

Obesity Management

Interventions to promote healthy eating habits: evaluation and recommendations

W. B. Traill¹, B. Shankar¹, J. Brambila-Macias¹, T. Bech-Larsen², J. Aschemann-Witzel², M. Strand², M. Mazzocchi³, S. Capacci³, W. Verbeke⁴, F. J. A. Perez-Cueto⁴, D. D'Addesa⁵, A. Saba⁵, A. Turrini⁵, B. Niedźwiedzka⁶, A. Koziol-Kozakowska⁶, V. Kijowska⁶, B. Piórecka⁶, M. Infantes⁷, J. Wills⁸, L. Smillie⁸, F. Chalot⁹ and D. Lyle⁹

¹Department of Agricultural and Food Economics, University of Reading, Reading, UK; ²Centre for Research on Customer Relations in the Food Sector, Aarhus School of Business, Aarhus University, Aarhus, Denmark; ³Department of Statistics, University of Bologna, Bologna, Italy; ⁴Department of Agricultural Economics, Ghent University, Ghent; ⁵European Food Information Council AISBL, Brussels; ⁶European Association of Communications Agencies SCRL, Brussels, Belgium; ⁷National Research Institute for Food and Nutrition, Rome, Italy; ⁸Institute of Public Health, The Jagiellonian University Medical College, Cracow, Poland; ⁹Kraft Foods R&D Inc., Munich, Germany

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Address for correspondence: WB Traill, Department of Agricultural and Food Economics, The University of Reading, Reading RG6 6AR, UK. E-mail: w.b.traill@reading.ac.uk

Summary

Although in several EU Member States many public interventions have been running for the prevention and/or management of obesity and other nutrition-related health conditions, few have yet been formally evaluated. The multidisciplinary team of the EATWELL project will gather benchmark data on healthy eating interventions in EU Member States and review existing information on the effectiveness of interventions using a three-stage procedure (i) Assessment of the intervention's impact on consumer attitudes, consumer behaviour and diets; (ii) The impact of the change in diets on obesity and health and (iii) The value attached by society to these changes, measured in life years gained, cost savings and quality-adjusted life years. Where evaluations have been inadequate, EATWELL will gather secondary data and analyse them with a multidisciplinary approach incorporating models from the psychology and economics disciplines. Particular attention will be paid to lessons that can be learned from private sector that are transferable to the healthy eating campaigns in the public sector. Through consumer surveys and workshops with other stakeholders, EATWELL will assess the acceptability of the range of potential interventions. Armed with scientific quantitative evaluations of policy interventions and their acceptability to stakeholders, EATWELL expects to recommend more appropriate interventions for Member States and the EU, providing a one-stop guide to methods and measures in interventions evaluation, and outline data collection priorities for the future.

Keywords: Benchmarking, EATWELL, obesity, policy.

obesity reviews (2010)

Introduction

Obesity is the most visible manifestation of poor diets, but diet quality matters too – Western societies consume too little fruit and vegetables and omega-3 fatty acids, too much saturated fatty acids, salt and sugar, although significant progress has been made in removing *trans*-fats from a range of food products (1,2).

The unification of Europe had, as a consequence, the narrowing of differences in the dietary patterns of the

different countries and culinary cultures (1). Since the early 1960s, calorie intake in the EU increased on average by 17%; the most rapid increases happened in the Mediterranean countries that caught up with, and in some cases overtook, Central and Northern European levels. There was also a pattern of dietary convergence among European countries. Sugar intake in the EU is near the WHO recommended proportion of total calories, but total fatty acid intake at 38% calorie share is well above the recommended maximum of 30%, and saturated fatty acid intake is 12%

of calories compared with the recommended maximum of 10%.¹ Fruit and vegetable consumption increased throughout the EU but remains below recommended levels in several Northern European countries (4)

Externalities imposed by unhealthy eating have led public health officials and the media to talk about an obesity epidemic and warn that healthcare systems will be overwhelmed unless present trends are reversed. Governments are responding with a range of measures intended to persuade and cajole people to lead healthier lifestyles and firms to offer healthier foods at affordable prices. So far there has been a notable absence of success in reversing obesity prevalence trends, although diet quality has improved in Northern Europe (while worsening in the South). The enormity of the problem and lack of policy success to date, combined with a growing emphasis on evidence-based policy-making, demands a better understanding of what policies work.

