Expert reaction to Cochrane review on nutrition labelling and calorie intake, as published by Cochrane

Dr Amelia Lake, Associate Director of Fuse: the Centre for Translational Research in Public Health, and Dietitian and Reader in Public Health Nutrition at Teesside University, said:

“As a society we obtain a significant amount of food and drink outside of our home environment. This out of home food environment is incredibly important in determining what we eat. In general there is little evidence about what interventions may be effective in changing our behaviours in cafes, restaurants, takeaways or even vending machines.

“Eating behaviours are complex and trying to explore factors that may influence our eating behaviours are fraught with bias. However, the scientist in this systematic review have reviewed the available international evidence of how nutritional labels – providing information about the nutritional content of food – influence our eating behaviour.

“The team was interested in whether or not labelling (for example labelling on a menu, or on a menu board, or on a food) promoted healthier eating behaviours.

“A thorough search of the literature found 28 studies that met all their criteria, the majority of these studies were in the USA – which while it is not the UK provides a similar consumer environment.

“From the evidence drawn from these studies the authors concluded that nutritional information on menus in out of home settings such as restaurants could reduce the amount of energy (calories) purchased by customers.

“While there are limitations and flaws with the design of the original studies (i.e. the studies the review looked at), the group were confident that the current evidence points to an effective intervention in reducing our overall calorie intake. When you are conducting a review you are dependent on the quality of the studies that have been conducted in that subject area. While there is a huge amount of academic interest in the field of how labelling may influence eating behaviour, some of the studies they reviewed were considered to be of low quality.

“That said, the team weighed up the available evidence and came to their conclusion.

“However, this is intervention needs to be used alongside other interventions addressing both calorie intake and expenditure. It is one piece of the intervention jigsaw that may help in addressing the obesity crisis.”

Prof Peymané Adab, Professor of Public Health, The University of Birmingham, said:

“This overview of previous studies considered whether nutritional labels, such as information on number of calories of foods and drinks, impacted on the purchase and consumption of these items.
“They found that most of the previous studies were conducted in Western countries, particularly the US. Most were also based on labels on foods in restaurants and cafés. The main findings are accurately summarised in the press release.

“This is a high standard study which has considered the quality of the underlying research. Overall, they report that most of the previous studies were of low quality, limiting how confident we can be about these findings, particularly in relation to impact on consumption. The research done so far also does not reliably confirm whether nutritional labelling impacts on food and drink purchasing for every day shopping. The study also found no evidence of unintended consequences or harms from nutritional labelling. Thus the balance of evidence favours use of nutritional labelling in food outlets.

“This study is a useful addition to previous literature by summarising all studies that have examined the effect of nutritional labelling on people’s behaviour in terms of food purchasing and consumption. Previous overviews had mainly examined people’s understanding of nutritional information and the types of labels that would be most acceptable.

“The overview has shown that higher quality studies are needed to increase our confidence about the benefits of labelling. In particular we don’t know whether those who alter their food purchasing or consumption are those that would most benefit or whether such labelling could differentially benefit only subgroups of the population, thus widening inequalities. We also don’t know whether nutritional labels could have other impacts such as substitution with less healthy alternatives or on total calories consumed over a longer time period. Information on calories alone does not tell us about the overall quality of the food (e.g. amount of salt, vitamins etc.) and we need more research to know whether or not choosing lower calorie foods at one point in the day could lead to compensatory overconsumption by choosing something more highly calorific later. Finally, the effects of nutritional labelling on the reformulation of products by food manufacturers and menu choices offered by restauranteurs also need to be studied.”

Prof Brian Ratcliffe, Emeritus Professor of Nutrition, Robert Gordon University, said:

“This is not a particularly new finding although it is helpful to see a number of studies reviewed in this way. Only two of the studies reviewed were from the UK and the greatest proportion was from the US and it may be that the findings were affected by cultural differences. The evidence is not strong that nutritional labelling, especially of energy (calories), has a significant impact on consumer choice. It is imperative, however, that as much information is given at point of selection so that consumers can make informed comparative choices. If you are watching your weight and one dessert is flagged as 100 kcal (sorbet) while others are around 300 kcal (sticky toffee pudding) then the right choice is clear. Even modest reductions of up to 10% in energy intake when eating out could help individuals who are trying to control their calories. Some of the studies reviewed showed this level of reduction is possible. There is evidence that some people eat more energy in meals outside the home where the portion size is controlled by others and the calorie content may be unknown. Some fast food outlets adopted this kind of informative menu labelling (especially calories) some time ago but it should be universal to tackle the problem of overweight and obesity.”

Prof Judith Buttriss, Director General, British Nutrition Foundation, said:
“It is good news that efforts already being taken by some high street chains to influence calorie intake through provision of information on menus and at the point of sale may have a positive effect. Hopefully this will encourage others to adopt this approach as part of a suite of ‘nudges’ designed to encourage healthier choices.

“Points to note – most of the studies (21 out of 28) were conducted in the USA. The authors of the Cochrane Review describe the evidence as ‘low quality’ and also low in quantity. They ‘tentatively suggest’ that “nutritional labelling on menus in restaurants could be used as part of a wider set of measures to tackle obesity. Additional high-quality research in real-world settings is needed to enable more certain conclusions”.”

Declared interests

Dr Amelia Lake: “Amelia Lake was a member of the responsibility deal high level steering committee for food representing the British Dietetic Association (2013-2015).”

Prof Peymané Adab: “Hold research grants from the National Institute for Health Research on obesity prevention. Previous research grants from the National Prevention Research Initiative on obesity prevention. Deputy Chair of the Public Health Research Funding Board of the National Institute for Health Research. Previous Trustee of the Association for the Study of Obesity, a charity that promotes research and education on obesity (2014-2017). Topic expert committee member for NICE Public Health Advisory Committee ‘Maintaining a healthy weight and preventing excess weight gain among children and adults’ (2014-15). Expert member on NICE Programme Development group on ‘Lifestyle weight management services for overweight and obese children and young people’ (2012-2013).”

Prof Brian Ratcliffe: “I have no conflicts of interest, paid or otherwise.”

Prof Judith Buttriss: “British Nutrition Foundation’s Director General. The British Nutrition Foundation (BNF), a registered charity, delivers impartial, authoritative and evidence-based information on food and nutrition. Its core purpose is to make nutrition science accessible to all, working with an extensive network of contacts across academia, education and the food chain, and through BNF work programmes focussing on education in schools and nutrition science communication. The key role of BNF’s Council and Trustees is to ensure that the Foundation delivers its charitable aims, is impartial, transparent and acts with integrity. BNF’s Articles of Association require a majority of Council’s members to be leading academics from the nutrition science community, supported by leaders in education, communication and the food chain. BNF’s funding comes from a variety of sources including EU projects; contracts with national government departments and agencies; conferences, publications and training; membership subscriptions; donations and project grants from food producers and manufacturers, retailers and food service companies; funding from grant providing bodies, trusts and other charities. BNF is not a lobbying organisation nor does it endorse any products or engage in food advertising campaigns. More details about BNF’s work, funding and governance can be found at www.nutrition.org.uk/aboutbnf.”
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The SMC has asked the experts in the above Roundup to declare any interests which may be regarded by a reasonable and objective third party as giving rise to a conflict, and their responses are included above.

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