

Acceptability and usability of a 200ml portion control tool in the family setting on the Island of Ireland

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Introduction

- The consumption of larger food portion size (PS) is a risk factor for obesity (1)
- The range of available PS have increased over time resulting in PS distortion among consumers (2-3)
- Weighing scales and measuring cylinders = most accurate; but most cumbersome to use by consumers (4)
- There is a need for user-friendly, fit-for-purpose tools to estimate PS

Objective

To assess the acceptability and usability of a 200 ml reusable cup as a portion control tool (PCT) within the family setting on the Island of Ireland (Iol) using a mixed methods approach

Methods

Quantitative study

Baseline: n 106
2 time points
week 3 ; n 83
week 6; n 80



Qualitative study

Four Focus group discussions
4 to 6 participants per session
21 participating households
total

Intervention pack

- 200ml reusable cup
- infographic (with brief instructions on cup use and care)
Duration of intervention: **6 weeks**
Setting: **rural** and **urban**

Results

Table 1: Patterns of use of PCT measured at week 3 and week 6 from quantitative study(n,%)

Factor	Week 3 n, 86	Week 6 n, 80
Use of PCT	78(94)	78(98)
Acceptability	71(86)	72(90)
Usability	67(81)	58(73)
Meal for which PCT most used: Breakfast	65(78)	62(78)
Meal for which PCT least used: Lunch	10(8)	8(10)
Food type for which PCT most used: amorphous foods	79(95)	75(94)
Use by all household members*	74(89)	69(86)
Daily use of PCT	35(42)	20(25)
Use of pct 4 to 6 days/week	32(39)	38(48)

*Engagement of male household members was limited

Results summary:

- PCT is usable and acceptable
- PCT use declined among respondents with time
- Design of the PCT can be improved

Conclusions

A 200ml PCT within the family setting on the Iol is effective, in the short term for increasing awareness of appropriate food portion size

Future studies are warranted to assess longer term use both in and out of the home setting

Qualitative results: Perceived behaviour changes linked to PCT use

- Introduction of the PCT into the household resulted in perceived changes in behaviour with respect to portion control
- The positive behavioural changes persisted for the duration of the study

Acceptability: experience using the PCT was generally positive

“Much easier for portion sizes than just guessing”

A few respondents did not find the PCT acceptable
“Not useful for normal family meals but more tailored towards those on a strictly controlled diet”

Usability: no problems reported with use, however design improvements were suggested

“I will use it while I can still see the writing”

“It is too hard when hot food is in it, we use it for hot milk, noodles, pasta”

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References

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