

## Evaluating the social and behavioural outcomes of a council-wide universal free school breakfast scheme.

Louise Harvey-Golding, Lynn Donkin, John Blackledge, Julie Young and Margaret Anne Defeyter.

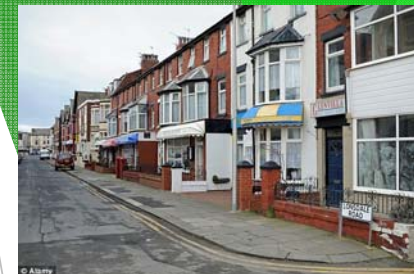


## Context of the Research:

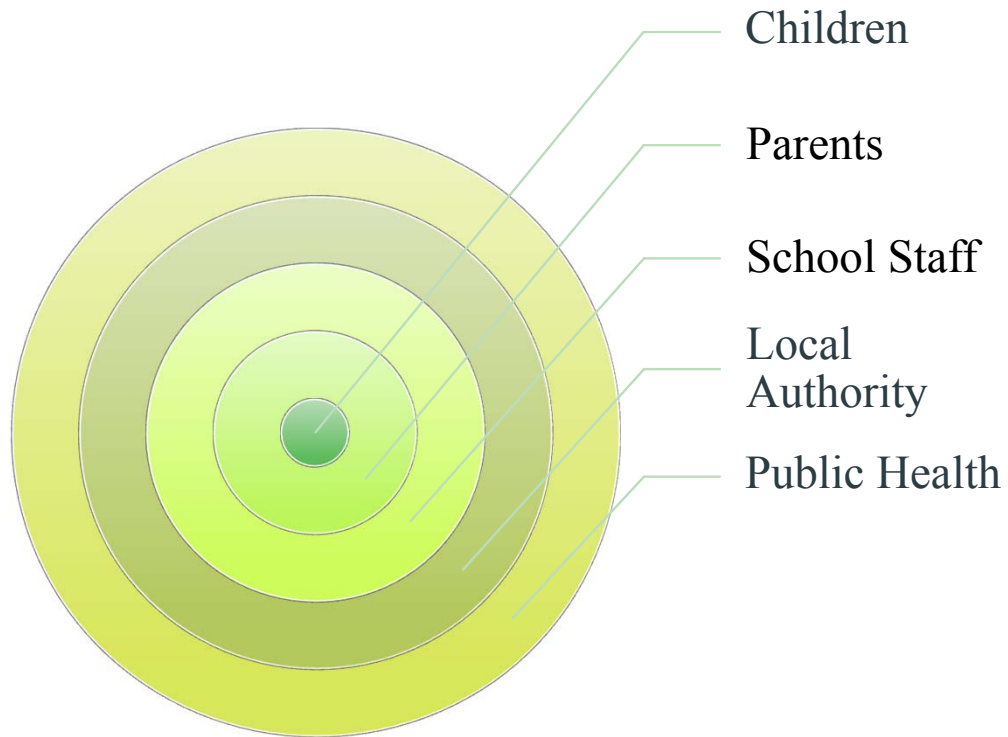
- ▶ PhD project examining the social and behavioural outcomes of a universal free breakfast programme within a universal deprived area of the North West England, UK. <sup>1</sup>.
- ▶ Universal free school breakfast programme aims to address inequalities and improve nutrition, diet and educational outcomes. <sup>2</sup>.
- ▶ School breakfast provision has increased in UK but research into the impact school breakfast programmes is complex.

1. Public Health England, (2015). Blackpool Health Profile. Available at: <http://www.apho.org.uk/resource/item.aspx?RID=171648>

2. Blackpool Council, (2015). Universal Free School Breakfast. Available at: <https://www.blackpool.gov.uk/Residents/Education-and-schools/School-meals/Free-breakfasts.aspx>



# Early Qualitative Findings



Interviews and Focus Groups with 66 Stakeholders

# Poverty and Food Insecurity

*We are quite a poverty stricken area and it perhaps doesn't seem a great deal of money to somebody that's got a little bit in their pocket but when you have nothing, cereal, toast, it can mean you know going without. (School Staff)*

*It's such a poor deprived area, and people just can't afford [food]. There's food banks in the area. (Parent/carer)*

*I think it just takes the pressure off them and it just gives them the knowledge that the child is gonna come to school, have something to eat to set them up for the day till lunch time. (Parent/carer)*

*In this catchment area, we're in a deprived area so for whatever reason a lot of children come to school without breakfast. (School Staff).*

