





## Fortified Milkshake Recipe Book

NHS Greater Glasgow and Clyde Care Home Dietitians







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## Introduction

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. 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.

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.



#### **Care Home Dietetic Team:**

Gillian Mackay (Team Lead)
Rachel Green
Carol Marshall
Vik Hilton

## 1) Malted Milkshake



5x 200ml servings





#### **Nutritional Information:**

	Per 200ml:	Per 100ml:	Per 50ml:
	2001111.	iooiiii.	30IIII.
Energy:	426kcal	213kcal	107kcal
Protein:	18.5g	9g	4.5g
Fat:	20g	10g	5g
Carbohydrates	: 41.2g	20.6g	10.3g
Of which	33g	16.5g	8.3g
sugars:			
Fibre:	0.6a	0.3a	Ωα

### Ingredients

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

- 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.
- 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



#### **Nutritional Information:**

	Per 200ml:	Per 100ml:	Per 50ml:
Energy:	436kcal	218kcal	109kcal
Protein:	17g	8.5g	4g
Fat:	20g	10g	5g
Carbohydrates	: 48.6g	24.3g	12.2g
Of which	48.6g	24.3g	12.2g
sugars:			
Fibre:	0g	0g	0g

### Ingredients

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

- 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.

# 3) Fortified Chocolate Milkshake



5x 200ml servings

( 10 minutes



#### **Nutritional Information:**

Fibre:

	Per 200ml:	Per 100ml:	Per 50ml:
Energy:	436kcal	218kcal	109kcal
Protein:	17g	8.5g	4g
Fat:	20g	10g	5g
Carbohydrates	: 48.6g	24.3g	12.2g
Of which	48.6g	24.3g	12.2g
sugars:			

0g

0g

0g

#### Ingredients

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

- 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.



# 4) Fortified Vanilla Milkshake



5x 200ml servings

( 10 minutes



#### **Nutritional Information:**

Fibre:

	200ml:	100ml:	50ml:
Energy:	436kcal	218kcal	109kcal
Protein:	17g	8.5g	4g
Fat:	20g	10g	5g
Carbohydrates	<b>48.6g</b>	24.3g	12.2g
Of which sugars:	48.6g	24.3g	12.2g

0g

0g

0g

### **Ingredients**

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

- 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

(L) 10 minutes



#### **Nutritional Information:**

Fibre:

	Per 200ml:	Per 100ml:	Per 50ml:
Energy:	436kcal	218kcal	109kcal
Protein:	17g	8.5g	4g
Fat:	20g	10g	5g
Carbohydrates	<b>:</b> 48.6g	24.3g	12.2g
Of which sugars:	48.6g	24.3g	12.2g

0g

0g

0g

## Ingredients

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

- 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





#### **Nutritional Information:**

Fibre:

	Per 200ml:	Per 100ml:	Per 50ml:
Energy:	544kcal	272kcal	136kcal
Protein:	22g	11g	5.5g
Fat:	35g	17g	8.5g
Carbohydrates	: 53g	26.5g	13.7g
Of which sugars:	48g	24g	12g

5.3g

2.6g

10.6g

## Ingredients

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

- 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.



## 7) Fruit Smoothie



5x 200ml servings

(1) 10 minutes



#### **Nutritional Information:**

	Per 200ml:	Per 100ml:	Per 50ml:
Energy:	256kcal	128kcal	64kcal
Protein:	8g	4g	2g
Fat:	15g	7.5g	4g
Carbohydrates	: 31.7g	15.9g	7.9g
Of which sugars:	30.6g	15.3g	7.7g
Fibre:	0.6g	0.3g	0g

## Ingredients

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

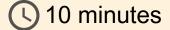
- 1. In a blender, puree the fruit until smooth.
- 2. Once smooth add Greek yoghurt and condensed milk into blender.
- 3. Blend all ingredients until there is a smooth consistency.
- 4. Serve chilled as 200ml, 100ml or 50ml portion.