EATWELL (4/2009 to 9/2012) is a new project funded by FP7, inscribed within the EU Platform on Diet, Physical Activity and Health, which operates under the leadership of the European Commission. It responds to the need to provide accurate information for policy-making. The overall objective of the project is to improve diet and health-related policy interventions by providing a scientifically sound evidence basis on the effectiveness of past interventions. The specific objectives are to:

1. Assess the efficacy of past interventions in improving dietary and health outcomes and identify promising avenues for the future;
2. Assess the acceptability of potential future interventions and generate best-practice guidelines for implementation;
3. Provide policy, data collection and monitoring advice in relation to healthy eating;
4. Communicate scientific findings to a wide audience.

Policies to improve diets

National and EU level policy interventions to promote healthier eating may broadly be grouped into three types: information measures, measures to affect food and nutrient availability, and fiscal measures. On top of this there is what the recent UK Foresight Programme (2007) called a

system-wide approach, simultaneous application of a number of interventions in the belief that the whole achieves more than the sum of the parts; the North Karelia project in Finland is usually mentioned in this respect.

Information measures

Information measures may themselves be divided into two groups: those aimed at enabling consumers to make informed choices such as nutritional labelling, the regulation of health and nutrition claims and nutrition education; and those that aim to promote healthy eating by changing consumer attitudes and behaviour via social marketing (e.g. 5-a-day) or restricting private sector advertising of 'unhealthy' foods.

Measures to affect food and nutrient availability

It is common for the state to control the provision of meals in schools, hospitals, prisons, and in public sector work canteens and government may regulate their nutritional composition. Governments may also legislate for the nutritional value of meals provided by private sector canteens, e.g. in Finland. Free fruit and vegetables may be made available (notably to children in schools), and junk food vending machines may be banned. Supermarket access may be targeted to counter 'food deserts'. Processed food composition may be regulated or firms may be 'encouraged' to improve nutritional profiles, e.g. by eliminating *trans*-fats or limiting salt or sugar content. Calorie intake can be targeted through reducing portion sizes of ready meals and meals outside the home through.

Fiscal measures

Taxes on unhealthy foods or nutrients (confectionary, salted snacks, grams of fat and calories) and subsidies on healthy foods, notably fruit and vegetables, have been sometimes termed *fat taxes* and *thin subsidies*. The logic is similar to taxes on tobacco and alcohol, the intention being both to encourage healthier eating and, in the case of the tax, to charge people for the social costs they cause (to healthcare and economic productivity).

EATWELL research

- benchmark diet and health-related policy interventions in Member States, the EU and elsewhere as relevant and draw conclusions from such policy evaluations as exist;
- draw on models of consumer behaviour from psychology and economics in order to review the impact of interventions on consumer attitudes, food consumption and health, and to re-analyse national and trans-national data

¹These data were derived by applying a food composition conversion to FAOSTAT (2003) food availability data and reported in the referenced article. It is likely that diet quality has continued to improve in which case these figures may somewhat overstate the scale of the problem, although Elmadfa (3) indicates a range from 28.4% (Portugal) and 45% (Greece) of energy from total fatty acids and between 8.8% (Portugal) and 14.6% (Belgium) from saturated fatty acids. Portugal is still the only EU country meeting the recommendations.