## Alleviates Rushed Mornings

*There's a lot of chaos in my house in a morning. You know everyone is busy getting ready for work.*

*(Parent/carer)*

*I know it can be quite a rush in the morning when you've got lots of children, so to bring them in and know that they're here and they're ready. (Parent/carer)*

*I've got to be at college for 9 in the morning, so that helps me drop them off before.*

*(Parent/carer)*

*If they've got work and they don't have to pay for breakfast club. They can drop them off a little bit earlier and then get to work and I know some parents that do that. (Parent/carer)*

*My mum has a baby now so it and now she needs, she doesn't have much time to do our breakfast so I think it's helping her that we go to breakfast club. (Child)*

# Weekends and School Holidays

*Holidays are a killer, a lot of them are working in the holidays and they can't have the time off in the summer, so for us as a seaside town. (School Staff)*

*There are families of concern that we think we know they're not going to have that breakfast when they get home and they won't have the quality. When there's lots of them, big families, you know it's the cost, especially during [school] holidays." (School Staff)*

*You know certain children and you think what's going to happen to them over the holidays. You're worried, are they getting fed, and probably the answer is no, they're not and it must be hard for children as well. (School Staff)*

*I think for some children, some families there is a definite, definite need, you know we've had to give food parcels out and things. (School Staff)*

*Sometimes I don't have any...because sometimes on weekends there isn't any breakfast things in, because erm the food are only in little boxes and erm there's isn't any left. (Child)*

## Previous Research:

- ▶ Rise in food banks during school holidays. <sup>1</sup>.
- ▶ Food poverty worsened during school holidays when free school meals, milk and fruit are not available to children. <sup>2</sup>.
- ▶ Teachers report that children return from the longer school holidays having lost weight and showing declines in readiness to learn. <sup>3</sup>.



1. Kellogg's Trussell Trust, (2015). School holidays leave kids hungry for three meals a day. Available at: <http://www.trusselltrust.org/holiday-hunger>
2. Rai S. Food Poverty: School Holidays and the Wider Impact. Available at: Northern Housing Consortium (2015). Available from: <http://www.northern-consortium.org.uk/assets/Policy%20Documents/childrenandyoungpeople/food-poverty-briefing-w-kelloggs.pdf>
3. School Holidays Leave Kids Hungry for Three Meals A Day. [Online]. Kellogg's & Trussell Trust (2014). Available at: <http://www.trusselltrust.org/holiday-hunger>

## Breakfast Behaviours: Skipping

*I have had times where my children's like, 'well I'm not hungry, I don't want anything.'*  
(Parent/carer)

*Mum sometimes doesn't have any, but [has breakfast] when she gets home.* (Child)

*Skipping breakfast and then cause they're on school dinners trying to stop eating.*  
(School Staff)

*I suppose it's not setting a good example cause they don't see you doing it.* (Parent/carer)



## Breakfast Behaviours: Double Breakfasting

*Other children who eat at home, go to early birds, have their breakfast there, come in school have their breakfast there and by then break might have a piece of fruit. (School Staff)*

*Mine last year were quite good at saying, no I've already had breakfast I'm not hungry, they'd only really eat when they were hungry. (School Staff)*

*Obviously I control the amount he has in the house, normally I would give him a certain amount, I give him slightly less than that. (Parent/carer)*

*Even though he has had a small breakfast at like 8'o clock it puts him over till dinner time. (Parent/carer)*

*A lot of them do just say I've had it already and they're fine and they know, but some of them do eat loads. (School Staff)*

# Previous Research into Breakfast Behaviours:

- ▶ Research suggests that breakfast omission detrimentally impacts on learning. <sup>1-3.</sup>
- ▶ Associations have been suggested between school breakfast participation and reducing obesity levels. <sup>4.</sup>
- ▶ Limited research into ‘double breakfasting’

*The bad behavior creeps in, because they just don't know what to do and then they're not concentrating so they will have annoyed the person next to them. (School Staff)*

*You just forget everything that you're doing and the teacher has to stop helping other people and go through it again. (Child)*

