



# Slow cooking for communities, Northern Ireland

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### Introduction and context

In February 2019, the Cook it! Team in partnership with North Ballymena Community Cluster (NBCC) group devised a cross community project "Slow cooking for communities" in the Dunclug & Doury Road areas in Ballymena. The NBCC aims to "increase social cohesion within the North Ballymena Area, reducing anti-social behaviour and sectarianism and increasing community confidence and wellbeing" <sup>1</sup>. Dunclug was identified as one of the most deprived super output areas within Mid and East Antrim for four of the seven domains including health and disability, income, education, skills and training and crime and disorder, resulting in them reaching the top 10 multiple deprivation list <sup>2</sup>.

Evidence shows those living in deprivation are 47% more likely to be obese than those living in nondeprived areas <sup>3</sup>. Obesity is a significant health concern in Northern Ireland with 65% of adults being overweight or obese.

The National Diet and Nutrition Survey Northern Ireland shows that food energy from saturated fat exceeds the recommended maximum level, by 15-20% in children aged 4 years upwards and 20-27% in adults. Excessive amounts of saturated fats are linked with cardiovascular disease <sup>4</sup>.

Conversely, AOAC fibre intake (American Association of Analytical Chemists method) and fruit and vegetables intake, did not meet recommended levels <sup>5</sup>.

An interactive cooking class was the chosen programme design as research has shown that this type of intervention can improve confidence with cooking as well as improving dietary intake <sup>6</sup>. It was felt slow cooking was a convenient and cost-effective way to encourage families to cook from scratch whilst reducing reliance on processed convenience foods and takeaways. These foods tend to be higher in saturated fats and salt, and red and processed meats in excess is linked to an increased risk of colorectal cancer <sup>7</sup>.

# Method

An open invite was sent via WhatsApp and word of mouth by a NBCC community worker to two housing areas within the NBCC catchment area. An informal coffee morning was set up to allow participants to find out more about the project, get to know the Cook it! team, choose their favourite recipes and if desired, to sign up to the programme.

Four weekly interactive sessions lasting 2 hours were delivered by a Registered Dietitian covering theory on food safety, how to use a slow cooker, general healthy eating principles, sustainable diets, sugar, and fat. We used the British Dietetic Association's environmentally sustainable diet project, 'One Blue Dot' to demonstrate how sustainable eating can also be cost effective and good for one's health. A group activity demonstrating how useful store cupboard items can be in creating multiple dishes was included. Visual displays demonstrating the sugar and fat content of foods was discussed with participants.

During each session, the group prepared a recipe as a team. At the end of the session, they were encouraged to taste the recipe - a batch pre-prepared by the Cook it! Team. Participants who did not own a slow cooker, were provided with one funded by NBCC. Ambient ingredients were provided for each attendee to encourage replicating the recipe at home. The Cook it! team decided against providing high-risk foods, such as beef or poultry to minimise the risk of food poisoning.

A WhatsApp group was set up and managed by NBCC, to encourage group interaction and social cohesion. Each participant received a copy of the Causeway Coast and Glens Borough Council Slow Energy Efficient recipe book <sup>8</sup> and some kitchen utensils.

An intervention specific questionnaire was carried out pre and post programme, using remote devices from Turning Technologies. This allowed responses to be kept anonymous.

#### Outcomes

Despite the small pilot size, this programme showed promising results. Following the programme participants reported a 57% increase in cooking from scratch, 100% participants felt confident using a slow cooker and using a slow cooker once a week or more. 80% of participants reported making healthy changes to their diet and reported improved awareness of healthy eating. Takeaway consumption reduced from 86% of participants purchasing 2-4 times per week to 80% having takeaways once or less per week, with the remaining 20% having takeaways no more than twice per week. There was a reduction in the use of processed foods. At baseline, 43% of the group consumed processed foods daily, this reduced to 100% consuming these foods twice or less per week, following the programme. A study by Mills et al (2017) supports home cooking for health.

"...eating home cooked meals more frequently was associated with better dietary quality and lower adiposity" <sup>9</sup>.

Fruit and vegetables intake did not change with 100% of the group consuming 0-2 portions per day.

Participants from both communities attended and interacted well with each other, sharing ideas on WhatsApp and working together.

A focus group at eight months post initial intervention revealed:

• 100% of participants would recommend the programme and the use of a slow cooker to their friends/family.

- 50% of participants have used their slow cooker at least 1-2 times per week since attending and the remainder used it at least a few times.
- 57% reported consuming takeaways once or less per week.
- 57% reported consuming processed foods once or less per week.
- 100% found the sessions interesting and enjoyed learning more about food and nutrition.
- The group enjoyed practical cooking, food sampling and interactive displays.
- No one used the Causeway Coast and Glens Slow Energy Efficient recipe book.

