- available at http://www.nytimes.com/2010/10/14/health/nutrition/14label.html
- Barker M, Lawrence W, Robinson S et al. (2012) Food labelling and dietary behaviour: bridging the gap (Invited Editorial). Public Health Nutr 15, 758–759.
- Chen X, Jahns L, Gittelsohn J et al. (2012) Who is missing the message? Targeting strategies to increase food label use among US adults. Public Health Nutr 15, 760–772.
- Hieke S & Wilczynski P (2012) Colour Me In an empirical study on consumer responses to the traffic light signposting
- system in nutrition labelling. *Public Health Nutr* **15**, 773–782.
- McLean R, Hoek J & Hedderley D (2012) Effects of alternative label formats on choice of high- and lowsodium products in a New Zealand population sample. Public Health Nutr 15, 783–791.
- 8. Turconi G, Bazzano R, Roggi C *et al.* (2012) Helping consumers make a more conscious nutritional choice: acceptability of nutrition information at a cafeteria. *Public Health Nutr* **15**, 792–801.

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## Food labelling and dietary behaviour: bridging the gap

A recent review in this journal demonstrated the unparalleled reach of nutrition labels on pre-packaged food as sources of nutrition information – more than half of people surveyed claim to read or use nutrition labels in some way<sup>(1)</sup>. Those who have campaigned for mandatory nutritional labelling in high-income countries across the world should now feel their efforts vindicated by the wide prevalence of label use and the consistent association of label use with healthier eating habits<sup>(1)</sup>.

However, this association is not necessarily causal. As the review we mentioned points out, it is as likely that individuals who already have healthier diets seek out and use food labels as it is that food labels themselves promote healthier eating. An illustration of the difficulty in connecting food labelling with behaviour change is the failure of the recent changes in US legislation, making it a legal requirement to post calorie information on the menus of chain restaurants, to reduce the calorie content of food purchased at these restaurants (2,3). In an evaluation of a fascinating natural experiment, Elbel and colleagues compared fast-food purchases from restaurants in lowincome neighbourhoods in New York with those from restaurants in Newark, New Jersey, a city that had not at that time introduced menu labelling<sup>(2)</sup>. Despite nearly 28% of New York City respondents saying that they had not only noticed but been influenced by the calorie information, the research team found no difference in the overall energy content of foods purchased from restaurants in New York City and Newark, New Jersey. Dumanovsky and colleagues made a similar observation in their before-andafter comparison, showing no overall decline in calories purchased after regulations were introduced<sup>(3)</sup>. These findings have since been confirmed in a review of seven such studies<sup>(4)</sup>, and highlight the general gap between people's knowledge about what they need to do to keep healthy and how they behave.

There is plenty of evidence that people know what they should be eating to improve their health and reduce their

body weight. For example, the first wave of the new survey 'Food and You', based on interviews with 3163 people over the age of 16 years around the UK, found that 99% of respondents rated eating fruit and vegetables, 94% eating less salt and 92 % limiting foods high in saturated fat as very or fairly important for a healthy lifestyle (5). In addition, 84% of them knew that, of all food groups, they should be eating the smallest amount of foods high in fat and/or sugar. However, figures from the most recent National Diet and Nutrition Survey show that only 30% of adults in the UK currently consume the recommended amount of fruit and vegetables, and that mean intakes of saturated fats and non-milk extrinsic sugars exceed the recommendation that they provide no more than 11% of food energy<sup>(6)</sup>. The fact that people's diets do not reflect what they know to be healthy suggests that simply providing more information is not going to produce the population-level improvements in diet that we seek.

But there are approaches that evidence suggests will work in helping people make changes to their diets and, which furthermore, may work with the disadvantaged populations that have traditionally been difficult to reach with health promotion activities. One of these is an empowerment or patient-centred approach. In clinical settings, this way of working empowers patients to take control of their medical conditions, and become key decision makers in their care and treatment. Applications of a patient-centred approach have been associated with better outcomes, and disease self-management programmes, such as the Department of Health's 'Expert Patient' Programme, have been shown to be more effective than standard patient education in improving outcomes and quality of life for patients with chronic conditions (7,8). The success of the empowerment approach in changing behaviour suggests that it may have application to improving health behaviour in the general population. The 'Health Trainer' initiative is one example of such an application (9). Health trainers are recruited mainly from the community in which they work