1. Powell CA, Walker SP, Chang SM, Grantham-McGregor SM. Nutrition and education: a randomized trial of the effects of breakfast in rural primary school children. *Am J Clin Nutr* (1998) 68(4):873–9.
2. Grantham-McGregor SM, Chang S, Walker SP. Evaluation of school feeding programs: some Jamaican examples. *Am J Clin Nutr* (1998) 67(4):785–9.
3. Winicki J, Jemison K. Food insecurity and hunger in the kindergarten classroom: its effect on learning and growth. *Cont Econ Policy* (2003) 21:145–57. doi:10.1093/cep/byg001
4. Millimet DL, Tchernis R, Husain M. School Nutrition Programs and the incidence of childhood obesity. *J Hum Res* (2009) 45:3. doi:10.3386/w14297

# Paper: Universal free school breakfast: a qualitative model for breakfast behaviours

<http://journal.frontiersin.org/article/10.3389/fpubh.2015.00154/full>

## Universal free school breakfast: a qualitative model for breakfast behaviors

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In recent years, the provision of school breakfast has increased significantly in the UK. However, research examining the effectiveness of school breakfast is still within relative stages of infancy, and findings to date have been rather mixed. Moreover, previous evaluations of school breakfast schemes have been predominantly quantitative in their methodologies. Currently, there are few qualitative studies examining the subjective perceptions and experiences of stakeholders, and thereby an absence of knowledge regarding the sociocultural impacts of school breakfast. The purpose of this study was to investigate the beliefs, views and attitudes, and breakfast consumption behaviors, among key stakeholders, served by a council-wide universal free school breakfast initiative, within the North West of England, UK. A sample of children, parents, and school staff were recruited from three primary schools, participating in the universal free school breakfast scheme, to partake in semi-structured interviews and small focus groups. A Grounded Theory analysis of the data collected identified a theoretical model of breakfast behaviors, underpinned by the subjective perceptions and experiences of these key stakeholders. The model comprises of three domains relating to breakfast behaviors, and the internal and external factors that are perceived to influence breakfast behaviors, among children, parents, and school staff. Findings were validated using triangulation methods, member checks, and inter-rater reliability measures. In presenting this theoretically grounded model for breakfast behaviors, this paper provides a unique qualitative insight into the breakfast consumption behaviors and barriers to breakfast consumption, within a socioeconomically deprived community, participating in a universal free school breakfast intervention program.

**Keywords:** school breakfast, breakfast behaviors, food insecurity, food poverty, families

### Introduction

The prevalence of school breakfast has increased considerably in the UK, with a 45% rise in provision since 2008, and current estimates that 85% of schools offer breakfast schemes (1). The UK government recently announced an investment of £3.15 million over 2 years to establish sustainable breakfast clubs in primary and secondary schools (2). From a policy perspective, a fundamental factor in the prevention of hunger in children at the start of the school day is that a third of the UK population experience significant

# Extending the Research:

- ▶ Examine concerns about breakfast behaviours:
  - Breakfast Omission
  - Double Breakfasting
  - Breakfast Locations (home, on the way to school, at school)
- ▶ Developed an efficient, low cost tool for gathering dietary data from children to address concerns.
- ▶ Minimising methodological issues.




# Developing a Breakfast Diary Tool:

**What did you do this morning?**

1. Did you watch television at home this morning?

No  Yes (Put a tick in the correct box)



2. Did you have anything to eat or drink at home this morning?

No  Yes

**Follow the arrows!**

**What did you have to eat or**


.....

.....





.....

.....

Write down EVERYTHING you can remember!



3. How did you travel to school this morning?

walk      cycle      by bus      by car

## NATIONAL DIET AND NUTRITION SURVEY

### Food and Drink Diary Instructions

Instructions.....2-3

Diary examples.....4-27



Examples and advice on food descriptions.....28-34

.....35-38

Day: Thurs Date: 31 March

Time	Where? With whom? TV on? Table?	Food/Drink description & preparation	Brand Name	Portion size or quantity eaten
<b>How to describe what you had and how much you had can be found on pages 28-34</b>				
<b>6am to 9am</b>				
6.30 am	Kitchen Alone No TV Not at table	Filter coffee, decaffeinated milk (fresh, semi-skimmed) Sugar white	Douwe Egberts  Silterspoon	Mug A little 1 level tsp
7.30 am	Kitchen Partner TV on At table	Filter coffee with milk and sugar Cornflakes Milk (fresh, semi-skimmed) Toast, granary medium sliced Light spread Marmalade	As above Tesco's own  Hovis Flora Hartleys	As above 1B drowned 1 slice med spread 1 heaped tsp
<b>9am to 12 noon</b>				
10.15 am	Office desk Alone No TV Not at table	Instant coffee, not decaffeinated Milk (fresh, whole) Sugar brown	Kenco	Mug A little 1 level tsp
11 am	Office desk Alone No TV Not at table	Digestive biscuit – chocolate coated on one site	McVities	2

# Breakfast Diary Tool:







## Children's Breakfast Food and Drink Diary

For primary aged children 9-11

# Monday

Secret number:	Date:

1

**DAY 1: MONDAY**

**Part 1 – At home this morning**

1) What time did you get up out of bed this morning?

