

Consumer views of portion size estimation aids

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Larger portion sizes (PS) are one of many factors contributing to the rise in obesity, and this has also distorted consumer's perceptions of appropriate PS⁽¹⁾. To date, there has been little research into consumers' views about portion size estimation aids (PSEA) available to assist with estimating more appropriate PS. The current study aims to explore consumer preferences for PSEA.

Six focus groups (three in NI and three in ROI) with three to eight participants in each group were formed. In total, 32 participants (17 males; 15 females, aged 18–64 years) from both urban and rural locations and representing a range of socio-economic groups took part. Their views on a representative range of PSEA were explored using a semi-structured discussion guide. PSEA included: quantities and measures (e.g. serving sizes on food labels), reference objects (e.g. palm of the hand), household measures and utensils (e.g. 200 ml disposable cup), and food packaging (e.g. demarcations on cheese block). The focus groups were audio recorded, professionally transcribed verbatim, coded by two researchers independently and analysed using an inductive thematic analysis⁽²⁾.

The major themes which emerged are outlined below with example quotes:

Major themes	Example quotes from participants
Prefer 'visuals' (objects/utensils/ indicators on food packaging) to quantities	"I think the visual is better than ... you know when you can actually see the amount rather than grams"
Use PSEA before cooking food	"Before I start cooking I would measure the rice"
More realistic serving sizes	"It says 18 servings per box; I would say I would get half of that out of a box, cereals especially..."
PSEA are only for weight loss	"...they all seem to be intended for people who wish to limit their food..."
Introduce early and reinforce	"Yeah, if you start at school and then you grow up yourself with it"
PSEA needed for grains not fruit and veg	"Not fruit and veg... all fruit and veg are free in our house, you can have as much as it as you want"
Account for age, gender and activity level	"But what about a man that's on a diet that's obese against a normal man that's active?"
Additional guidance on no. of servings per day (range)	"That would be alright if you knew the number of servings"
Via TV ads/ free mobile app <u>not</u> leaflet (routes for communication)	"Leaflets and posters I don't know whether you pay much attention to them"
Consistent serving sizes from one authoritative body	"But from a single source. We've seen lots of contradictory messages..."

This study has identified consumer preferences for "visual" PSEA (e.g. reference objects, household measures and utensils, and food packaging) communicating realistic serving sizes which are flexible for individual requirements, presented consistently and introduced innovatively at an early age. Stakeholders should be cognisant of such views on PSEA when promoting their use for more effective management of PS selection.

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1. Jeffery RW, Rydell S, Dunn CL *et al.* (2007) *Int J Behav Nutr Phys Act*, **4**: 27.
2. Braun V & Clarke V (2006) *Qual Res Psychol* **3**, 77–101.