



# Fortified Milkshake Recipe Book



NHS Greater Glasgow and Clyde Care Home  
Dietitians

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# Introduction



## Care Home Dietetic Team:

Gillian Mackay

(Team Lead)

Rachel Green

Carol Marshall

Vik Hilton

Welcome to the NHS Greater Glasgow and Clyde (NHSGGC) fortified milkshake recipe book. The recipes within this book are easy to prepare and were developed by the Care Home Dietetic Team, along with care staff and chefs from care homes.

Malnutrition in care homes is estimated to affect almost 60% of residents, and managing this can be challenging (BAPEN, 2022). For some residents, care home staff are advised to “fortify” meals with cream, butter, cheese and other high energy foods as part of the MUST Step 5 pathway. In addition, nourishing drinks which meet residents nutritional needs and preferences should be available, throughout the day or night, and can improve both nutrition and hydration status, in order to reduce the risk of malnutrition.

During 2022, recipes with known nutritional content were created and tested in a care home. The trial evaluated taste, cost and ease of preparation of each recipe.

# Introduction



The feedback gathered from residents, staff and family members was invaluable in making changes to ingredients, volume and presentation. The recipes include high calorie, high protein, low volume and healthier choice options. In addition, milk alternatives have been incorporated in order to support residents who dislike milk, or are unable to tolerate it. Each recipe has the nutritional breakdown provided in a variety of volumes i.e. 50ml, 100ml and 200ml servings. As part of the trial, residents' weight and nutritional status were tracked, and results showed an improvement in both measures for the majority of residents over 3-6 months.

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Alongside this recipe book, an information pack and a number of short videos have been developed to support other care homes to successfully implement fortified milkshakes, with the aim of reducing the risk of malnutrition and making a positive impact for residents living in care homes.

# 1) Malted Milkshake



5x 200ml servings

🕒 10 minutes



## Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	426kcal	213kcal	107kcal
<b>Protein:</b>	18.5g	9g	4.5g
<b>Fat:</b>	20g	10g	5g
<b>Carbs:</b>	41g	21g	10g
<b>Of which sugars:</b>	33g	16.5g	8g
<b>Fibre:</b>	0.6g	0.3g	0g

## Ingredients

- 550ml full fat milk
- 150ml double cream
- 180g skimmed milk powder
- 150g instant malted drink powder

## Method

1. Sieve skimmed milk powder and instant malted drink powder and mix together in a bowl.
2. Gradually whisk in full fat milk with instant malted drink powder and skimmed milk powder mix.
3. Add double cream into mixture and stir well.
4. Serve chilled as 200ml, 100ml or 50ml portion.



## 2) Fortified Strawberry Milkshake



5x 200ml servings

🕒 10 minutes



### Ingredients

- 550ml full fat milk
- 150ml double cream
- 180g skimmed milk powder
- 120g vitamin fortified strawberry milkshake powder

### Method

1. Sieve skimmed milk powder and milkshake powder and mix together in a bowl.
2. Gradually whisk in full fat milk with milkshake powder and skimmed milk powder mix.
3. Add double cream into mixture and stir well.
4. Serve chilled as 200ml, 100ml or 50ml portion.



### Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	436kcal	218kcal	109kcal
<b>Protein:</b>	17g	8.5g	4g
<b>Fat:</b>	20g	10g	5g
<b>Carbs:</b>	48g	24g	12g
<b>Of which sugars:</b>	48g	24g	12g
<b>Fibre:</b>	0g	0g	0g

# 3) Fortified Chocolate Milkshake

5x 200ml servings

🕒 10 minutes



## Ingredients

- 550ml full fat milk
- 150ml double cream
- 180g skimmed milk powder
- 120g vitamin fortified chocolate milkshake powder

## Method

1. Sieve skimmed milk powder and milkshake powder and mix together in a bowl.
2. Gradually whisk in full fat milk with milkshake powder and skimmed milk powder mix.
3. Add double cream into mixture and stir well.
4. Serve chilled as 200ml, 100ml or 50ml portion.

## Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	436kcal	218kcal	109kcal
<b>Protein:</b>	17g	8.5g	4g
<b>Fat:</b>	20g	10g	5g
<b>Carbs:</b>	48g	24g	12g
<b>Of which sugars:</b>	48g	24g	12g
<b>Fibre:</b>	0g	0g	0g





# 4) Fortified Vanilla Milkshake



5x 200ml servings

🕒 10 minutes



## Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	436kcal	218kcal	109kcal
<b>Protein:</b>	17g	8.5g	4g
<b>Fat:</b>	20g	10g	5g
<b>Carbs:</b>	48g	24g	12g
<b>Of which sugars:</b>	48g	24g	12g
<b>Fibre:</b>	0g	0g	0g

## Ingredients

- 550ml full fat milk
- 150ml double cream
- 180g skimmed milk powder
- 120g vitamin fortified vanilla milkshake powder

## Method

1. Sieve skimmed milk powder and milkshake powder and mix together in a bowl.
2. Gradually whisk in full fat milk with milkshake powder and skimmed milk powder mix.
3. Add double cream into mixture and stir well.
4. Serve chilled as 200ml, 100ml or 50ml portion.





# 5) Fortified Banana Milkshake

5x 200ml servings

🕒 10 minutes



## Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	436kcal	218kcal	109kcal
<b>Protein:</b>	17g	8.5g	4g
<b>Fat:</b>	20g	10g	5g
<b>Carbs:</b>	48g	24g	12g
<b>Of which sugars:</b>	48g	24g	12g
<b>Fibre:</b>	0g	0g	0g

## Ingredients

- 550ml full fat milk
- 150ml double cream
- 180g skimmed milk powder
- 120g vitamin fortified banana milkshake powder

## Method

1. Sieve skimmed milk powder and milkshake powder and mix together in a bowl.
2. Gradually whisk in full fat milk with milkshake powder and skimmed milk powder mix.
3. Add double cream into mixture and stir well.
4. Serve chilled as 200ml, 100ml or 50ml portion.



## 6) Chocolate Peanut Butter Shake



5x 200ml servings ⌚ 40 minutes



### Ingredients

- 15 dates
- 700ml vitamin fortified soya milk
- 300g smooth peanut butter
- 50g golden syrup
- 25g cocoa powder

### Method

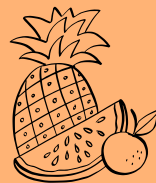
1. Soak dates in water for 30 minutes and ensure the stones are removed.
2. Add all ingredients into a blender.
3. Blend all ingredients until there is a smooth consistency.
4. Serve chilled as 200ml, 100ml or 50ml portion.

### Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	544kcal	272kcal	136kcal
<b>Protein:</b>	22g	11g	5.5g
<b>Fat:</b>	35g	17g	8.5g
<b>Carbs:</b>	53g	26.5g	14g
<b>Of which sugars:</b>	48g	24g	12g
<b>Fibre:</b>	10.5g	5g	2.5g



# 7) Fruit Smoothie



5x 200ml servings

🕒 10 minutes



## Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	256kcal	128kcal	64kcal
<b>Protein:</b>	8g	4g	2g
<b>Fat:</b>	15g	7.5g	4g
<b>Carbs:</b>	32g	16g	8g
<b>Of which sugars:</b>	31g	15g	7.5g
<b>Fibre:</b>	0.6g	0.3g	0g

## Ingredients

- 575g plain full fat Greek yoghurt
- 225g fruit cocktail or other tinned fruit of choice
- 200ml condensed milk

## Method

1. In a blender, puree the fruit until smooth.
2. Once smooth add Greek yoghurt and condensed milk into blender.
3. Blend all ingredients until there is a smooth consistency.
4. Serve chilled as 200ml, 100ml or 50ml portion.



