

## Editorial

### *Improving healthy nutrition at the workplace: Why are we so behind in France?*

The implementation of Worksite Health Programs in France is the responsibility of individual employers, as per the national labour law and as a result of a long social history. This translates as priority to OSH (Occupational Safety and Health) approach and poorly developed Workplace Health Promotion. Nutrition is addressed by occupational practitioners in terms of irregular work hours, for example people working at night, but is otherwise often absent from workplace topics. Moreover it is difficult to strike a good balance between the proposition of nutrition policies in the workplace and individual freedom regarding dietary behaviours. It is assumed that people generally wish to eat what they want and do not appreciate an imposed nutritional message. Nevertheless, there is clear evidence of the links between lifestyles, including nutrition habits, working conditions, and ill-health. The current French figures on F&V point to low consumption. It is well known that price, taste, and eating habits in the home are determining factors; in the work place, there is also the issue of where to find fruit and vegetables and how to keep them.

The ideas of CSR (Corporate Social Responsibility) or Sustainable Development and work-life balance are increasingly becoming topics of debate and policy. This is partly in response to the fact that individuals also are becoming more concerned with their own health.

Some first examples of positive actions to improve access of F&V in the workplace include direct services offered to companies, vending machines which also deliver fruit compotes and fresh fruit, and nutrition information and education programs led by companies themselves or by workplace collective catering companies. Times are changing in response to demand of French consumers for healthier options, and specifically fresh fruit and vegetables, in the workplace.

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# Health promotion services for lifestyle development within a UK hospital

## Patients' experiences and views

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The WHO Health Promoting Hospitals & Health Care Network (HPH) guidance<sup>1</sup> and UK public health policy<sup>2</sup> require hospitals to have in place services which enable patients to improve their health through adopting healthy behaviours, i.e. health education. I report here on the findings from a study which investigated hospitalised patients' experiences and views of health education for, amongst other lifestyle issues, diet<sup>3</sup>.

### Methods

Recently discharged adult hospital patients (n=322) were sent a survey which included questions on whether the patient agreed that "all adult [hospital] patients should be asked about their diet" (Responses were on a five point likert scale ranging from "strongly agree" to "strongly disagree"). Responders were asked about their fruit and vegetable consumption<sup>4</sup>, whether they received health education for diet, whether it was "helpful" (likert scale from 1 "not at all helpful" to 5 "very helpful"), and if they wanted to consume a healthier diet (responses: "yes" or "no"). Participants were also asked a set of general questions concerning health education within hospitals.

Health education was defined as any action taken by a member of staff at the hospital to enable the patient to take control over aspects of their lifestyle that may have a negative effect on their health. Actions included verbal advice, written advice, and referral to specialists/services that aim to improve diet.

Responses to questions were subject to descriptive statistics: proportions, 95% confidence intervals (CI) and tests for proportion differences where appropriate. All reported significance values are two-tailed.

### Patient's experiences and views

There was a 59% response rate. Responders were between the ages of 17 and 76 years, mean age was 57.0 ± 1.3 years (SE) and length of hospital stay ranged from 1 to 50 days, with a median of 4 days.

Key findings were as follows:

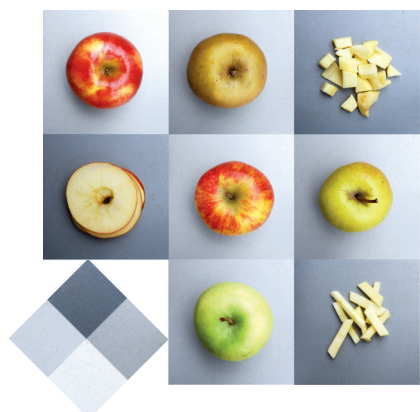
- The majority of responders (84%) agreed that all adult patients should be asked about their diet, 11% were undecided and only 5% disagreed.
- There were 83% of respondents that consumed less than five portions of fruit and vegetables a day (95% CI = 76% to 88%).

- Significantly more people who consumed less than five portions of fruit and vegetables a day wanted dietary advice during their hospital admission compared to those who consumed five or more portions a day (67% and 36% respectively,  $P < 0.002$ ).
- A quarter of responders were asked about their usual diet during their hospital admission (95% CI = 19% to 32%);
- Only 12% of patients consuming less than five portions of fruit and vegetables a day received health education for diet (95% CI = 7% to 18%).
- Dietary health education was delivered in the form of leaflets (n = 6) or verbal advice (n = 11). None were referred to a specialist or service.
- Numbers were too small to conclude how helpful the health education was: 4 reported that it was not helpful, 6 that it was neither helpful nor unhelpful and 6 found the health education helpful.

Over 60% of patients wanted health education around discharge, but the majority receiving health education did so at admission. The majority agreed that "the hospital is a good place for patients to receive" health education (87%) and that "the hospital should provide patients with details of community organisations that provide" health education (83%).

