

# ‘I wouldn’t swap semi-skimmed milk for whole milk’ Using the Person-based approach to develop a personally relevant intervention

Liz Payne, Leanne Morrison, Philine Harris, Daniela Ghio,  
Joanna Slodkowska-Barabasz, Michelle Sutcliffe, Bernard Gudgin,  
Elisabeth Grey, Paul Little, Lucy Yardley

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# STREAM Project: Screen and TREA<sup>t</sup> for Malnutrition

Objective:

To **develop and test** an intervention to:

1. Identify **older adults (75 and over)** who may be at **risk of undernutrition**
2. Advise, **encourage and support** older adults identified as at risk
3. Enable **staff at the GP surgery** to identify and support older adults who may be at risk of undernutrition

# Person-based intervention development



Food List	
Here are some ideas from different food groups that you can try	
Drinks	Condiments
* Fruit or vegetable juices	* Salad dressings, mayonnaise, salad cream
* Milk: hot or cold, or add to hot chocolate, milkshake, milky coffee, tea	* Oils: flax, coconut, olive or rapeseed oil (own brand veg oil is usually rapeseed oil)
* Bovril/Oxo/Marmite (as a drink or a spread)	* Cranberry or apple sauce, redcurrant jelly, jam or honey
* Malt drinks: Horlicks or Ovaltine	* Pickles, chutneys, relish
* Fizzy drinks	* Brown sauce, ketchup
* Flavoured water/squash	* Tartare or mint sauce
Fuel for longer - carbs	
<ul style="list-style-type: none"> <li>• Potatoes – e.g. boiled, instant mash with milk and butter or spread, baked potatoes (in the microwave or oven), oven chips, microwave chips</li> <li>• Rice e.g. savoury rice (different flavours with added egg, veg, sweet and sour) – can make an instant mini-meal, or add chicken/ham for more flavour. Or pudding rice (e.g. rice pots plain or with fruit).</li> <li>• Oats: porridge e.g. instant porridge, Ready Break - which includes added nutrients, microwave porridge, oatcakes</li> <li>• Macaroni or Spaghetti: wholegrain, spinach or plain</li> <li>• Sweet potato - e.g. boiled, mashed, roast in oven</li> <li>• Bread: Multigrain, wholegrain or 50:50 types</li> </ul>	

