EUROPEAN PARLIAMENT

REPORT

Policy Department
Economic and Scientific Policy

Workshop on Food Labelling Brussels, 5 November 2008

Consolidated Texts

IP/A/ENVI/WS/2008-17

PE 408.578

Table of Contents

1. Introduction

In January 2008, the European Commission adopted a proposal for a Regulation on the "Provision of food information to consumers" (COM(2008)40), thus combining several food labelling directives.

In order to get a balanced picture of the variety of views seriously considered among professionals in this field, **a workshop on Food Labelling** has been organised on request of the Members of the Environment, Public health and Food Safety Committee.

The workshop - hosted by Rapporteur Ms Sommer - will include presentations of 3 experts, followed by a question & answer session (Q&A). During the expert sessions and the Q&A, a sandwich lunch is available to the participants of the workshop.

Date: *Wednesday 5 November 2008, 13h00 - 15h00*

Venue: *European Parliament, Brussels, ASP 5G01*

2. Workshop - Programme

Organised by CoMeta, together with the European Parliament's Policy Department A and the European Parliament's ENVI Committee Secretariat

Draft Programme

Workshop
FOOD LABELLING

Wednesday 5th November 2008 - 13h00-15h00

Room ASP 5G01

13h00 **Opening of the workshop** by Rapporteur Ms Sommer (PPE-DE)

13h10 **Expert session - different viewpoints on the EC proposal**

1. Nutritionist: Dr Liisa Valsta, Finnish National Public Health Institute, Dept. Health Promotion and Chronic Disease Prevention

Content of the label - Effects of nutrients on health

2. Consumer behaviour expert: Klaus Grunert, Director Centre for Research on Customer Relations in the Food Sector (MAPP), Denmark

Presentation of the label
Experiences with comparable legislation in US/Canada
Impacts on obesity

3. Economist: Jan Tiessen, Rand Europe

Implementation of EU food regulation
Impact of the proposal on industry, health, consumer protection

14h00 **Debate - Q & A session**

14h50 **Closing remarks** by Rapporteur Ms Sommer (PPE-DE)

Entrance in the room is restricted to Members, EP staff and other European Institutions' staff. A sandwich lunch will be provided.

3. Curriculum vitae of the experts

1. Liisa Valsta, Finnish National Public Health Institute, Dept. Health Promotion and Chronic Disease Prevention

Dr. Liisa M. Valsta, M.Sc.(1982), Ph.D.(1996) in Human Nutrition at the University of Helsinki, M.Sc. (1986) in Food Science and Technology/Food Toxicology at the Oregon State University, USA. Senior researcher in the Nutrition Unit at the National Public Health Institute (KTL), Helsinki, Finland (1991-) and Adjunct Prof. at the University of Helsinki (2001-).

Main research interests in the area of food composition/quality of diet, metabolic responses and health. Additionally, long experience in methodological and practical aspects of monitoring diet and nutritional status as well as in the area of nutritional risk assessment. Expert functions e.g. in the National Nutrition Council, Novel Food Committee, Advisory Committee on Foodstuffs, Finnish Heart Association's Nutrition Expert Group and Heart Symbol Expert Group.

International activities include participation in several European and Nordic research projects (e.g. EU/EURODIET, EU/EFCOSUM, EU/PHYTOHEALTH and NORBAGREEN), participant and board member of the European Nutrition leadership program, member of the Nordic working group for nutrition and toxicology under the Nordic Council of Ministers, and the EFSA Food Consumption Data Expert Group.

Altogether 50 articles in refereed international scientific journals. Additionally, over 30 other scientific articles and about 50 popular articles in the area of foods, nutrition and public health in domestic and international journals.

2. Klaus Grunert, Director Centre for Research on Customer Relations in the Food Sector (MAPP), Denmark

EDUCATION

Habilitation, University of Hohenheim, Stuttgart, Germany, 1988; Dr. oec., University of Hohenheim, Stuttgart, Germany, l982; Dipl.-Volksw., University of Cologne, Cologne, Germany, l976

PRESENT POSITIONS

Professor of Marketing, Aarhus Aarhus University, l987 - ; Director, MAPP – Centre for Research on Customer Relations in the Food Sector, 1991 - ; Professor of Fisheries Marketing (part-time), University of Tromsø, 1996- ; Professor of the European Institute for Advanced Studies in Management, 1998 - .