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and receive training in how to support health behaviour change in clients drawn from hard-to-reach, disadvantaged groups (10). In one-to-one sessions, they identify unhealthy behaviours that clients wish to change, assess triggers to these behaviours, assist in setting goals and build the confidence required to enable clients to achieve change. These are all techniques known to be effective in supporting behaviour change<sup>(9)</sup>. All patient and client-centred approaches are based on the understanding that supplying them with knowledge is not enough to change their behaviour. Clients need also to be motivated to change. Client-centred approaches therefore demand a style of communication that is not reliant on information giving and instruction. Interactions are characterised by exploratory conversation through which the practitioner attempts to understand the world of the client and the context of the presenting problem, and supports the client in finding his/ her own solutions to the problem<sup>(11)</sup>.

In Southampton, we have been attempting to apply this approach to supporting women from disadvantaged populations to improve their diets and physical activity levels. Our programme of 'Healthy Conversation Skills' training aims to support this group of women by improving behaviour change skills of Sure Start Children's Centre staff with whom they come into contact (12). Staff are trained to ask 'open discovery questions' allowing exploration of benefits and barriers to change and facilitating problem solving. Other aspects of the training content are based on a range of recognised behaviour change techniques<sup>(13)</sup>. The intervention is accompanied by an evaluation at two levels: the first assesses changes in staff practice, which are the route to changing women's health behaviour; the second assesses change in women's diets and physical activity in a before-and-after, non-randomised controlled trial comparing women in Southampton with women in a matched control area. The impact of this intervention on the diets and physical activity levels of women will be known mid 2012.

The challenge faced by all of us who wish to support improvements in the diets of the general population was neatly summed up by a member of a group discussion held in Southampton. She said:

You can give me the information but you can't make me stop eating the six cream cakes, can you? I have to make that decision for myself.

We need to accept that nutrition information in general, and food labelling in particular, may not be enough to change eating habits. There is a role for information in our individual interactions with people seeking support for dietary change, but only once those persons are motivated to change and we have understood the context in which they are attempting to make that change.

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## References

- Campos S, Doxey J & Hammond D (2011) Nutrition labels on pre-packaged foods: a systematic review. *Public Health Nutr* 14, 1496–1506.
- Elbel B, Kersh R, Brescoli VL et al. (2009) Calorie labeling and food choices: a first look at the effects on low-income people in New York City. Health Aff (Millwood) 28, w1110-w1121.
- Dumanovsky T, Huang CY, Nonas CA et al. (2011) Changes in energy content of lunchtime purchases from fast food restaurants after introduction of calorie labelling: crosssectional customer surveys. BMJ 343, d4464.
- Swartz JJ, Braxton D & Viera AJ (2011) Calorie menu labelling on quick-service restaurant menus: an updated systematic review of the literature. *Int J Behav Nutr Phys Act* 8, 135.
- Prior G, Hall L, Morris S et al. (2010) Exploring Food Attitudes and Behaviours in the UK: Findings from the Food and You Survey. London: Food Standards Agency.
- Whitton C, Nicholson SK, Roberts C et al. (2011) National Diet and Nutrition Survey: UK food consumption and nutrient intakes from the first year of the rolling programme and comparisons with previous surveys. Br J Nutr 106, 1899–1914.
- Zachariae R, Pedersen CG, Jensen AB et al. (2003) Association of perceived physician communication style with patient satisfaction, distress, cancer-related self-efficacy, and perceived control over the disease. Br J Cancer 88, 658–665.
- Bodenheimer T, Lorig K, Holman H et al. (2002) Patient self-management of chronic disease in primary care. JAMA 288, 2469–2475.
- 9. Michie S, Rumsey N, Fussell A et al. (2008) Improving Health: Changing Behaviour NHS Health Trainer Handbook. London: Department of Health.
- Smith J, Gardner B & Michie S (2010) Health Trainers National End of Year Report: 2008–09. London: University College London.
- Stewart M, Brown JB, Weston WW et al. (2003) Patientcentred medicine: transforming the clinical method, 2nd ed. Oxford: Radcliffe Medical Press.
- Barker M, Baird J, Lawrence W et al. (2011) The Southampton Initiative for Health: a complex intervention to improve the diets and increase the physical activity levels of women from disadvantaged communities. J Health Psychol 16, 178–191.
- Abraham C & Michie S (2008) A taxonomy of behaviour change techniques used in interventions. *Health Psychol* 27, 379–387.