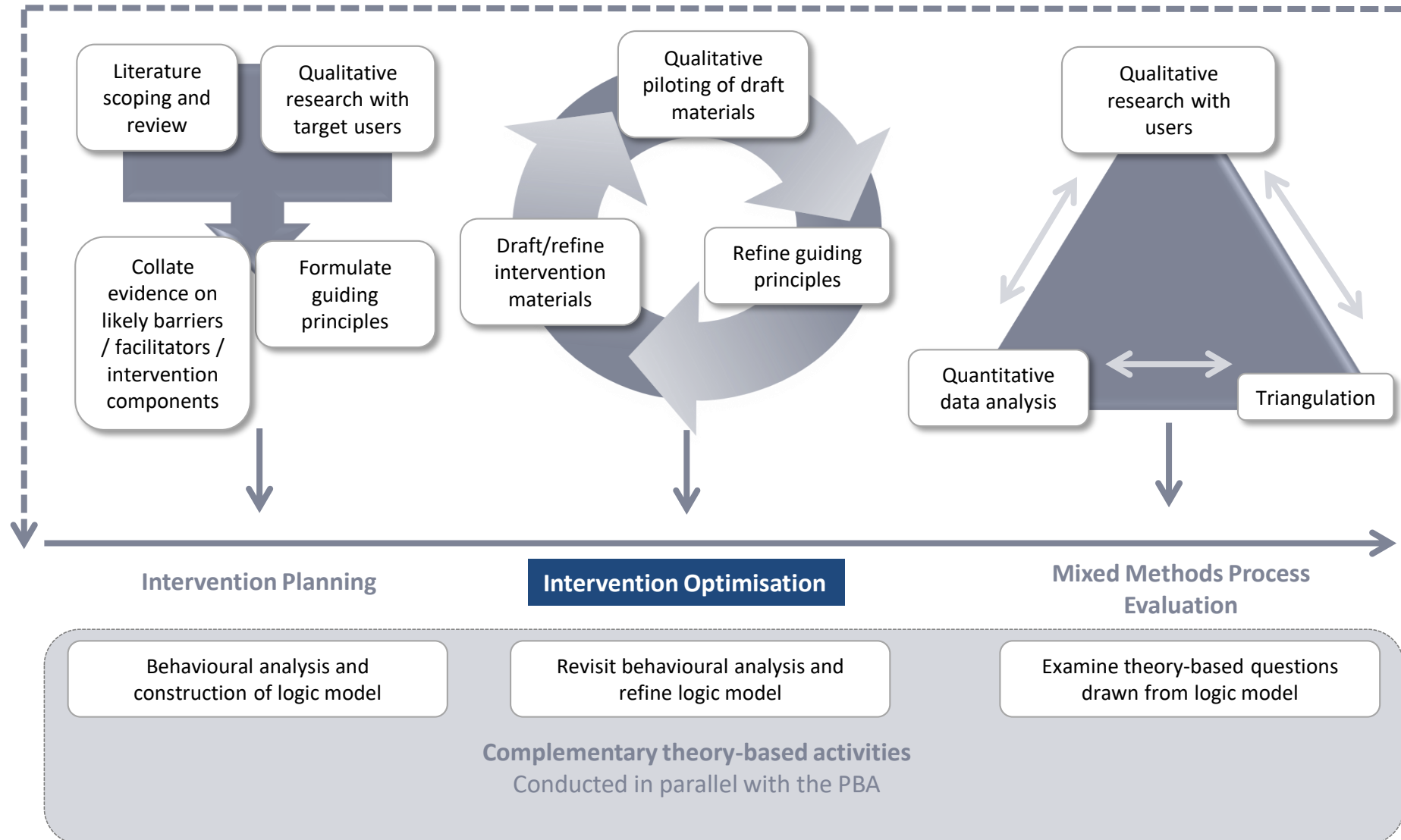


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# Person-based approach to intervention development





## Think Aloud study

**Aim:** Check whether all intervention components are:

- Comprehensible, acceptable, feasible
- Easy to use, motivating, enjoyable, informative, convincing

**Analysis:**

- Positive / negative comments  decision-making process
- Thematic analysis to aid understanding 



# Person-based changes: decision-making process

Table 7: Main booklet							
Negative Comments	Positive Comments	Possible Change	Reason for change	Agreed change	Date of change	Broad problem code	MoScoW
Contradictory diet advice							
			<b>IMP</b> – important for behaviour change				
			<b>EAS</b> – easy and uncontroversial				
			<b>EXP</b> – supported by experience (PPIs, experts, lit)				

## Thematic analysis: Personal relevance

I thought oh **that's good, I'm going the right way.** (P21)

I thought they were **very helpful for certain people that really needed them.**  
I don't think I would need one.... (P163)

Perhaps it's because **I've got the common sense,** not to be big-headed, or what I  
don't know, but **I feel I don't need booklets like that.** (P513)

## Thematic analysis: My diet is already optimal

You've just got to sort of, I don't know, **eat when you know when you're hungry** if you like, like I say, **not just eating for the sake of it**. (P47)

**[Reading from booklet]** 'Use whole milk instead of semi-skimmed, use cream instead of water in soup. You can use juice instead of water.'

What I'm thinking is **if I took any notice of those**, so I would end up probably being at about twenty stone within the next six months. (P223)

**'Loss of weight is good isn't it', so yeah, that's me**. .....No, I don't, I don't, I don't agree with putting on too much weight, because I've never been big, not even when I was pregnant. (P005)

## Diet already optimal: changes

Here are a few ways to make eating and drinking easier when you don't feel well

If you...	You could try...
<div>Have a small appetite</div>	<p>...eating <b>little and often</b>. Try having a <b>small bite</b> every couple of hours e.g. crackers and cheese, a boiled egg, toast with marmite, crumpets, yoghurt or a pot of rice</p> <p>...<b>drinking in</b> between having small bites, instead of just before eating, to feel less full</p> <p>...eating what you think of as <b>comfort food</b></p>



## Thematic analysis: Advice contradicting beliefs about healthy diet

.....if she [**the nurse**] gave me this [**booklet**], like the last time, I'd say it's a load of rubbish, I can do it myself. I've always managed my diet myself.....My yoghurts are low fat; everything is low fat, and low cholesterol. (P111)

I mean you know it's always the concern that something's going on underneath the surface that you don't know about, but umm we do what we can to manage our diet and particularly our exercise properly. (P14)

# Advice contradicting beliefs about healthy diet: changes

*Did you know...* Over time, our food and drink needs and our body change. As we eat less we need to make the smaller changes.