PROFESSIONAL FUNCTIONS

European Marketing Academy, president; Danish Marketing Club, board member, 1989-1996; The Danish Marketing Research Council, chairman, 1992 – 1995; KLICT International Advisory Board, member, 1999-2003; European Federation of Food Science and Technology- EFFoST, member of Executive Committee, 2002 - 2005 ; Sovion B.V. Social Advisory Council, 2004 - 2007; VIFU – Videnscenter for Fødevareudvikling, Board Member, 2003 - 2007; TransForum Agro Groen Scientific Advisory Council, 2004 - ; RelationLab, Board Member, 2005 - 2007; Dansk Allergikost, Board Member, 2006 -

EDITORIAL BOARDS

International Journal of Research in Marketing, 1989-2002; Marketing - ZFP, 1993 -; Journal of Business Research, 1989 – 1997; Journal on Chain and Network Science, 2001- ; Appetite, 1997 - ; Food Quality and Preference, 1998 - ; Journal of Economic Psychology, 1991- 1996; Agribusiness, 1998 – ; Journal of Customer Behaviour, 2002 - .

SELECTED RECENT PUBLICATIONS

Grunert, K.G., Jensen, B.B., Sonne, A.-M., Brunsø, K., Byrne, D.V., Clausen, C., Friis, A., Holm, L., Hyldig, G., Kristensen, N.H., Lettl, C. & Scholderer, J. (in press). User-oriented innovation in the food sector: Relevant streams of research and an agenda for future work. Trends in Food Science and Technology. Krutulyte, R., Grunert, K. G., Scholderer, J., Hagemann, K. S., Elgaard, P., Nielsen, B., & Graverholt, J. P. (in press). Motivational factors for consuming omega-3 PUFAs: An exploratory study with Danish consumers. Appetite. Grunert, K. G., & Wills, J. M. (2007). A review of European research on consumer response to nutrition information on food labels. Journal of Public Health, 15, 385-399. Grunert, K. G., Raats, M., Nielsen, N. A., & Lumbers, M. (2007). A measure of satisfaction with food-related life. Appetite, 49, 486-493. de Ferran, F., & Grunert, K. G. (2007). French fair trade coffee buyers´ purchasing motives: An exploratory study using means-end chains analysis. Food Quality and Preference, 18(2), 218-229. Bech-Larsen, T., Esbjerg, L., Grunert, K. G., Juhl, H. J., & Brunsø, K. (2007). The Supermalt identity: How Brixton-based Afro-Caribbean consumers construct a Danish malt beer brand as one of their own. Journal of Product and Brand Management, 16(1), 5-15. Grunert, K. G., Esbjerg, L., Bech-Larsen, T., Brunsø, K., & Juhl, H. J. (2006). Consumer preferences for retailer brand architectures: Results from a conjoint study. International Journal of Retail and Distribution Management, 34(8), 597-608. Grunert, K. G. (2006). Future trends and consumer lifestyles with regard to meat consumption. Meat Science, 74(1), 149-160. Grunert, K. G. (2006). How changes in consumer behaviour and retailing affect competence requirements for food producers and processors. Economía y Recursos Naturales, 6(11), 3-22. Juhl, H. J., Esbjerg, L., Grunert, K. G., Bech-Larsen, T., & Brunsø, K. (2006). The fight between store brands and national brands: What's the score?. Journal of Retailing and Consumer Services, 13(5), 331-338. Scholderer, J., Grunert, K. G., & Brunsø, K. (2005). A procedure for eliminating additive bias from cross-cultural survey data. Journal of Business Research, 58(1), 72-78. Vaz De Almeida, M. D., Davidson, K., De Morais, C., Marshall, H., Bofill, S., Grunert, K. G., Kozlowska, K., Lacasta, Y., Martines, S., Mattsson-Sydner, Y., Nielsen, H. B., Seltmann, G., Szczecinska, A., Raats, M., & Lumbers, M. (2005). Alcohol consumption in elderly people across European countries: Results from the Food in Later Life project. Ageing International, 30(4), 377-395. Søndergaard, H. A., Grunert, K. G., & Scholderer, J. (2005). Consumer attitudes to enzymes in food production. Trends in Food Science & Technology, 16(10), 466-474. Brunsø, K., Bredahl, L., Grunert, K. G., & Scholderer, J. (2005). Consumer