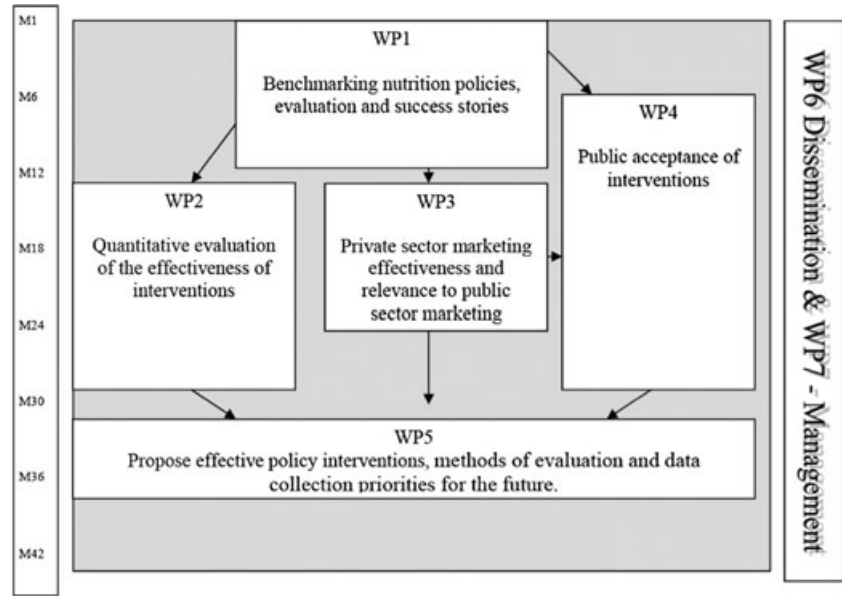


Figure 1 Graphical presentation of the components and their interdependencies. WP, work package.

Table 1 EATWELL partners

Project partners	Country
Department of Agricultural and Food Economics, the University of Reading (Co-ordinator)	UK
AU Centre for Research on Customer Relations in the Food Sector, University of Aarhus	Denmark
Department of Statistics, University of Bologna	Italy
Department of Agricultural Economics, Ghent University	Belgium
National Institute for Research on Food and Nutrition	Italy
Institute of Public Health, Jagiellonian University Medical College	Poland
Kraft Foods R&D	Germany
European Food Information Council	Belgium
The European Association of Communication Agencies	Belgium

Further information: <http://www.eatwellproject.eu>

sets on consumers’ attitudes, knowledge, behaviour, diets and health in the short and long terms;

- develop practical procedures for assessing cost-effectiveness, cost–utility and cost–benefit analysis of policy interventions, which take into account market interactions and agents’ adaptive behaviours;
- make recommendations on the form, frequency and coverage of data that should be collected to enable effective evaluation at the time new interventions are launched, thereby contributing to a best-practice intervention planning guide;
- determine lessons the public sector can learn from the experiences of the private sector in the promotion of healthy eating and develop a good-practice manual, including conditions of transferability;
- assess public, private and other stakeholder acceptance of alternative forms of intervention and how these vary by socio-demographics and by nation;

- indicate actions appropriate and acceptable at EU and Member State levels and their transferability across cultures.

The project consists of seven work packages (see Fig. 1). Work package 1 provides a foundation and review of available information, directly addressing the benchmarking objective of the project. Work packages 2–4 employ a variety of research methods such as surveys, workshops and meta-analysis of existing data bases. They follow a three-stage procedure: (i) Impact on attitudes, behaviour and consumption; (ii) Impact on obesity and health outcomes and (iii) Cost-effectiveness, cost–utility analysis. Attention will be paid to barriers to healthy eating and motives to continue eating unhealthily and will identify particular socio-demographic groups who are particularly at risk and/or hard to target. These work packages together will address project objectives relating to improvement of

the evidence base for the efficacy and effectiveness of policy interventions for healthy eating and their acceptance by consumers and other stakeholders. Additionally, work package 3 will explicitly fulfil the project objective of enabling learning from private sector marketing initiatives, and work package 5 will draw together the evidence from the previous work packages to provide guidance for the future. Such guidance will enable fulfilment of project objectives relating to making policy recommendations, reporting on optimal methods and measures to use in intervention analysis and indicating data collection priorities for the future. Work package 6 deals with stakeholder involvement, dissemination and exploitation and work package 7 with management.

What EATWELL provides to the scientific community and policymakers is a renewed approach to diet and health that comes from a multidisciplinary team that includes

economists, public health nutritionists, psychologists and marketing specialists (Table 1).

Conflict of Interest Statement

No conflict of interest was declared.

References

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