Worksite Catering Interventions:
Overview & Two Trial Interventions

SSPHR Workplace Interventions Workshop

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Worksite Catering Interventions

- Benefits of workplace setting for nutrition based interventions
- Current balance of evidence around effectiveness
- Caveats and cautions associated with current literature
- Background and rationale to current feasibility studies
- The Projects themselves...
Advantages of Workplace Setting

- Work environment is subject to a degree of control
- Workforce can often be fairly homogeneous
- On-site catering facilities often have a ‘captive population’
- Feedback can often be very forthcoming...
Current Balance of Evidence

- Generally encouraging (e.g. Anderson CDC review) (2.8pnds wt loss pooled over 9 RCTs)
- Multicomponent interventions fair better
- While much of the best evidence comes from US (with associated concerns over wider applicability of findings), a recent European based review (Maes et al) also had much to be positive about (incl. sustained behaviour change from rel. low intensity interventions)
- Although all 3 recent reviews in this area had similar methodological concerns/...
Common Methodological Problems
- as noted by reviewers

- Absence of controls or comparison groups
- Absence of reliable baseline data prior to intervention
- An over-reliance on subjective outcomes (e.g. diet self reporting)
- Limited duration of follow-up...

BUT
Workplace interventions are difficult...
Intervention Trial 1:
EatSMART: A feasibility trial to promote the uptake of healthy eating options in workplace canteens.
Trial 1: Promoting the uptake of healthier eating options

- SCPHRP / CSO seed-funding grant in collaboration with University of Dundee
- Worksites recruited who already held ‘healthy living award’: 2 stage process
- Intervention formulated with canteen staff and diners: ‘discount meal-deal’:
  - Marketing and price combined approach
  - Items could not be labelled as healthy due to new EU marketing restrictions
Primary recruitment strategy

- Independent workplace sites contacted directly by study team: n = 37
  - Interested: n = 4
    - Non-responsive: n = 2
    - Unsuitable: n = 1
    - Withdrawn: n = 1

  - Sites participated in the study: n = 0

Secondary recruitment strategy

- Workplace sites invited to take part via Healthy Living Award Team email invitation (Summer 2011): n = 37
  - Sites contacted directly by the Health Living Award Team (April/May 2012): n = 4
    - No response: n = 2
    - Interested: n = 2
      - No senior approval to participate: n = 1
      - Positive meeting but no further participation: n = 1

    - Sites participated in the study: n = 0

- Sites contacted directly by the Healthy Working Lives Programme (Jan – May 2012): n = 4
  - Responded but not interested: n = 2
  - Interested: n = 2

  - Sites participated in the study: n = 2

Sites completing study: n = 2
Participating sites…

Call Centre A (private)
- N = 1600; 800 on site
- Gender: Higher M:F
- Wage levels: low to moderate
- Combination deal A#
- Reduced price for 10 weeks (£1.80)
- Desk area promotion

Call Centre B (public)
- N = 550
- Gender: Higher F:M
- Wages: moderate-high
- Combination deal B#
- Reduced price ~ 10-20% redn (£2.50/£3)
- Visualisation in canteen only (paperless site)

# Combination deal A = soup+sandwich / salad & brown roll (alternate wks)
# Combination deal B = soup+sandwich OR soup+sandwich+fruit
Promotional Material: Site A
Promotional Material: Site B

**Today's Specials**

- **EAT SMART PROMOTION**
  - Soup & Sandwich Combo £2.50

**Today's Soup & Sandwich Combo**
- Tuna & Sweetcorn £2.50
- Smoked Salmon & Cream Cheese £2.50
- Ham & Cheese, Fruit Combo

**Today's Special**
- Steak Pie Pots & Veg £2.75

**Baked Potato - Various Fillings**
- Chips
- Chicken Burgers
- Paninis
- Pies, S/Roll

**Vegetarian Sausage Rolls**

**Soup of the Day**
- Carrot & Coriander Soup

*Please be aware the contents are very hot. If you require assistance please ask.*
Results