perception of the quality of beef resulting from various fattening regimes. Livestock Production Science, 94(1-2), 83-93. Scholderer, J., & Grunert, K. G. (2005). Consumers, food and convenience: The long way from resource constraints to actual consumption patterns. Journal of Economic Psychology, 26(1), 105-128. Grunert, K. G., & Ramus, K. (2005). Consumers' willingness to buy food through the internet: A review of the literature and a model for future research. British Food Journal, 107(6), 381-403. Scholderer, J., & Grunert, K. G. (2005). Do means-end chains exist? Experimental tests of their hierarchicity, automatic spreading activation, directionality, and self-relevance. Advances in Consumer Research, 32, 530. Grunert, K. G., & Bech-Larsen, T. (2005). Explaining choice option attractiveness by beliefs elicited by the laddering method. Journal of Economic Psychology, 26(2), 223-241. Grunert, K. G. (2005). Food quality and safety: Consumer perception and demand. European Review of Agricultural Economics, 32(3), 369-391. Grunert, K. G., Jeppesen, L. F., Risom Jespersen, K., Sonne, A., Hansen, K., Trondsen, T., & Young, J. A. (2005). Market orientation of value chains: A conceptual framework based on four case studies from the food industry. European Journal of Marketing, 39(5/6), 428-455. Grunert, K. G., Bech-Larsen, T., Lähteenmäki, L., Ueland, Ø., & Åström, A. (2004). Attitudes towards the use of GMOs in food production and their impact on buying intention: The role of positive sensory experience. Agribusiness, 20(1), 95-107. Brunsø, K., Scholderer, J., & Grunert, K. G. (2004). Closing the gap between values and behavior: A means-end theory of lifestyle. Journal of Business Research, 57(6), 665-670. Grunert, K. G., Bredahl, L., & Brunsø, K. (2004). Consumer perception of meat quality and implications for product development in the meat sector: A review. Meat Science, 66(2), 259-272. Scholderer, J., Brunsø, K., Bredahl, L., & Grunert, K. G. (2004). Cross-cultural validity of food-related lifestyles instrument (FRL) within Western Europe. Appetite, 42(2), 197-211. Grunert, K. G., & Hildebrandt, L. (2004). Success factors, competitive advantage and competence development. Journal of Business Research, 57(5), 459-461. Brunsø, K., Scholderer, J., & Grunert, K. G. (2004). Testing relationships between values and food-related lifestyle: Results from two European countries. Appetite, 43(2), 195-205. Grunert, K. G., Bredahl, L., & Scholderer, J. (2003). Four questions on European consumers' attitudes to the use of genetic modification in food production. Innovative Food Science and Emerging Technologies, -(4), 435-445. Grunert, K. G. (2003). Purchase and consumption: The interdisciplinary nature of analysing food choice. Food Quality and Preference, 14(-), 39-40. Bech-Larsen,

T., & Grunert, K. G. (2003). The perceived healthiness of functional foods: A conjoint study of Danish, Finnish and American consumers' perception of functional foods. Appetite, 40(1), 9-14. Lähteenmäki, L., Grunert, K. G., Ueland, Ø., Åström, A., & Bech-Larsen, T. (2002). Acceptability of genetically modified cheese presented as real product alternative. Food Quality and Preference, 13, 523-533. Grunert, K. G. (2002). Current issues in the understanding of consumer food choice. Trends in Food Science & Technology, 13, 275-285. Grunert, K. G., Jeppesen, L. F., Risom Jespersen, K., Sonne, A., Hansen, K., & Trondsen, T. (2002). Market orientation at industry and value chain levels: Concepts, determinants and consequences. Journal of Customer Behaviour, 1(2), 167-194. Scholderer, J., Brunsø, K., & Grunert, K. G. (2002). Means-end theory of lifestyle: A replication in the UK. Advances in Consumer Research, 29, 551-557.