### **Key learning points**

The group reported enjoying the short interactive educational sessions on healthy eating, followed by a practical cooking session. A slow cooker is not required for everyone and participants indicated they would have attended irrespective of the provision of a slow cooker, therefore the need for this could be checked at registration. Ambient ingredients did not have the positive impact of encouraging the recipe replication at home, therefore we would review the provision of these items in future.

A printed recipe book was provided to each member. However, from feedback these were not used. Supplying a PDF version via the group WhatsApp or use of online resources would save cost and would be more environmentally friendly. Participants suggested a series of 'fake-away' recipes would be useful to include in future recipe books.

It is widely accepted that the cause of obesity is multifactorial but participants provided feedback they would like to know more about portion sizes and calories .<sup>10</sup> Although obesity rates in this group were not reviewed, this desire to increase knowledge of portions sizes and calories is encouraging, given the link with larger portion sizes and increased energy intake.<sup>11</sup>

Follow-up at 8 months showed the sustained use of the slow cooker. However, we did not review the type of recipes being prepared in the slow cooker. This would have been useful to review to understand more detail on the types of food prepared.

This pilot was presented to and reviewed by our regional colleagues in the Public Health Dietitians group in Northern Ireland and has since been adapted into a train-the-trainer model, with training sessions being delivered virtually and knowledge passed on to groups, including those from socially deprived areas, throughout Northern Ireland.

#### **References and additional links**

- The Charity Commission for Northern Ireland (2014) North Ballymena Community Cluster. Available at: <u>https://www.charitycommissionni.org.uk/charity-</u> <u>details/?regid=100224&subid=0</u> (Accessed on 12/12/2021)
- Northern Ireland Statistics and Research Agency (2017) Northern Ireland Multiple Deprivation Measure Available at: <u>https://www.nisra.gov.uk/statistics/deprivation/northern-ireland-multipledeprivation-measure-2017-nimdm2017 (Accessed on 12/12/2021)</u>
- Department of Health (2020) Health Survey NI First Results 2019/20. Available at: <u>https://www.health-ni.gov.uk/sites/default/files/publications/health/hsni-first-results-19-20.pdf</u>(Accessed on 12/12/21)

- The National Institute for Health and Care Excellence health (2010) Cardiovascular disease prevention (PH25), Chapter 1. Available at: <u>https://www.nice.org.uk/guidance/ph25/chapter/1-Recommendations</u> (Accessed on 12/12/2021)
- National Diet and Nutrition Survey (NDNS RP): Results for Years 5 to 9 (2012/13 2016/17) (combined) and time trend and income analysis Years 1 to 9 (2008/09 - 2016/17) Available at:

https://www.food.gov.uk/research/national-diet-and-nutrition-survey-ndns/national-dietand-nutrition-survey-ndns-report-for-northern-ireland (Accessed on 12/12/2021)

- Hasan B, Thompson WG, Almasri J, Wang Z, Lakis S, Prokop LJ, Donald D. Hensrud, Kristen S. Frie, Mary J. Wirtz, Angela L. Murad, Jason S. Ewoldt & M. Hassan Murad (2019) The effect of culinary interventions (cooking classes) on dietary intake and behavioral change: a systematic review and evidence map. BMC Nutr 5, 29 (2019). https://0-doiorg.brum.beds.ac.uk/10.1186/s40795-019-0293-8
- 7. Public Health England (2010) Scientific Advisory Committee on Nutrition Iron and Health. Norwich. TSO. Available at: <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/339309/SACN\_Iron\_and\_Health\_Report.pdf</u> (Accessed on 12/12/2021)
- Causeway Coast and Glens (no date) Slow Energy Efficient Recipe Book Available at: <u>https://www.causewaycoastandglens.gov.uk/live/health-and-built-</u> <u>environment/environment-health-and-well-being/wellbeing/improving-wellbeing-through-</u> <u>food/slow-energy-efficient-cookbook (</u>Accessed on 12/12/21)
- Mills S, Brown H, Wrieden W, White M, Adams J. Frequency of eating home cooked meals and potential benefits for diet and health: cross-sectional analysis of a population-based cohort study. Int J Behav Nutr Phys Act. 2017 Aug 17;14(1):109. doi: 10.1186/s12966-017-0567-y. PMID: 28818089; PMCID: PMC5561571.
- S M Grundy (1998) Multifactorial causation of obesity: implications for prevention. The American Journal of Clinical Nutrition, Volume 67, Issue 3 <u>https://doi.org/10.1093/ajcn/67.3.5635</u>
- M. Barbara E. Livingstone, L. Kirsty Pourshahidi, Portion Size and Obesity, Advances in Nutrition, Volume 5, Issue 6, November 2014, Pages 829–834, <u>https://doi.org/10.3945/an.114.007104</u>