“I wouldn’t swap semi-skimmed milk for whole milk” : using the person-based approach to develop a personally relevant screen and treat intervention for malnutrition risk in adults aged 65 and over in primary care

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‘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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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
Person-based approach to intervention development

Intervention Planning
- Literature scoping and review
- Qualitative research with target users
- Collate evidence on likely barriers / facilitators / intervention components
- Formulate guiding principles
- Draft/refine intervention materials

Intervention Optimisation
- Qualitative piloting of draft materials
- Refine guiding principles
- Draft/refine intervention materials
- Quantitative data analysis
- Triangulation

Mixed Methods Process Evaluation
- Qualitative research with users

Complementary theory-based activities
Conducted in parallel with the PBA
- Behavioural analysis and construction of logic model
- Revisit behavioural analysis and refine logic model
- Examine theory-based questions drawn from logic model
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>
<thead>
<tr>
<th>Negative Comments</th>
<th>Positive Comments</th>
<th>Possible Change</th>
<th>Reason for change</th>
<th>Agreed change</th>
<th>Date of change</th>
<th>Broad problem code</th>
<th>MoScoW</th>
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<tbody>
<tr>
<td>Contradictory diet advice</td>
<td></td>
<td></td>
<td>IMP – important for behaviour change</td>
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<td></td>
<td></td>
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<td>EAS – easy and uncontroversial</td>
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<td></td>
<td></td>
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<td>EXP – supported by experience (PPIs, experts, lit)</td>
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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

<table>
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<th>If you...</th>
<th>You could try...</th>
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<tr>
<td>Have a small appetite</td>
<td>...eating <strong>little and often</strong>. Try having a <strong>small bite</strong> every couple of hours e.g. crackers and cheese, a boiled egg, toast with marmite, crumpets, yoghurt or a pot of rice</td>
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<td></td>
<td>...<strong>drinking in</strong> between having small bites, instead of just before eating, to feel less full</td>
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<tr>
<td></td>
<td>...eating what you think of as <strong>comfort food</strong></td>
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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 changes. We eat less we need to make the smaller and combinations.

- **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

This 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
- 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
Read more ...

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


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
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
## Acknowledgements:

**PBA intervention development team members**

<table>
<thead>
<tr>
<th>Leanne Morrison</th>
<th>Stephanie Hughes</th>
<th>Mary Steele</th>
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<tr>
<td>Ingrid Muller</td>
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Plus many other co-investigators and research team members.