3. **Jan Tiessen,** Rand Europe

Name:	Jan Tiessen
Department:	Evaluation and Audit Team
Institution:	RAND Europe, Westbrook Centre, Milton Road, Cambridge, CB4 1YG, United Kingdom
Telephone:	+44-1223-227595
Fax	+44-1223-358845
Email:	tiessen@rand.org

Education

2003	Master in Public Policy & Public Administration („Diplom Verwaltungswissenschaftler“).
1997 – 2003	Study of Public Administration, Public Policy and Economics at the University of Potsdam (Germany) and Stockholm’s University (Sweden).

Professional experience

2007 – present	Analyst, RAND Europe, Cambridge
2005 – 2007	Associate Analyst, RAND Europe, Berlin and Cambridge
2005 – 2006	Research Associate, Hertie School of Governance, Berlin
2005	Desk Officer, Unit for Reconstruction of East Germany, Federal Ministry of Transport, Building and Urban Affairs, Berlin
2003 – 2005	Research Associate, University of Potsdam, Chair for Political Science, Administration and Organisation (Prof. Dr. Werner Jann)
2001	Student Research Assistant Institute for Ecological Economy Research (IÖW), Berlin.

Research interests

- Public sector reform and better regulation
- Regulatory Impact Assessments
- Evaluation
- Politics and administration in Scandinavia

Publications

Tiessen, J. (2008). *Health and medical research in Sweden. Observatory on health research systems*. Santa Monica, CA, RAND.

Tiessen, J., L. Rabinovich, F. Tsang and C. v. Stolk (2008). *Assessing the impact of revisions to the EU horizontal food labelling legislation*. TR-532. Santa Monica, CA, RAND.

Jann, W. and **J. Tiessen** (2008). Gesetzgebung in Schweden. *Gesetzgebung in den Staaten der Europäischen Union. EU-Staaten und Europäische Union*. Ismayr, W. Wiesbaden, VS Verlag für Sozialwissenschaften**:** 99-131.

Ling, T., M. Hallsworth**, J. Tiessen**, S. Hoorens, L. Klautzer and K. Wegrich (2008). *Identifying DG SANCO's future challenges 2009-2014. Final report*. TR-570. Santa Monica, CA, RAND.

Rabinovich, L., **J. Tiessen**, B. Janta, A. Conklin, J. Krapels and C. v. Stolk (2008). *Reducing alcohol harm. International benchmark.* TR-592. Santa Monica, CA, RAND.

Rabinovich, L., **J. Tiessen**, F. Tsang and C. v. Stolk (2008). *Assessing the impact of revisions to the EU nutrition labelling legislation*. TR-522. Santa Monica, CA, RAND.

Stolk, C. v., A. Scoggins, **J. Tiessen**, R. Warnes and J. Krapels (2008). *Comparing how some tax authorities tackle the hidden economy*. London, National Audit Office.

Tiessen, J. (2007). Die Resultate im Blick? Kontraktsteuerung in Schweden. *Agencies in Westeuropa*. Jann, W. and M. Döhler. Opladen, VS Verlag für Sozialwissenschaften**:** 138-171.

Tiessen, J. and C. v. Stolk (2007). *Introduction of single farm payments in Finland and Germany*.TR-523. Santa Monica, CA, RAND.

Jann, W., K. Wegrich and **J. Tiessen** (2007). *„Bürokratisierung" und Bürokratieabbau im internationalen Vergleich – wo steht Deutschland?* Staatsmodernisierung. Berlin, Friedrich-Ebert-Stiftung.

Scoggins, A., **J. Tiessen**, T. Ling and L. Rabinovich (2007). *Prescribing in primary care. Understanding what shapes GPs' prescribing choices and how might these be improved*. TR-443. Santa Monica, CA, RAND.

Stolk, C. v., **J. Tiessen**, J. Clift and R. Levitt (2007). *Student retention in higher education courses international comparison*. TR-482. Santa Monica, CA, RAND.

Fiedler, J., C. G. Paulus, J. Peters, M. Rossi, G. F. Schuppert, D. Müller-Jentsch, H. Seitz, K. Kühl and **J. Tiessen** (2006). *Die finanzielle Zukunft Berlins – Vorschlag eines konditionierten Sanierungsverfahrens für die Hauptstadt. Zugleich ein Beitrag zu generellen Verfahrensregelungen bei Haushaltsnotlagen im Bundesstaat.* Berlin, Hertie School of Governance.

