Submitter: Dr Jean Adams

Author: Jean Adams

Co Author: Aoiffe Doherty, Wendy Wrieden, Louis Goffe, Frances Hillier-Brown,
Amelia Lake, Vera Araujo-Soares, Carolyn Summerbell, Martin White, Ashley Adamson

Topic: Community health and nutrition programs

Title: The efficacy & effectiveness of 5-holed salt shakers for reducing salt dispensed by takeaway fish and chip shops in England

Presentation Type: Poster

Background

UK takeaway fish & chip shops have been encouraged to reduce salt by using salt shakers with five, instead of the standard 17, holes. We sought to determine if: the amount of salt delivered by 5-holed salt shakers (5HSS) and 17-holed salt shakers (17HSS) differs under controlled conditions; and if any differences translate into practice.

Methods

Experiments in controlled conditions were conducted comparing salt delivered by 5HSS vs 17HSS. Independent variables were: type of shaker (5HSS, 17HSS), amount of salt in the shaker (full, half full, nearly empty), time spent shaking (3s, 5s, 10s), and individual serving (n=10).

One portion of fish & chips, with server-added salt, was purchased from all fish & chip shops in two English towns (n=61) and shaker used noted. Salt content was laboratory analysed.

Results
In controlled conditions, 5HSS delivered significantly less salt than 17HSS when other variables were kept constant (p<0.001). This difference was robust to variations in other independent variables (ps<0.001).

Twenty-nine shops used 5HSS and 32 used 17HSS. There was no difference in absolute salt content (mg/meal) of meals from shops using 5HSS versus 17HSS. Relative salt content (mg/100g) was significantly lower in meals from shops using 5HSS versus 17HSS (p=0.008). This was extinguished by adjustment for purchase price.

Conclusions

5HSS deliver less salt than 17HSS in controlled conditions. This translates into differences in relative, but not absolute, salt content of meals served. Shops serving higher priced meals, which may reflect more affluent customers, may be more likely to use 5HSS.