



Title: Fun with Food: A collaborative, universal approach to improving child healthy weight through an established parenting programme

Name and job title of Authors: Jamie Dorrans and Elaine Jocelyn; Dietitians

Email: Elaine.Jocelyn@aapct.scot.nhs.uk

Description

The Fun with Food project is a group based parenting programme developed collaboratively by NHS Dietetic Health Improvement (DHI), Early Years Education, and the charity Peep.

Through established partnerships with early years, the DHI team worked with key practitioners and leads involved with the charity “Peep” to develop a universal approach to child healthy weight within early years settings. Peep train and support practitioners to run evidence-based parenting programmes named “Peep groups”.

An area wide working group consisting of staff from each of the three organisations used the Plan, Do, Study, Act (PDSA) quality improvement methodology to take the current Peep nutrition session plans and further enhance them with NHS information, resources and activities.

Once completed, the session plans were delivered through four test groups across all three Ayrshire localities. The target population were families with young children living in Scottish Index of Multiple Deprivation (SIMD) 1-2 areas (the most deprived), although, the programme was open to any families with young

children. An evaluation was completed and the results considered to guide where the project will go next.

From the process evaluation there are early indications that the programme provided key healthy eating messages to families in an effective way that limited the added workload impact on early years practitioners.

Introduction and Context

Childhood overweight and obesity is a major public health issue facing Scotland. In Ayrshire and Arran, the 2022/23 Primary 1 BMI data revealed that 22% of children were at risk of overweight and obesity (Public Health Scotland, 2023). Research by Cunningham et al (2014) and Arisaka et al (2020) presents the evidence that weight during early childhood impacts later childhood, and adulthood, therefore, laying out the rationale for early intervention and prevention programmes targeting early years (0-5y).

Currently, the DHI team deliver a programme “Jump Start Tots” which is a targeted early years child healthy weight intervention. This is delivered on a one-to-one basis with families referred from partner services e.g. health visiting. Whilst aiming to provide access for early intervention to families with children aged 2- 4 years above a healthy weight, developing a universal, group approach will contribute to prevention of childhood overweight and obesity in Ayrshire.

The charity called “Peeples” currently train early years, local authority, and third sector staff to deliver “Peep groups” which are groups for parents/grandparents/guardians and the young children (0-5years). These groups cover a range of different topics and aim to support children’s development by making the most of play and learning opportunities. They also provide a space for different families to meet, socialise, and learn about healthy lifestyles to support their babies and young children learning.

The aim of this project focused on establishing a universal child healthy weight approach by enhancing nutritional messaging currently being delivered through Peep groups. Initially being delivered in selected early years centres with the future aim to roll it out on a larger scale.

Method

The Fun with Food project was developed using the Plan, Do, Study, Act (PDSA) methodology.

Plan

A working group was established comprising of practitioners from DHIT, Early Years Education, and Peeple. The development and enhancement of the current three nutrition related Peep session plans was agreed by the group as the best way to progress. Thus, the group separated into three subgroups with representation from health and early years. Each subgroup was assigned one of three session plans titled: Food for Life, Exploring Food, and Making the Most of Mealtimes. Each session plan was developed to provide more detail on how to run the session, as well as integrating NHS information, resources, and activities.

Once work on the session plans was complete, four test groups were planned whereby each subgroup would deliver a 4-week Peep group using all three enhanced session plans with a special celebration session at the end. Families with young children (0-5years) living in areas of high deprivation (SIMD 1-2) were selected as the target population.

Do

The test groups were delivered in all three Ayrshire localities. They were delivered in three Early Years Centres in which the early years practitioners worked.

Study

To gather quantitative data, a pre and post survey was developed but could not be implemented due to test group timescales. Qualitative data was also gathered through written feedback at the end of sessions.

Act

In the Act phase, evaluation data as well as practitioner experience was used to reflect on the project and determine the next steps.