2) Did you watch television at home this morning?  
 Please circle YES or NO      Yes      No

3) Did you have anything to eat or drink at home this morning?  
 Please circle YES or NO      Yes      No

If 'No' please move onto **Part 2 – On your way to school**

If you ticked 'Yes' please tell us what you had to eat/ drink at home this morning below: (See your diary toolkit for help)



a) What time did you have something to eat or drink at home this morning?

b) Who were you with when you had something to eat or drink at home this morning?

c) What else were you doing when you had something to eat or drink at home this morning? e.g. watching TV, sitting at the kitchen table, playing on a computer, etc.

d) What did you have to eat and drink at home this morning? Remember to say what including the name and brand, the amount you ate/ drank (use your diary tool to help with this), cooking methods, and if there were any left overs.

2







## Children's Breakfast Food and Drink Diary

For primary children aged 9-11

# Weekend




Secret number:	Date:

1

Please tell us more about what you had to eat and drink this morning:





1) If you had milk this morning, was it whole milk (blue top), semi-skimmed milk (green top), skimmed milk (red top) or a milk alternative e.g. soya, oat, coconut?

Other milk:

Whole Milk 
Semi-skimmed Milk 
Skimmed Milk

2) If you had cereal this morning, how much milk did you have on your cereal?


A little 
Some 
A lot 
Drowned

3) If you had cereal this morning, did you sweeten with sugar, honey or syrup?  
 Yes, sugar     Yes, honey     Yes, syrup     None/ did not have   
 If yes, how many teaspoons?

4) If you ate bread this morning, what type of bread was it?  
 White     Granary     Wholemeal     Brown     50/50 bread   
 Other Type:

Large loaf or small loaf: Large  Small

If the bread was shop bought, how was it sliced?  
 Thick     Medium     Thin     Unsliced   
 Name: e.g. Warburton's, Asda, Hovis.



3

# Breakfast Diary Toolkit:

## Food Diary Information

This is a food diary for you to tell us about the food and drink you have from waking up in the morning to before lunch:

- On school days this includes: at home in the morning, on the way to school before lunch.
- At the weekend it includes everywhere from waking up to before lunch

It is not a test and it is important that you do not change what you normally eat just because you're keeping this diary. The most important thing is that you answer the questions truthfully.

You should start your food and drink diary on Monday and fill it in for seven days on Sunday. After lunch break each day you will be asked by your teacher to fill in a section of the food diary telling us about what you had to eat and drink from before lunch break. You will be given a diary to take home for the weekend.

**When:** On a school day each day is divided into 3 main time slots: at home in the morning, on the way to school and at school before lunch.

**Where:** This could be at home in your bedroom, kitchen, sitting room, at a friend's or family member's house, in a car, on a bus/tram on the way to school; it could also be from a shop, takeaway, cafe, school canteen, classroom or outdoors. Tell us if you were sitting at a table or watching TV.

**With Whom:** Give information about who you were with when you were drinking. This could be alone, with family, with friends, with your teacher, staff etc.

**What:** Describe your food and drink giving as much detail as you can. Extras like sugar and milk in your tea or cereal; butter or other spreads or sauces such as ketchup and mayonnaise.

**Brand:** Please make a note of the brand name (e.g. Heinz, Walkers, Hovis) if you know it.

**Amount eaten:** You can specify packet (e.g. Crisps), or number of individual items (e.g. biscuits, cereal bars), or slices (e.g. bread, bacon), or spoons. For drinks, write glass, cup or mug. More help on describing portion sizes is provided in sections of this toolkit.

**Cooking methods:** If you know how the food was cooked (e.g. grilled, baked, fried), please record this. If you're unsure about how your food is cooked, please ask the person who prepares it if possible.

**Help:** You can find help on describing food and drink in this toolkit. As descriptions, you can find pictures of portion sizes of some common breakfast foods. Pick the picture that looks the most like the portion you had and record it in your food diary.

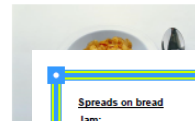
**Left overs:** We would like to know the amount that you actually ate, so tell us if you left any food or drink.