## 8) Greek Cooler

5x 200ml servings

🕒 10 minutes



### Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	252kcal	126kcal	63kcal
<b>Protein:</b>	12g	6g	3g
<b>Fat:</b>	13.5g	7g	3g
<b>Carbs:</b>	30g	15g	7.5g
<b>Of which sugars:</b>	29g	14.5g	7g
<b>Fibre:</b>	0.6g	0.3g	0g

### Ingredients

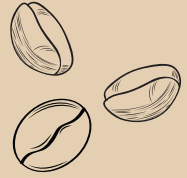
- 500g plain full fat Greek yoghurt
- 400ml full fat milk
- 70g skimmed milk powder
- 90g honey

### Method

1. In a blender, mix together milk and milk powder until smooth.
2. Once smooth add Greek yoghurt and honey into the blender.
3. Blend all ingredients until there is a smooth consistency.
4. Serve chilled as 200ml, 100ml or 50ml portion.



## 9) Coffee Shake



5x 200ml servings

🕒 10 minutes



### Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	408kcal	204kcal	102kcal
<b>Protein:</b>	17g	8.5g	4g
<b>Fat:</b>	20g	10g	5g
<b>Carbs:</b>	38g	19g	9.5g
<b>Of which sugars:</b>	37g	18.5g	9g
<b>Fibre:</b>	0g	0g	0g

### Ingredients

- 500ml full fat milk
- 150ml double cream
- 180g skimmed milk powder
- 60g vitamin fortified chocolate milkshake powder
- 20g coffee granules
- 40g golden syrup

### Method

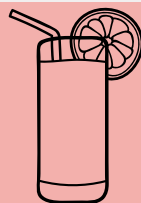
1. Mix coffee granules with a small amount of hot water to dissolve.
2. Sieve skimmed milk powder and milkshake powder, then mix together.
3. Add this to coffee granules and water mix.
4. Gradually add in milk, then cream and mix well.
5. Serve chilled as 200ml, 100ml or 50ml portion.



# 10) Fortified Fruit Juice

5x 200ml servings

🕒 10 minutes



## Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	192kcal	96kcal	48kcal
<b>Protein:</b>	8g	4g	2g
<b>Fat:</b>	0g	0g	0g
<b>Carbs:</b>	24g	12g	6g
<b>Of which sugars:</b>	23g	11g	5.5g
<b>Fibre:</b>	0g	0g	0g

## Ingredients

- 800ml fruit juice (e.g. cranberry)
- 200ml blackcurrant cordial
- 150g egg white powder or pasteurised liquid egg white

## Method

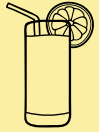
1. Add egg white powder/ pasteurised liquid egg whites into the fruit juice using a blender.
2. Add blackcurrant cordial into blender.
3. Blend all ingredients until there is a smooth consistency.
4. Serve chilled as 200ml, 100ml or 50ml portion.



# 11) Fortified Fruit Juice (Skimmed Milk Powder)

5x 200ml servings

🕒 10 minutes



## Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	174kcal	87kcal	44kcal
<b>Protein:</b>	12g	6g	3g
<b>Fat:</b>	0g	0g	0g
<b>Carbs:</b>	29g	14.5g	7g
<b>Of which sugars:</b>	28g	14g	7g
<b>Fibre:</b>	0g	0g	0g

## Ingredients

- 875ml fruit juice (e.g. orange)
- 125g skimmed milk powder

## Method

1. Dissolve milk powder into the fruit juice using a blender.
2. Blend ingredients until there is a smooth consistency.
3. Serve chilled as 200ml, 100ml or 50ml portion.





## 12) Lemonade Float



5x 200ml servings

🕒 10 minutes



### Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	166kcal	83kcal	41kcal
<b>Protein:</b>	9g	4.5g	2g
<b>Fat:</b>	3g	1.5g	1g
<b>Carbs:</b>	26g	13g	6.5g
<b>Of which sugars:</b>	24g	12g	6g
<b>Fibre:</b>	0g	0g	0g

### Ingredients

- 700ml fortified orange juice (see Recipe 11: Fortified Fruit Juice - Skimmed Milk Powder)
- 150ml full sugar lemonade
- 150g vanilla ice cream

### Method

1. Follow the method from 'Recipe 11: Fortified Fruit Juice - Skimmed Milk Powder' to make 700ml of fortified orange juice.
2. Add ice cream into blender and blend until smooth.
3. Remove from blender and mix in lemonade.
4. Serve chilled as 200ml, 100ml or 50ml portion.



