



A Nutrition Education and Cooking Intervention in a UK Foodbank

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A case study exploring the practicalities and experiences of implementing a healthy diet skills programme in a foodbank setting.

Background

There has been an exponential rise of foodbanks in the UK over the past decade. In 2008/09 25,899 people received 3 days emergency food from UK foodbanks, this rose to 1,084,604 people by 2014/15 (1). The leading UK foodbank charity, The Trussell Trust, is a Christian organisation distributing food to those in need out of local church rooms or community centres. To address the foodbank clients' broader needs, a 'more than food' approach has emerged aiming to improve health and wellbeing and advance social circumstances. As part of the 'more than food' approach Coventry Foodbank and Coventry University in partnership working applied for funding from Lottery Awards for All to fund for one year a graduate part-time dietitian to design and deliver a cooking and nutrition course.

This intervention was deemed necessary as food insecurity is a growing concern in the UK with 8.4million individuals (13%) food insecure in 2014 (2). The diets of foodbank clients usually fall short of healthy eating recommendations as they are unable to acquire or consume an adequate quality or sufficient quantity of food (3). Coventry Foodbank wanted to be able to provide practical skills and knowledge regarding healthy eating and cooking at a low cost to supplement the foodbank parcel they were giving to clients.

The aims of the intervention were:

- To communicate health messages in an appropriate way to support dietary and lifestyle change

- To explore the role of a dietitian in a UK foodbank
- To test the feasibility of delivering a nutrition intervention for foodbank clients and to measure change in nutrition knowledge, food choice and confidence of healthy eating and cooking

Practice Development

A two-week nutrition education and cooking intervention was delivered in a UK foodbank by a dietitian. The population was defined as foodbank clients accessing support at Coventry Foodbank. The intervention involved 2 x 2hour sessions, split into one-hour nutrition education and one hour on cooking fresh vegetable soup. The focus of the intervention was on 'Soups for Revival' as this was a stipulation of the funding grant. It was felt that soup was a simple nutritious meal to use as a starting point to improve skills and knowledge.

All foodbank distribution centres had posters for advertisement. The intervention took place at four of the busiest foodbank centres. The kitchen facilities at these venues were basic and sometimes portable cooking equipment was taken to the venue. Recruitment took place for 2 weeks and following this the intervention was delivered for 2 weeks. Recruitment took place whilst clients received soup and a roll whilst waiting for their foodbank parcel. Giving out the soup and collecting the empty mug created the opportunity to recruit onto the programme.

The length of the course was agreed with different stakeholders. Recommendations from research highlighted the challenge of delivering an intervention in a hard to reach group within longer timeframes (4). Two weeks was felt to be an attainable course length that would reach a wider audience. At the time of delivering the intervention there was a local 9 week 'cook well eat well' council-run course being delivered, so clients were also able to be signposted to this course.

The content of the nutrition intervention was developed from existing interventions and available resources. This included:

Week 1: learning about The Eatwell Guide, food budgeting tips and reducing food waste. The first week tomato soup was made. When making the soup there was the opportunity to discuss cooking tips and get to know one another.

Week 2: meal ideas using ingredients given at the foodbank, understanding food labels and physical activity ideas. The second week the soup made was chosen by the group during the first session. The nutrition information was tailored to foodbank client's needs and resources. For example, one foodbank client only had a kettle and no other cooking facilities therefore some of the content was adjusted accordingly to meet their needs. Clients attending both weeks received a hand blender,

recipe cards and ingredients to make the soup at home. The resources were used as an incentive to sign up to the course and encouraged participants to make the soup at home instilling new behaviours.

Measuring Impact

An intervention-specific questionnaire was completed pre and post intervention, to measure change in nutrition knowledge, food choice and confidence. Knowledge was measured by asking foodbank clients the recommendations for physical activity, fruit and vegetable intake and questions on The Eatwell Guide. Food choice options related to budgeting and shopping were measured by identifying and ranking statements such as 'writing a shopping list' as: already do it, will try to do it and not for me. Confidence was measured by ranking a variety of variables on a 5-point Likert scale, such as 'preparing healthy meals from the foodbank parcel'. Feasibility was measured through client's uptake and attendance rates. A Wilcoxon test, McNemar paired sample test, and 2-tailed paired sample T-test were run on the data. 95% confidence intervals around the mean change was presented and statistical significance was accepted at $P < 0.05$.