Hustedt, T. and **J. Tiessen** (2006). *Central Government Coordination in Denmark, Germany and Sweden. An Institutional Policy Perspective*.Heft 2 (2006). Forschungspapiere "Regierungsorganisation in Westeuropa". Potsdam, Universität Potsdam.

Stolk, C. v., M. Shergold, A. Scoggins, H. Pung, **J. Tiessen** and J. Grant (2006). *International benchmark of fraud and error in social security systems: final report*. Santa Monica, CA, RAND**:** 104.

Stolk, C. v., **J. Tiessen**, C. Von Schoeler and K. Wegrich (2006). *German introduction of single farm payments*. TR-429. Santa Monica, CA, RAND.

Jann, W., M. Döhler, J. Fleischer, T. Hustedt and J. Tiessen (2005). *Regierungsorganisation als Institutionenpolitik: Ein westeuropäischer Vergleich.*Heft 1 (2005). Forschungspapiere "Regierungsorganisation in Westeuropa". Potsdam, Universität Potsdam.

Jann, W., K. Wegrich, J. Fleischer, T. Hustedt and J. Tiessen (2005). *Bürokratieabbau in Ostdeutschland.* Bonn, Bundesamt für Bauwesen und Raumordnung.

Nill, J. and J. Tiessen (2005). Policy, Time, and Technological Competition: Lean Burn Engine versus Catalytic Converter in Japan and Europe. *Time Strategies, Innovation and Environmental Policy*. Sartorius, C. and S. Zundel. Cheltenham, Edward Elgar**:** 102-132.

4. Briefings/Abstracts prepared prior to the roundtable

4.1 Content of the Label: Case salt and beyond by Liisa M. Valsta and Pirjo Pietinen

National Public Health Institute
Department of Health Promotion and Chronic Disease Prevention
Nutrition Unit, Helsinki, Finland

The Proposal for a Regulation of the European Parliament and of the Council on the provision of food information to consumers can be seen as a good step in improving food labelling in Europe. The whole process in connection to the proposal may serve as a tool to improve the possibilities of consumers to get better nutritional information than ever before. According to the original proposal, the mandatory nutrition declaration would include information on energy, amounts of fat, saturated fatty acids, carbohydrates, sugars and salt, factors that are important from the public health point of view. In addition, declaration may also include one or more of the following: trans fats, mono-unsaturates, polyunsaturates, polyols, starch, fibre, protein and certain vitamins and minerals present in significant amounts. The aim to get accurate, clear and easy to understand food information for the consumers is very welcome. The mandatory declaration helps the consumer if clearly presented, but requires public campaigns to increase understanding of the information.

Additional ways to increase understanding the nutritional content of foods by labelling means have been used already for a long time in different European countries covering either single or a set of nutrients with public health importance. Finland has been one of the first countries to implement population-wide initiatives to decrease the intake of salt in the whole population to decrease blood pressure in the population and prevent strokes, heart attacks and heart failure, i.e. cardiovascular diseases – the most important causes of death and disability worldwide. Systematic efforts have included education of the public as well the health care sector, involving the food industry and mass catering. In the early 1990s a national legislation was developed to help consumers to choose foods with less salt. Crucial starting point was that food categories, which were important sources of salt, must be labelled by marking the percentage of salt by fresh weight of the product. Furthermore, national standards were established for the categories of “reduced salt” and “heavily salted/extra salt” in different food groups. As a result, the consumers were able to make informed choices concerning salt in their food and activities in research and development both in the academia and food industry improved technologies to produce food products with normal or reduced salt content. Most of the products considered containing “extra salt” disappeared from the market and the producers in many cases gradually reduced the salt content of products.

The public health impact of lowering salt intake in the population by just 2-3g is significant based on several meta-analyses. With simulation studies it has been shown that the potential impact of labelling and giving consumers the possibility to choose products with less salt is of public health importance. This labelling system was renewed in the beginning or 2008 to be in accordance with new EU regulations concerning the “reduced salt” criteria (25% less salt than in a normal product in the same food group). In the past 30 years the average intake of salt in the Finnish population has decreased by about a third. Accompanying this development, there has been a reduction of over 10 mmHg in both systolic and diastolic blood pressure and a decrease of 75-80% in both stroke and coronary heart disease mortality. Although both body mass index and alcohol consumption have increased during the same time, reduction in salt intake, decreased intake of fat, improved quality of fats and increase in fruit and vegetable consumption have contributed to the decrease of cardiovascular disease mortality.