## 8) Greek Cooler



5x 200ml servings





#### **Nutritional Information:**

	Per 200ml:	Per 100ml:	Per 50ml:
Energy:	252kcal	126kcal	63kcal
Protein:	12g	6g	3g
Fat:	13.5g	7g	3g
Carbohydrates	: 29.8g	14.9g	7.5g
Of which	28.8g	14.4g	7.2g
sugars:			
Fibre:	0a	0a	0a

## Ingredients

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

- 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





#### **Nutritional Information:**

	Per 200ml:	Per 100ml:	Per 50ml:
Energy:	408kcal	204kcal	102kcal
Protein:	17g	8.5g	4g
Fat:	20g	10g	5g
Carbohydrates	: 38g	19g	9.5g
Of which	36.8g	18.4g	9.2g
sugars:			
Fibre:	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

- 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

(1) 10 minutes



#### **Nutritional Information:**

	Per 200ml:	Per 100ml:	Per 50ml:
Energy:	192kcal	96kcal	48kcal
Protein:	8g	4g	2g
Fat:	0g	0g	0g
<b>Carbohydrates:</b>	: 23.6g	11.8g	5.9g
Of which	22.6g	11.3g	5.7g
sugars:			
Fibre:	0g	0g	0g

## Ingredients

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

- 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:
Energy:	174kcal	87kcal	44kcal
Protein:	12g	6g	3g
Fat:	0g	0g	0g
Carbohydrates	: 29.2g	14.6g	7.3g
Of which	28g	14g	<b>7</b> g
sugars:			
Fibre:	0a	0a	0a

### **Ingredients**

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

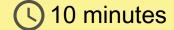
- 1. Dissolve milk powder into the fruit juice using a blender.
- 2. Blend ingredients until there is a smooth consistency.
- 3. Serve chilled as 200ml, 100ml or 50ml portion.



## 12) Lemonade Float



5x 200ml servings





#### **Nutritional Information:**

	Per 200ml:	Per 100ml:	Per 50ml:
Energy:	166kcal	83kcal	41kcal
Protein:	9g	4.5g	2g
Fat:	3g	1.5g	1g
Carbohydrates	25.8g	12.9g	6.5g
Of which sugars:	23.8g	11.9g	5.9g
Fibre:	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

- Follow the method from 'Recipe
   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

(1) 10 minutes



#### **Nutritional Information:**

	Per 130ml:	Per 100ml:	Per 50ml:	
Energy:	295kcal	225kcal	112kcal	
Protein:	11.7g	9g	4.5g	
Fat:	15.4g	12g	6g	
Carbohydrates:	16.7g	12.8g	6.4g	
Of which	16.5g	12.7g	6.4g	
sugars:				
Fibre:	0g	0g	0g	

#### **Ingredients**

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

#### **Method**

- 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 is a specific low volume, high nutritional content milkshake and 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

U 10 minutes



#### **Nutritional Information:**

	Per 200ml:	Per 100ml:	Per 50ml:
Energy:	132kcal	66kcal	33kcal
Protein:	4g	2g	1g
Fat:	1g	0.5g	0g
Carbohydrates	: 22g	11g	5.5g
Of which	20.6g	10.3g	5.1g
sugars:			
Fibre:	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

- 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.

	allergen is not mentioned, then it is not used in any of the recipes.							
		Gluten (wheat, rye and barley) and oats	Milk	Egg	Soya	Peanuts		
1	Malted Milkshake	Y	Y					
2	Fortified Strawberry Milkshake		Y					
3	Fortified Chocolate Milkshake		Y					
4	Fortified Vanilla Milkshake		Y					
5	Fortified Banana Milkshake		Y					
6	Chocolate Peanut Butter Shake				Υ	Υ		
7	Fruit Smoothie		Υ					
8	Greek Cooler		Υ					
9	Coffee Shake		Y		Y			
10	Fortified Fruit Juice			Y				
11	Fortified Fruit Juice (Skimmed Milk Powder)		Y					
12	Lemonade Float		Υ					
13	Mini Energy-Boosting Milkshake		Y					
14	Healthier Choice Milkshake		Y					

## Summary



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.

## Acknowledgements

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- 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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