# 13) Mini Energy-Boosting Milkshake

10x 130ml servings

🕒 10 minutes



## Nutritional Information:

	Per 130ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	295kcal	225kcal	112kcal
<b>Protein:</b>	12g	9g	4.5g
<b>Fat:</b>	15.5g	12g	6g
<b>Carbs:</b>	17g	13g	6.5g
<b>Of which sugars:</b>	16.5g	12.5g	6.5g
<b>Fibre:</b>	0g	0g	0g

## Ingredients

- 700ml full fat milk
- 250g skimmed milk powder
- 250ml double cream
- 100g vitamin fortified milkshake powder

## Method

1. Pour full fat milk into a jug and whisk in skimmed milk powder.
2. Add in milkshake powder and double cream.
3. Mix until smooth.
4. Serve chilled as 130ml portion.

**Please note:** This will produce 1300ml (unlike the other recipes which produce 1000ml). Can be offered as 50ml shot or 130ml portion.



# 14) Healthier Choice Milkshake

5x 200ml servings

🕒 10 minutes



## Nutritional Information:

	Per 200ml:	Per 100ml:	Per 50ml:
<b>Energy:</b>	132kcal	66kcal	33kcal
<b>Protein:</b>	4g	2g	1g
<b>Fat:</b>	1g	0.5g	0g
<b>Carbs:</b>	22g	11g	5.5g
<b>Of which sugars:</b>	21g	10g	6g
<b>Fibre:</b>	3g	1.5g	0.8g

## Ingredients

- 600ml skimmed milk
- 3 bananas - peeled, sliced and frozen
- 20g ice
- 25g unsweetened cocoa powder
- 25g honey
- 1 teaspoon vanilla extract

## Method

1. Add frozen banana, ice and skimmed milk into a blender.
2. Whilst on a low speed add cocoa powder, honey and vanilla extract.
3. Blend until smooth.
4. Serve chilled as 200ml, 100ml or 50ml portion.



# Milkshake Allergy Information

5 of the 14 regulated allergens can be found in the recipes and are detailed below. If an allergen is not mentioned, then it is not used in any of the recipes.

	Gluten and Oats	Milk	Egg	Soya	Peanuts
<b>1) Malted Milkshake</b>	Yes	Yes			
<b>2) Fortified Strawberry Milkshake</b>		Yes			
<b>3) Fortified Chocolate Milkshake</b>		Yes			
<b>4) Fortified Vanilla Milkshake</b>		Yes			
<b>5) Fortified Banana Milkshake</b>		Yes			
<b>6) Chocolate Peanut Butter Shake</b>				Yes	Yes
<b>7) Fruit Smoothie</b>		Yes			

# Milkshake Allergy Information

5 of the 14 regulated allergens can be found in the recipes and are detailed below. If an allergen is not mentioned, then it is not used in any of the recipes.

	Gluten and Oats	Milk	Egg	Soya	Peanuts
8) Greek Cooler		Yes			
9) Coffee Shake		Yes		Yes	
10) Fortified Fruit Juice			Yes		
11) Fortified Fruit Juice (Skimmed Milk Powder)		Yes			
12) Lemonade Float		Yes			
13) Mini Energy-Boosting Milkshake		Yes			
14) Healthier Choice Milkshake		Yes			

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## Summary

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

We encourage you to continue to support your residents nutrition by providing fortified milkshakes (where indicated) on a daily basis.

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## Acknowledgements

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- 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.



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# Acknowledgements

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- 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 our Care Home Dietetic Team for all their hard work developing this recipe book and related information pack.



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