## Describing food/drink and amounts

Use the following table for information on how to describe the food and drink in your diary. It's in alphabetical order so you can easily look up the food or drink.

Food/Drink	Description	Preparation	Amount
Baked beans	Standard, reduced salt or reduced sugar	Cooked in pan or microwave	Nutrition table
Biscuits	Cheese, wafer, crispbread, sweet, chocolate (fully or half coated), boudoir, custard cream, jammy dodger, shortbread	Home-made or shop bought	Number of pieces
Breakfast cereal and muesli	Brand: Kellogg's, Nestle, Asda Vary: Cornflakes, Weetabix, Cheerios, Coco pops	Added fruit or nuts With milk, sugar, honey, syrup	See for it portion Spoon Spoon
Bread	Wholemeal, granary, white or brown; 50/50 Currant, fruit, mat	Alone or with spread or filling Grilled, toasted, fried	Number of slices Thin Cut
Buns and pastries	Loaf, currant or plain, jam, custard, fruit, cream	Home-made or shop bought	Size Number of pieces
Butter, margarine & fat spreads	Flora margarine, Lurpack butter, Asda margarine, Utterly Butterly	On bread, crackers, malt loaf	For spread 13-1
Cake	Fruit, sponge, fresh cream, loaf, chocolate coated Filling: buttercream, jam	Home-made or shop bought	Large slice How or piece
Cereal bars	Type/ brand name: Coopops bar, Kellogg's Special K Bar	With fruit, nuts, coated with chocolate/yoghurt	Size Star Multi-pack
Cooked breakfast foods, e.g. bacon, sausage, eggs	Bacon: back, streaky, smoked, unsmoked, with/without fat Sausage: type, brand name, pork, beef, fat thin etc.	Fried with or without oil, grilled, baked, boiled, poached, scrambled	Number of pieces, rashers, items etc
Crisps	Brand name and type: Walker's Salt and Vinegar, Wotsits Cheese What sort: potato, corn, wheat, maize, vegetable		Standard or from multipack Standard or sharing bag
Fruit: fresh	Apple, banana, orange, grapes	With or without skin Chopped up or whole fruit?	Small, medium or large piece or portion

## Cornflakes:



## Spreads on bread

Jam:



## Drinks - Glasses of milk:



# Gathering Additional Data:

- ▶ Caterer's Diary.
- ▶ Researcher Observations.
- ▶ Food and Beverage Packaging.
- ▶ Photographs of Portions and Packaging.

1110007

Before you start the food diary please answer the following questions about your school's free school breakfast:

1. Do you serve breakfast before or after the formal start?
2. Does the school use a house caterer, school contract caterer or other?
3. Is food prepared for school breakfast on or off site?
4. What are your opinions on the food and drink quality of breakfast?
5. Do you know where food is sourced for school breakfast?
6. Do you serve the same or different foods daily for breakfast?
7. What food serving model does your school use for breakfast individual portions?

Please continue on the next page...

2

### Start of School Breakfast Food and Diary

This food diary should be completed by the school caterer responsible for preparing/ serving free school breakfast. The diary should be completed each day after school breakfast for one school week –Monday to Friday.

Each day you should record the types of foods and drinks served for free school breakfast including brand names where appropriate, amounts served in individual portions, preparation methods, leftovers and wastage.

In addition to this breakfast food and drink diary you will also be supplied with a plastic bag for you to retain and store any food and drink packaging from free school breakfast items. This will be collected with your food diary.

Day 1: Monday

Please complete the required information below:

Food/ Drink Type and Brand Name where possible	Amount Served in Individual Portions	Preparation Methods
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

4



# Why is this data useful to us as academics, policy makers and practitioners?

- ▶ Concerns about breakfast behaviours amongst children, e.g. breakfast skipping and double-breakfasting.
- ▶ We have developed a low cost efficient tool for gathering data to examine these concerns.
- ▶ Knowledge on children's breakfast behaviours and effective tools for gathering this knowledge are important to research, policy and praxis.
- ▶ In the context of rising breakfast school breakfast provision important to assess that intended outcomes such as reducing hunger and health inequality are being met.

# Thank you for listening

## Any questions?

Universal free school breakfast: a qualitative model for breakfast behaviours

<http://journal.frontiersin.org/article/10.3389/fpubh.2015.00154/full>

[Website: http://healthylivinguk.org/](http://healthylivinguk.org/)

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