Summer Meeting, 11–14 July 2016, New technology in nutrition research and practice

Calories on menus and that 'Friday feeling'

M. Clements¹, O. Feehan¹, K. McElroy¹, B. Griffin¹, B.E. Cronin¹, F.E. Douglas¹, O.C. Lyons^{1,2} and M.A.T. Flynn^{1,2}

¹Public Health Nutrition, Food Safety Authority of Ireland, Dublin 1, Republic of Ireland and ²Northern Ireland Centre for Food and Health, University of Ulster, Coleraine, BT52 1SA, UK

Calorie menu labelling (CML) increases awareness of the caloric content of food and helps consumers choose foods with fewer calories⁽¹⁾. Food choices vary from day to day, especially at weekends (including Fridays), where calorie intakes tend to be higher⁽²⁾. This study examines the effect of CML, taking into account day of the week.

Calories per portion of food served for breakfast (set daily menu) and lunch (variable daily menu, three week menu cycle) in a hospital staff and visitor canteen were calculated using MenuCal^{®(3)}. Consumer food choices were recorded for both meals on five days (Monday-Friday) of the same menu cycle, over four different time points - November 2014 (Pre CML), January 2015 (2 months Post CML), November 2015 (12 months Post CML) and January 2016 (14 months Post CML). Median calories purchased at each time point were examined for differences according to day of the week and gender. Median calories purchased on each day of the week, at all time points were compared with Pre CML.

	(<i>n</i>)	Pre CML Median (Range)	(<i>n</i>)	2 months Post CML Median (Range)	(<i>n</i>)	12 months Post CML Median (Range)	(<i>n</i>)	14 months Post CML Median (Range)
Monday (kcal)	151	576 (16-1836)	182	491** (51-1488)	219	468*** (0-1558)	209	452*** (0-1960)
Tuesday (kcal)	211	517 (4-1752)	186	547 (10-2840)	242	600* (32-2040)	236	495* (0-1406)
Wednesday (kcal)	211	577 (0-2700)	220	516 (2-2112)	278	538 (5-1568)	221	507* (0-1815)
Thursday (kcal)	184	569 (0-1597)	231	557 (2-2322)	315	528 (0-1591)	305	480*** (32-1215)
Friday (kcal)	227	559 (0-1523)	177	627 †† (16–1758)	288	545 †† (32–1573)	207	527*† (32–1206)

CML: Calorie Menu Labelling

*p < 0.05 **p < 0.01 ***p < 0.001: significantly different compared with Pre CML (Mann-Whitney U)

† p < 0.01, †† p < 0.001; significantly different between Monday and Friday within each time point

As shown in the table, compared with Pre CML median calories purchased were significantly lower every day at 14 months Post CML. This 14 month effect was evident in males, except on Tuesday, and in females except for Wednesday and Friday (data not shown). At all time points Post CML median calories purchased on Mondays were significantly lower compared with Fridays (see table). Compared with Pre CML, Monday was the only day where median calories purchased were significantly lower at each time point examined.

In conclusion, this study shows that CML reduces calories purchased on Mondays more than any other week day. The longer that CML is in place, the more effective it is at reducing calories purchased, regardless of day of the week. CML creates a marked difference between calories purchased on Mondays compared with Fridays. This 'Friday feeling' is more evident in women.

Nikolaou CK, Hankey CR and Lean MEJ (2016) Eur J Clin Nutr 70, 386-392.

Rupong AN, (2016) Am Epidemiol **26**, 57–65. MenuCal[®]. Available from: www.menucal.ie (Accessed Oct 2015).