42 foodbank clients completed the intervention, and on average there were 2-4 foodbank clients on each course. Only 2 foodbank clients (5%) did not complete the intervention. The low dropout rate (5%) demonstrated acceptability of the intervention. Attrition from recruitment of the intervention to attendance was high (42%). The mean age of participants was 36 years (± 12 s.d.), 70% were female and 68% identified as single.

Following the intervention there was an increase in clients' knowledge of the recommendations for physical activity (55%) and The Eatwell Guide (40%) ($P < 0.001$). Foodbank clients knew the recommendations for fruit and vegetable intake pre intervention, but their intake was low; on average 2 portions per day. Many of the food choice statements used to determine budgeting and shopping habits, were already observed, for example buying value brands ($P > 0.285$) and 'using tinned/frozen fruit and vegetables' ($P > 0.614$). Confidence was identified as the most improved measured variable. Across all variable's confidence increased with statistical significance, for example 'How confident do you feel in planning meals?' ($P < 0.001$).

Learning

Positive features of the intervention:

- There was a low dropout rate between week 1 and week 2 of the intervention (95%).
- Improvements were noted in nutrition knowledge and confidence.

- Many of the clients stated that their cooking confidence had increased, and they were planning to try to cook more meals at home.
- Many participants reported that they enjoyed the social aspect of the course.
- At recruitment, offering homemade soup and a roll engaged potential participants and provided a nutritious meal whilst they were waiting for their foodbank parcel.
- Incentives to participate were well received, they encouraged attendance and empowered foodbank clients to instil new behaviours.
- Feasibility has been tested for the role of dietitians' in UK foodbanks.
- The dietitian provided an advocate role to other services within the foodbank network, for example referring on to the job club.

Challenges of the intervention:

- Advertising and recruitment of the intervention to the target population took a significant amount of time for the dietitian.
- Many people signed up for the intervention but did not attend. Of the 96 people recruited for the intervention only 42 (42.7%) attended.
- Transporting the cooking equipment between venues.
- Foodbank clients seeing improving health as important. Many of the foodbank clients had other important factors to address in their life such as housing and finance. Attending the programme was a low priority.
- A part time dietitian role meant that not all foodbanks within the Coventry Foodbank network were able to be targeted. It was also challenging to complete the objectives of the role in the time available.
- Relying on volunteers to support delivery of the intervention as not always were they able to help due to other commitments.
- Limited evidence base in the subject area.

Recommendations:

- On the spot interventions may work better instead of asking clients to return on a future date. For example, delivering a health promotion topic as a stand which foodbank users are encouraged to access as they are waiting for their foodbank parcel. There could be different topics delivered each week, that are put on a repeated cycle, examples could be cheap but healthy snack ideas, getting your five a day and increasing fibre in the diet.

- The clients supported are facing extreme hardship so it is important to understand what would be helpful in times of crisis. For example, by providing a key take home message and keep nutrition knowledge and terminology basic to increase engagement, as baseline knowledge was low.
- Adding recipe cards to food parcels using ingredients enclosed would also be a simple yet effective intervention as many foodbank users feel unsure what to do with the ingredients they are given. This is something some but not all foodbanks do.
- Text messaging to be used as the main method of communication to remind foodbank clients about the intervention.

Conclusion

The intervention identified that a dietitian working within a foodbank is a feasible and worthwhile asset and produced similar findings to other published research (5). The intervention made an important contribution to the foodbanks 'More than Food' model. Improving confidence to prepare healthy meals is important to support behaviour change and should be a key focus in interventions like this. This case study highlights the evolving role of an allied health professional in the community setting developing on existing assets such as community buildings and volunteers.

'Food is a simple medium through which powerful positive change can take place within our community'

References

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