Outcomes

The Fun with Food project was successfully delivered over a 4-week period in February/March 2024. All three session plans and the celebration session were delivered to different age groups in North (2-3years), East (3-5years), and South (0-2years) Ayrshire. While the session plans were broadly followed, certain aspects were adapted when delivering the session, but these were recorded to guide any future session plan development. The quantitative pre and post survey was not used for two reasons: A) logistically it was challenging as each session lasted only one hour and parents struggled to complete the questionnaires whilst looking after their young child in a new and stimulating environment, and B) it was important to avoid any negative feelings such as judgement – especially during week one with the pre-questionnaire. Therefore, qualitative feedback was gathered informally at the final session.

Locality	Total	SIMD 1&2	SIMD 3-5	SIMD not known
North	23	9	13	1
East	15	10	5	0
South	5	4	1	0
Totals	43	23	19	1

Total contacts over 4-week group: 113

Family Feedback:

All feedback from the families was positive and grouped into five different themes: information, enjoyment, resources, recipes, and homework. Some examples and their themes are below:

“I am more confident choosing the right foods for me and my children” – Family C (information)

“absolutely buzzing on a Peep day, loved everything about it. Great doing things together and learned a lot about myself” – Family D (enjoyment)

“(We) enjoyed using the sticker taste adventure at home to try new foods” – Family F (resources)

Practitioner Feedback:

Practitioners felt the sessions all had learning points which could be communicated easily and that families responded well to. It is worth noting that all comments were positive and constructive:

“Fun and inclusive session with full participation and allowed apprehensive children a way to interact with food that was new and fun” – Practitioner A

“Good use of resources such as HENRY taste adventure and NHS fussy eating leaflets” – Practitioner C

“(we used the) PEEP pancake song instead of silly pie song because it went with pancake activity” – Practitioner E

Key Learning Points

From the methods and results, it is clear that the collaborative model demonstrated that the established Peep parenting programme could be delivered as a universal approach to child healthy weight within early years. The result was an information-rich parenting programme; based around fun, inclusion, and learning; which was simple to understand and implement for practitioners. From the family data, it can be seen more than half the families live in SIMD 1 and 2, which was the target population.

The group-based format provided an alternative space for families struggling with their child’s food related behaviours to receive key nutrition and health messages. It has demonstrated a potential gateway for practitioners to signpost families into the targeted intervention, Jumpstart Tots, in a safe, non-judgemental environment where a relationship and rapport has been created.

Strengthening partnerships was integral to success which is seen by the feedback on the session plans and will be used to inform further groups.

An area for learning focuses around impact on family food habits. While qualitative written feedback from the families provides a good insight into their experience of the project, it lacks evidence on clear dietary changes such as increased fruit and vegetable intake or decreased sugary drinks intake. While a quantitative evaluation process was developed and described in methods, it was not used for reasons described in results but will be considered for further test groups.

The test group was delivered by experienced early years practitioners, who contributed to the enhanced the session plans. Therefore, for less experienced practitioners who may be new to Peep, further training and support from these experienced practitioners and the DHI team should be provided to enable them to deliver the programme.

References

1. Arisaka, O., Ichikawa, G., Koyama, S., & Sairenchi, T. (2020). Childhood obesity: rapid weight gain in early childhood and subsequent cardiometabolic risk. *Clinical Pediatric Endocrinology*, 29(4), 135-142.
2. Barr, E., & Brannan, G. D. (2024). Quality Improvement Methods (LEAN, PDSA, SIX SIGMA). In *StatPearls [Internet]*. StatPearls Publishing.
3. Campbell, P. (2022). Final Report on the Implementation of a Local Early Years Healthy Weight Programme (Jumpstart Tots). P22
4. Cunningham, S. A., Kramer, M. R., & Narayan, K. M. (2014). Incidence of childhood obesity in the United States. *The New England journal of medicine*, 370(5), 403–411. <https://doi.org/10.1056/NEJMoa1309753>
5. Public Health Scotland. (2023). Body Mass Index of Primary 1 children in Scotland. *A National Statistics release for Scotland*. P16-17.
6. Simmonds, M., Llewellyn, A., Owen, C. G., & Woolacott, N. (2016). Predicting adult obesity from childhood obesity: a systematic review and meta-

analysis. *Obesity reviews : an official journal of the International Association for the Study of Obesity*, 17(2), 95–107. <https://doi.org/10.1111/obr.12334>