- Uptake of intervention meal-deals was relatively low: 15% at site A and 43% at site B reported purchasing an EatSmart ‘meal-deal’ during 10 week intervention
- 38% and 56% respondents (respectively) reported seeing marketing materials
Benefits to Catering Services

- Perceptions of what was on offer at canteens improved significantly e.g. For site B: On choice (p=0.008); quality (p=0.008); value for money (p=0.035); overall dining experience (p=0.004).
Limitations / Lessons Learned

- Substantial support required to initiate and develop programmes (logistical differences between sites)
- Individual-level till receipt data not available (cashless systems would in principle be easier)
- Marketing information “could have been more visible” or “clearer about what was on offer”
Intervention Trial 2: Workplace Vending Machines
Traditional Vending Machine Food…

- Not terribly appetising!
- Health credentials not high on the list...
- Often consumed as last resort
- Disproportionately eaten by people working unsocial hours / more disadvantaged groups
- And yet:?

...
Thanks to studies of French et al:

- Vending machine based trials = some of the most convincing evidence that healthier options can be price-incentivised!
- Trials have targeted ‘hard to reach groups’ (students & transport workers)
- Would we be able to demonstrate similar effectiveness in Scotland?
Step forward Abercromby Vending..

- Small family firm based in East-end of Glasgow
- Only vending company in Scotland to receive ‘healthy living award’
- 30% of their range qualifies as healthier using FSA approved nutrient profiling software...
- Now servicing around 30 sites
- Keen to explore price incentives
  Small trial at design stage...
Experiment Design – Phase 1

- 4 sites selected (3 blue collar; 1 white collar)
- Using either crossover design or ‘time-series’ (dependent on extent of historical data available)
- Big advantage – we are only dealing with one company since they control machine contents
- If successful – potential roll out to 30 sites – detailed sub-group analysis etc...
Abercromby Vending Ltd is a family owned business established in 2005 to service a gap in the vending dispensing market. The rationale behind Abercromby Vending Ltd was simple, to merge the talents of a caterer and vending engineer to form Scotland’s first and exclusive fresh food vending company.

From humble beginnings Abercromby Vending Ltd has now over 200 vending machines. We recently moved to a purpose built food manufacturing plant in Arrol Road, Glasgow, Abercromby Vending Ltd has witnessed continuous growth with large sections of our commissions coming from companies wishing to replace what’s traditionally known as the works canteen with Abercromby’s vending suites.

Abercromby Vending Ltd has distribution rights with Aminis foods for the new Pour Moi hot drinks system. A G Barr and Coca Cola soft drinks, Mars Confectionery, Mars Hot Drinks and GSK (Lucozade). We are also full members of the Government approved Automatic Vending Association (AVA) and are fully accredited with ISO 9001 2008 as well as being on the preferred supplier’s list with the Scottish Executive for vending machines, all our operators are approved with full Disclosure Scotland. All our food vendors stock at least 40% of healthy products which are clearly visible by the Healthy Choice Label.
Conclusions

- There is certainly a willingness by employers to engage in measures to improve workplace diets.
- Many logistical/planning issues to be overcome - which can vary between workplaces.
- Perhaps simpler designs like vending machine study are a way forward initially (especially regarding feasibility of price incentives).
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<thead>
<tr>
<th>Name</th>
<th>Affiliation (during project)</th>
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<tr>
<td>Professor Annie Anderson</td>
<td>University of Dundee</td>
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<td>Dr Dionne Mackinson</td>
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<td>Dr Ruth Jepson</td>
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<td>Dr Maureen Macleod</td>
<td>University of Dundee</td>
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<td>Barbara McDougall &amp; Claire Brown</td>
<td>Healthy Living Award Team (Consumer Focus Scotland)</td>
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<td>Catering Staff &amp; Diners</td>
<td>Participating sites &amp; Vending Company</td>
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