We can continue to eat well and

and

- **Milk** (full fat)
- Flavoured or add to hot chocolate, milkshake, milky coffee/tea
- Plain milk

Here are two ways to eat well when you may not feel like it

**Tip 1: Eat little and often**

**Tip 2: Add tasty extras to your usual plate**

Booklet includes a few suggestions to help follow these tips. There are four booklets with more suggestions - see page 11.

**\* Milk:** hot or cold, or add to hot chocolate, milkshake, milky coffee, tea

# Advice contradicting beliefs about healthy diet: changes

## How about...

Have a bite with your coffee or tea	→	Tea-cakes or malt loaf with butter or spread
Make a note to buy your favourite bites	→	Crackers, cheese and chutney Pots of rice, custard, yoghurt
Freeze small portions to take out any time	→	Stew, curry, meat or nut roast, fish in sauce or batter

## Positive views from feasibility interviews

And then it gives you the **advice of what to do**, which is good  
(‘I don’t fancy food and drink’)

And you know it gave, like you know you don’t put it [**weight**] on very quick, so **that helped me, to know that I would put it on gradually**.  
(Main booklet)

I’ve **drunk more water**, ate more umm **plain food**, umm and **enjoyed it**, umm, more or less everything. Yes, **the booklets were so helpful**, so helpful, and er **enjoyable** reading anyway.  
(Main and goal booklet and ‘Cooking or shopping feels like a chore’)

# Summary: what did the Person-based approach contribute?

## Person-based approach enabled us to:

- Reveal personally relevant issues
- Understand crucial ways that engagement with key messages was undermined
- Adjust intervention materials to make them more personally relevant
- Test potential solutions

## Key examples

- Clarified changing diet needs in older adulthood
- Recommended choosing one or more relevant suggestions to try
- Added food suggestions appropriate for those on special diets

# Intervention materials: optimised



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Here are some ideas from different food groups that you can try	
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Read more ...

**Tutorial** papers on the Person-based approach:

Yardley et al. (2015). The person-based approach to intervention development: Application to digital health-related behaviour change interventions. *J Med Internet Res*, 17(1), e30. <http://www.jmir.org/2015/1/e30/>

Yardley et al. (2015). The person-based approach to enhancing the acceptability and feasibility of interventions. *Pilot and Feasibility Studies*, 1, 37.  
<https://pilotfeasibilitystudies.biomedcentral.com/articles/10.1186/s40814-015-0033-z>

# Further PBA publications

Series of papers further illustrating use of PBA submitted and in preparation:

- synthesising evidence to support PBA intervention planning
- using the PBA to improve trial materials

PBA website has references of all publications:

[www.personbasedapproach.org](http://www.personbasedapproach.org)

# About us.....



## Prof Lucy Yardley

Initiated and leads the LifeGuide multidisciplinary research programme, and development and mixed methods evaluation of numerous digital interventions using the **Person-based approach**.



## The CCCAHP PBA/Lifeguide team – STREAM project

### Current:

Leanne Morrison  
(co-investigator)  
Liz Payne

### Previous:

Daniela Ghio  
Philine Harris  
Joanna Slodkowska-Barabasz  
Lis Grey

### PPI:

Bernard Gudgin  
Pam Holloway

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## PBA intervention development team members

Leanne Morrison	Stephanie Hughes	Mary Steele	Rebecca Grist
Ingrid Muller	Emily Smith	Ben Ainsworth	Andre Muller
Adam Geraghty	Laura Dennison	Alison Rowsell	Kate Greenwell
Miriam Santer	Rosie Essery	Liz Payne	Katy Sivyver
Kate Morton	Rosie Stanford	Laura Parry	Fiona Mowbray
Rebecca Band	Jin Zhang	Kirsten Smith	Sian Williamson
Katherine Bradbury	Philine Harris	Daniela Ghio	
Sarah Williams	Frank Han	Adele Krusche	
Judy Joseph	Elaine Douglas	Tara Cheetham	
Sascha Miller	Lis Grey	Joanna Slodkowska-Barabasz	

Plus many other  
co-investigators and  
research team  
members