Clear labelling of the nutritional quality of a food is essential for the consumer to distinguish between food choices. Different organisations have developed signpost labelling systems to help the consumers in making informed decisions on foods. Already in 1989 the keyhole symbol was launched in Sweden and the criteria behind the symbol have been updated regularly. Foods labelled with the keyhole symbol contain less fat, have a healthier fat composition, contain less sugars and salt and more dietary fibre than other foods of the same type. Today it is used in all Scandinavian countries. At the start of 2000 the Finnish Heart Association and the Finnish Diabetes Association launched the Heart Symbol in Finland to enable the consumer to make better choices when shopping for foods with less salt and better quality of fat (i.e. less saturated fats, more unsaturated fats). Later also fibre and sugar criteria have been added to the symbol. Today over 80% of the consumers recognise the symbol and about 42% of respondents say that the symbol has, at least occasionally, influenced their purchases. Both of these labelling systems share the feature that the criteria for the label are food group dependent. This is crucial when trying to detect important nutritional quality differences between foods.

One already widely accepted labelling system in the UK is the traffic light labelling. The clear colour coding (red, amber and green) for salt, total fat, saturated fat and sugar enables consumers to see at a glance whether a product has a little of a lot of a nutrient that is relevant from the chronic disease prevention point of view. This labelling system is planned especially for composite, processed foods, i.e. food group that cover only a minor part of food consumption in many countries. It does not help the consumer to distinguish between ingredient type of foods widely used in many European countries in the daily diet. For example, there is not much difference in the colour codes of butter, margarine (40%) or rapeseed oil, although this kind of labelling should be able to separate healthier fats from less favourable fats. This is because same criteria are applied for all food products. Only drinks have separate criteria for colour coding. The need of several criteria based on food categories is obvious.

Traffic lights – per 100g (UK model)

	Sugars (g/100g)	Fat (g/100g)	Saturates (g/100g)	Salt (g/100g)
Butter	**0**	**80**	**53**	**1,5**
Margarine (40%)	**0**	**40**	**11**	**1,4**
Rape-seed oil	**0**	**100**	**6**	**0**
Skim milk*	**5**	**0**	**0**	**0,1**
Semi skimmed-milk*	**5**	**1,5**	**1**	**0,1**
Milk*	**5**	**3,5**	**2,2**	**0,1**
Candy	**54**	**0**	**0**	**0,2**
Chocolate	**50**	**33**	**17**	**0,3**
Fish soup	**1,8**	**2,6**	**0,6**	**0,5**
Pizza (ham)	**2,2**	**10,3**	**5,6**	**1,0**

(* According to criteria for drinks)

The GDA label (Guideline Daily Amount) increasingly used by the food industry helps consumers to get information of the nutrient content of a food. Again, the nutrients included are relevant from the health point of view. The reference values are close to the internationally recommended intake limits, but in case of natural sugars and sodium need to be clarified to the consumers. Additionally the reference values of GDA used are most often same for men, women and children. There is a need for an evaluation of the reference values by independent experts. The GDA system is based on portion sizes that may not be universal (e.g. 250 ml of soft drink is definitely not an universal portion of soft drink for adolescents).

The fact that all sugars, also the naturally occurring sugars of e.g. fruit and berries and lactose in milk are included in the reference amount of sugars, may confuse the consumers.

Finally, an issue relevant for all labelling that should be brought up in the discussions, is the tolerance from declared values for different nutrients at different concentrations. There is always error in the labelled nutrient values, because of analytical errors and other reasons. But how much is tolerable? In the CIAA recommendations the tolerance from declared value for minerals (e.g. sodium) of non-fortified foods is ± 50%. What could be said about the salt levels in food products, if this kind of tolerances would be applied?

To conclude, in addition to public campaigns on diet and health and product development reaching for healthier food choices, clear labelling of foods is a very important part in activities to improve diet in the whole Europe. Labelling works both for consumers as well as for product development. Legislation is one effective tool among these activities shown e.g. in case of setting maximum salt levels for normal products. In all signpost labelling systems it is crucial that the criteria are food group based – a single set of criteria for all foods does not work. These efforts require long-lasting, systematic work and overall agreement within Europe helps – food travels.