### Hospitals, a good place for health promotion

The study findings indicate that hospitals are viewed as an appropriate and acceptable setting for the delivery of health education for diet. There was clear support for assessing adult hospital patients for diet and considerable demand for health education, but very low levels of dietary assessment and health education. The challenge facing hospitals is how to meet their patients' demand for health education on diet. Guidance on delivering health education within hospitals has been provided by the WHO HPH<sup>1,5</sup>, and there is some evidence of effective actions that can be taken to increase patients' fruit and vegetable consumption<sup>6</sup>: All food provision within the hospital should include a variety of fruit and vegetables alongside active promotion of healthy food choices<sup>5</sup>. Patients with low consumption of fruit and vegetable need to be identified and provided with a combination of written and verbal health education materials<sup>7</sup> and offered brief interventions which have been shown to improve diet and nutrition<sup>6,8</sup>.



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# Successful strategies for sustaining increased F&V consumption in worksite canteens

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The settings approach to promotion of healthy eating has been growing in importance ever since the Ottawa charter for health promotion was adopted in 1986 (<https://www.who.int/healthpromotion/conferences/previous/ottawa/en/>). In settings, a large number of individuals can be reached including many unlikely to engage in preventive health behaviors. Since, for many companies, the concern for the long term health and well-being of its employees is of strategic concern health promoters and companies in a growing number of cases have joined efforts to develop and test healthy eating interventions. Common to settings approaches is that in all cases intermediaries play an important role in delivering the intervention. Traditionally our understanding of how individuals adopt a healthy eating pattern has relied on insights from behavioural health theories that traditionally put the individual in the centre. However, to make interventions work in complex social settings, we need theoretical insights from organizational sociology. This is due to the fact that the sustainability of such interventions is a central challenge in public health nutrition interventions<sup>1</sup>. Sustainability of a healthy eating intervention is about how the healthy eating project keeps up its momentum after the researchers have left.

This paper reports on key elements in sustaining increased F&V consumption in a canteen environment intervention that has been followed in the 5 years after the intervention was started. The full report from the study including detailed accounts of the daily employee F&V intake in the 5 Danish workplaces will be available in Thorsen et al<sup>2</sup>.

Traditionally, it has been assumed that interventions can be regarded as one size fits all. However the current study shows that worksite interventions need to be tailored to the needs of the particular worksite environment in which they are

implemented. Furthermore this tailoring needs to be done in close partnership with the local stakeholders. Intermediaries that seem to play a special role in food and nutrition issues are canteen staff and managers.

## ***An intervention in Danish canteens***

The current intervention project started in 2000 as a partnered dialogue research design where the Danish 6-a-day partnership along with local worksites and the research partner developed the intervention. The point of entry to the worksite was the canteen. The specific choice of intervention components was done in cooperation with the local food service team and the research partner. The canteen staff initiated a mapping of the F&V consumption in the different canteen workstations in order to increase the F&V availability throughout the whole menu range. The strategies for embedding F&V in meals were directed towards the four main menu types in Danish canteens: hot dishes, cold dishes, salads and snacks.

In order to monitor quantitatively the F&V consumption, an assessment scheme was developed. The quantitative monitoring played a role in the local setting to keep up momentum but also to raise external awareness of the ability of worksite intervention to raise F&V intake. The monitoring was performed routinely by the staff, and data was collected at baseline, 1 year after intervention and 5 years after intervention. Besides the quantitative evaluation, the intervention was followed using a qualitative methodology. The qualitative evaluation helped develop a better understanding of how healthy eating interventions seemed to become shaped through the interaction of different stakeholders and how this interaction might contribute to the sustainability of the intervention.

## ***Results of the intervention***

The status of the project in 2008 is that 4 out of 5 of the involved cases have been successful in terms of their ability to increase the consumption of F&V, but it also shows that some sites have been more successful than others. The insight gained from the qualitative evaluation suggests that fruit and vegetable interventions seem to be shaped and translated in slightly different directions depending on the local context. Healthier eating interventions will and should be shaped and controlled by the involved local actors' ideas of health and nutrition, and also by their conceptions of how these facts interrelate with the worksite's working conditions and working performance. This also means that not only can interventions be expected to do something for stakeholders; stakeholders at the same time do something for the intervention. This "doing" is dependant on the nature, the history, and the internal power relations of the particular workplace – coined by Hildebrandt and Seltz<sup>3</sup> as the social constitution of the company. All in all, it is important to understand any kind of interaction – and lack of interaction – between the workplace and the healthier eating activity.

## ***Recipe for an effective intervention?***

Results also indicate that there is no single best recipe for an intervention, but that interventions should be developed to suit the local needs depending on the social constitution of the worksite. As a consequence, interventions cannot be delivered, but only be rolled out in partnerships. Results also indicate that worksite food service is an important intermediary for developing intervention components, but that increasingly human resource staff and top management participate in shaping healthy eating strategies.



