie and Chef John Brereton for their support in the second phase of testing and developing the recipes.
- Thank you to Crosslet House Residential Home, Care Manager Heather Boyle, Support Services Manager Don Sinclair and Catering Manager Robert Patterson for their support in the third phase of testing and developing the recipes.
- Thank you to the Care Home Dietetic Team for all their hard work developing this information pack and related recipe book.



Reference

- Bauer, J., et al., 2013. Evidence-based recommendations for optimal dietary protein intake in older people: a position paper from the PROT-AGE Study Group. Journal of the American Medical Directors association, 14(8), pp.542-559.

Appendices

Appendix 1 Milkshake Volume Tracker

Appendix 2 Milkshake Volume Tracker
Example



Milkshake Volume Tracker

Resident	MUST score	IDDSI level for fluids	Volume to be achieved (mls)

Key:
D - Diarrhoea
V - Vomiting
N - Nausea
O/D - Offered but declined

Monday		Date:	
Time	Flavour	Volume taken	Initials
Total mls taken:			
Tuesday		Date:	
Time	Flavour	Volume taken	Initials
Total mls taken:			
Wednesday		Date:	
Time	Flavour	Volume taken	Initials
Total mls taken:			
Thursday		Date:	
Time	Flavour	Volume taken	Initials
Total mls taken:			
Friday		Date:	
Time	Flavour	Volume taken	Initials
Total mls taken:			
Saturday		Date:	
Time	Flavour	Volume taken	Initials
Total mls taken:			
Sunday		Date:	
Time	Flavour	Volume taken	Initials
Total mls taken:			

Milkshake Volume Tracker Example

Resident	MUST score	IDDSI level for fluids	Volume to be achieved (mls)
Doris Jones	3	Level 0	200ml/ day

Key:
D - Diarrhoea
V - Vomiting
N - Nausea
O/D - Offered but declined

Monday		Date: 17.06.2024	
Time	Flavour	Volume taken	Initials
2.30pm	Fortified Chocolate Milkshake	150ml	JB
7.00pm	Chocolate Peanut Butter Shake	50ml - O/D	JB
Total mls taken:		150ml	
Tuesday		Date: 18.06.2024	
Time	Flavour	Volume taken	Initials
2.00pm	Fortified Strawberry Milkshake	200ml	CM
Total mls taken:		200ml	
Wednesday		Date: 18.06.2024	
Time	Flavour	Volume taken	Initials
2.00pm	Fortified Strawberry Milkshake	200ml - O/D, N	NH
7.00pm	Fortified Strawberry Milkshake	100ml - O/D, N	NH
9.00pm	Fortified Strawberry Milkshake	100ml	DL
Total mls taken:		100ml	
Thursday		Date: 18.06.2024	
Time	Flavour	Volume taken	Initials
2.30pm	Greek Cooler	200ml (100ml taken)	JB
6.30pm	Greek Cooler	100ml	DL
Total mls taken:		200ml	
Friday		Date: 18.06.2024	
Time	Flavour	Volume taken	Initials
2.30pm	Fortified Strawberry Milkshake	100ml	CM
7.00pm	Chocolate Peanut Butter Shake	100ml	JB
Total mls taken:		200ml	
Saturday		Date: 18.06.2024	
Time	Flavour	Volume taken	Initials
2.00pm	Mini Energy-Boosting Milkshake	130ml	DL
Total mls taken:		130ml	
Sunday		Date: 18.06.2024	
Time	Flavour	Volume taken	Initials
2.00pm	Coffee Shake	O/D - dislikes	JB
2.05pm	Fortified Banana Milkshake	200ml	JB
Total mls taken:		200ml	