References:

Cutler JA, Follmann D, Allender PS. Randomized trials of sodium reduction: an overview. Am J Clin Nutr 2007;65(Suppl.):643S-51S.

Front of pack nutritional labelling technical guidance, Issue 2: Published November 2007, Food Standards Agency. http://www.food.gov.uk/foodlabelling/signposting/technicalguide/ (Accessed October 28, 2008).

He FJ, MacGregor GA. How far should salt intake be reduced? *Hypertension* 2003; 42:1093-9.

He FJ, McGregor GA. Effect of longer-term modest salt reduction on blood pressure. Cochrane Database of Systematic Reviews 2004;(3):DC004937.

Kinnunen TI. The Heart symbol: a new food labelling system in Finland. Nutrition Bulletin 2001;25(4):335-339. (Published Online: 25 Dec 2001)

Laatikainen T, Pietinen P, Valsta L, Sundvall J, Reinivuo H, Tuomilehto J. Sodium in the Finnish diet: 20-year trends in urinary sodium excretion among the adult population. *Eur J Clin Nutr* 2006;60:965-70.

Pietinen P, Valsta L, Hirvonen T, Sinkko H Labelling salt in foods: a useful tool in reducing sodium intake in Finland. Publ Health Nutr 2008 Apr;11(4):335-40.

Young L, Swinburn B. Impact of the Pick the Tick food information programme on the salt content of food in New Zealand. *Health Promot Int* 2002;17:13-9.

The Keyhole symbol, Livsmedelsverket
http://www.slv.se/templates/SLV_Page.aspx?id=12220&epslanguage=EN-GB , (Accessed October 28,2008).

The What's inside guide, Know what's going inside you – Guideline daily amounts (GDA), http://www.whatsinsideguide.com/, (Accessed October 28,2008).

Traffic light labelling, Food Standards Agency
http://www.eatwell.gov.uk/foodlabels/trafficlights/check (Accessed October 28, 2008).

Tuomilehto J, Jousilahti P, Rastenyte D, Moltchanov V, Tanskanen A, Pietinen P, Nissinen A. Urinary sodium excretion and cardiovascular mortality in Finland: a prospective study. *Lancet* 2001;357:848-851.

WHO/FAO. Diet, nutrition and the prevention of chronic diseases. Report of a Joint WHO/FAO Expert Consultation. Geneva: 2003. WHO Technical Report Series 916.

4.2 Nutrition information on food labels: Use, understanding and effects by Klaus G. Grunert

MAPP Centre for Research on Customer Relations in the Food Sector,
University of Aarhus, Denmark[1]

Nutrition information on food labels is regarded as a major weapon in encouraging consumers to make healthier choices when shopping for food. In recent years, the traditional nutrition information in table or grid form, usually found on the back of the food package, has for this reason been supplemented by a variety of simplified nutrition labels that appear on the front of the pack, often called front of pack signposting (FOP) information. Various formats of such labels have been promoted, of which the most well-known ones are labels based on the guideline daily amount (GDA) concept and labels based on a traffic light (TL) scheme. Both formats are based on a five key nutrient concept, i.e., contain information on calories, fat, sugar, salt and monosaturates. New legislation is currently being proposed that would make some of this information compulsory.

Do consumers notice such labels, do they read and understand them, do they make use of them in their daily shopping? A range of consumer research studies, reviewed recently by Cowburn and Stockley (2005) and Grunert and Wills (2007), have tried to shed light on these questions. However, existing research on the issue has a number of deficiencies, as pointed out in these reviews. Insights on whether people notice and read such labels are mostly based on self-reported retrospective behaviour, which is believed to lead to considerable overreporting of the degree of usage of nutrition information when shopping. Many studies have been done on people's liking of various labelling schemes, without much consideration of whether such liking translates into any behaviour. There have been studies on whether people think they understand the labels, and also some tests of objective understanding. But very little is known about actual use of this information in the shop, and still less is known about whether the information has an impact on product choice, whether this impact will be sustained over time, and how the impacts across product categories will or will not lead people to have a healthier overall dietary pattern – which we must assume is the real aim of providing nutrition information of food labels.