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# *Eat Better & Move More* A Community Program for Older Adults

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Eat Better & Move More (EBMM) was designed for the Older Americans Act Nutrition Program, the USA's largest nutrition assistance program for older adults, as a means to promote health, decrease malnutrition, and prevent physical/mental deterioration<sup>1</sup>. The Nutrition Program targets those in greatest social or economic need, particularly poor minorities and those in rural areas. It annually provides ~250 million meals to 3 million adults age 60+ at 4,000 local agencies.

## *The Eat Better & Move More Guidebook for Community Programs*

([http://nutritionandaging.fiu.edu/You\\_Can/07.2YouCanGuidebook.pdf](http://nutritionandaging.fiu.edu/You_Can/07.2YouCanGuidebook.pdf)) has 12 weekly sessions with nutrition and physical activity mini-talks and interactive activities. Due to its popularity, a Guidebook Part 2 is now online. Emphasizing fruits, vegetables, calcium-rich foods, and dietary fiber, EBMM addresses serious deficiencies and portion sizes. Also emphasized are walking, using step counters, simple stretches, and hydration. People take home Tips & Tasks sheets to fill in and bring the next week.

In our study<sup>2</sup>, we chose 10 community sites that had no physical activity programming and could recruit 50+ people and collect/submit data. Grantees (\$10,000) included congregate dining centers, neighborhood recreation centers, and housing complexes in urban inner city, suburban, and rural sites, and a Native American reservation. Each facilitator (8 dietitians, 1 nurse, 1 Native manager) attended a 1.5-day workshop and our Center provided technical assistance via biweekly conference calls and a listserv. A total of 999 were enrolled. Inclusion criteria were age 60+ and the ability to walk with/without assistive devices. Discretion was given to exclude those with cognition problems. The nutrition and activity questionnaires had a 'Stage of Change' question.

## *Results*

Completers numbered 620 (62%). Completion rates differed by site (35-85%), but not ethnicity. The lowest completion rate at a subsidized high-rise housing site had the highest mean nutrition risk score. Those residents often have greater needs than those in traditional community housing. Completers' mean age was

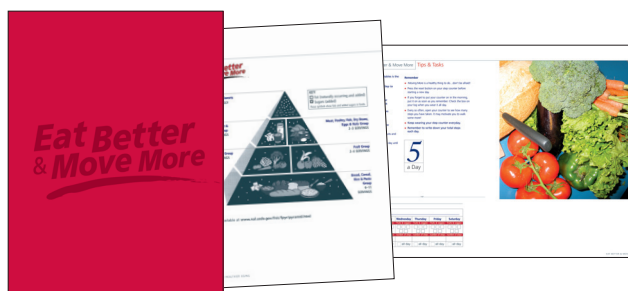
75 years. The oldest was 101 (5 were in their 90s; 162, in their 80s); 82%, females; 41%, minorities. Half lived with family and 38% with a spouse. They had fewer health conditions and lower nutrition risk, but were otherwise similar to non-completers.

About 3 in 4 completers not in maintenance stage pre-intervention significantly advanced >1 'Stages of Change' for both nutrition and activity. Daily food intakes increased significantly by >1 serving of vegetables for 37%; fruits, 31%; fiber, 33%; calcium-rich food, 42%; fluids, 31%. Daily steps increased 35% to ~4200. Blocks walked and stairs climbed increased. Timed Up & Go improved as risk of falling decreased. Of the 94% not reporting excellent health pre-intervention, 24% improved >1 health categories. Self-rated health can predict functional abilities and mortality in the community-dwelling. Almost all recommended the program and 93% and 90% said it helped them Eat Better and Move More respectively. Facilitators' salary was the main expense due to the focus on documenting outcomes.

## *Implications*

Characteristics of successful nutrition education programs commonly limit messages to 1 or 2; reinforce and personalize messages; provide hands-on activities and access to health professionals<sup>3</sup>. Each EBMM nutrition message was introduced 1 week and reinforced the next. Tips & Task sheets visually reinforced goals and gave more food choices. Weekly sessions were interactive, used real foods, labels, and Program meals, and were led by culturally sensitive health workers, who could answer questions beyond the intervention's scope. Personalized step goals and self-pacing likely improved outcomes. Overall, EBMM was successful because it was easy to use, inexpensive, tailored for older adults, while simultaneously geared to changing both nutrition and activity behaviors. Another success factor was hands-on coordination by the Center.

We and other translational researchers believe that nutrition education is enhanced by integrating activity. We encourage use of our 2 Guidebooks and interdisciplinary collaboration. As community-residing older adults often need extra encouragement to Eat Better and Move More, more communities should encourage healthy aging by offering similar programs.



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