[1] Correspondence: klg@asb.dk, more information on MAPP at www.mapp.asb.dk

In a just completed study conducted by EUFIC[2] on use of nutrition labels in six EU countries (UK, Germany, Poland, Hungary, France, Sweden), results showed that awareness of the currently mostly used front-of-pack labelling schemes was very high. More than 80% of respondents in the UK reported having seen a GDA label, with figures in Germany, Poland, Hungary and France being about 60%, and only Sweden being lower with 40%. In Sweden, the keyhole health logo achieved an overall awareness of 95%. In the UK, where traffic light labelling is another scheme widely used, awareness of this was likewise very high. So most consumers are aware that this information exists.

Consumers were, in this study, also pretty confident that they understood the information. This confidence was well-founded: Across the board, at least half of the respondents could correctly solve a number of tasks involving interpretation of GDA information. When asked to identify the healthiest product just by being shown two GDA or traffic light labels, by far most of the respondents can come up with the correct answer. When given a realistic choice set of three products within the same category, including all package information, more than 70% can correctly identify the most healthy product in France, Germany, and the UK, and still about 50% in Hungary, Poland and Sweden. These figures do not seem to be influenced by which labelling scheme is adopted on the packaging – like GDAs or traffic lights. Younger consumers were a bit better in finding the right answers, and of course people with more nutritional knowledge were also doing better.

So when you prompt people to use nutrition information, most people can handle them correctly. But will they actually use them when they are shopping?

In this study, people were recruited in supermarkets after they had just chosen a product (six different product categories – ready meals, carbonated soft drinks, yoghurt, confectionary, salty snacks, breakfast cereal). They were then asked for major reasons for choosing this particular product, and whether they had looked for any nutrition information. If the latter question was answered with a yes, shoppers were asked which nutrients they had been looking for and were asked to show on the package where they found the information. This gives, for the first time, real-life insight into how many consumers actually do look for nutrition information.

UK consumers most frequently did so – 27% of the shoppers interviewed. The figure was lowest for France with 9%. The other countries were in between. People looked mostly for calories, fat, and sugar, but salt, carbohydrates, saturated fat and food additives were also often mentioned. When asked to show the source of information the two most frequently used sources were the nutrition grid/list on the back and the GDA information on the front (note that the 6 product categories selected include some where such information is available because manufacturers have opted to have it on their packages).

These figures are averages. People were much more likely to look for nutrition information on breakfast cereal and yoghurt than for the other product categories – that means, for products that already have a healthy image. People were, not surprisingly, much more likely to look for nutrition information when health/nutrition was their major reason for choosing that particular product – which has to be seen in the light of the fact that across product categories the major reason for choosing it was taste, not health/nutrition. Also, people with better nutritional knowledge and people in the higher social grades were more likely to look for nutrition information.

[2] European Food Information Council, see www.eufic.org

The grand picture emerging is that the minority of consumers looking for nutrition information does so because there is a health theme/motive in the background of that particular purchase. As for all the rest, most of them *could* use nutrition information effectively for identifying a healthier product – if they chose to do so.

Even with this knowledge on how many consumers do look for nutrition information in the supermarket, we still do not know if this has resulted in a healthier choice, and whether the nutrition information available indeed has long-term effects on their product choices and, eventually, their dietary patterns. Finding answers to these questions would require an analysis of people's choice behaviour in supermarkets, based on scanner data, linking this data to household data, and looking at developments over time. Such analyses will be done in the FLABEL[3] research project funded by the European Commission under FP7, which has started August 1, 2008 and will during three years investigate many of the questions that are still open with regard to the effects of nutrition labelling. This will include questions on how more use of labels in the shop could be promoted, and whether the ideal label format, the one that would motivate consumers to make more use of nutrition information in the shop, still needs to be developed. It may be worth waiting for these results.

References

Cowburn, G. & Stockley, L. (2005) Consumer understanding and use of nutrition labeling: a systematic review. Public Health Nutrition, 8, 21–28

Grunert, K. G. & Wills, J. (2007). A review of European research on consumer response to nutrition information on food labels. Journal of Public Health, 15, 385-399

4.3. Understanding the costs of food labelling1 by Jan Tiessen

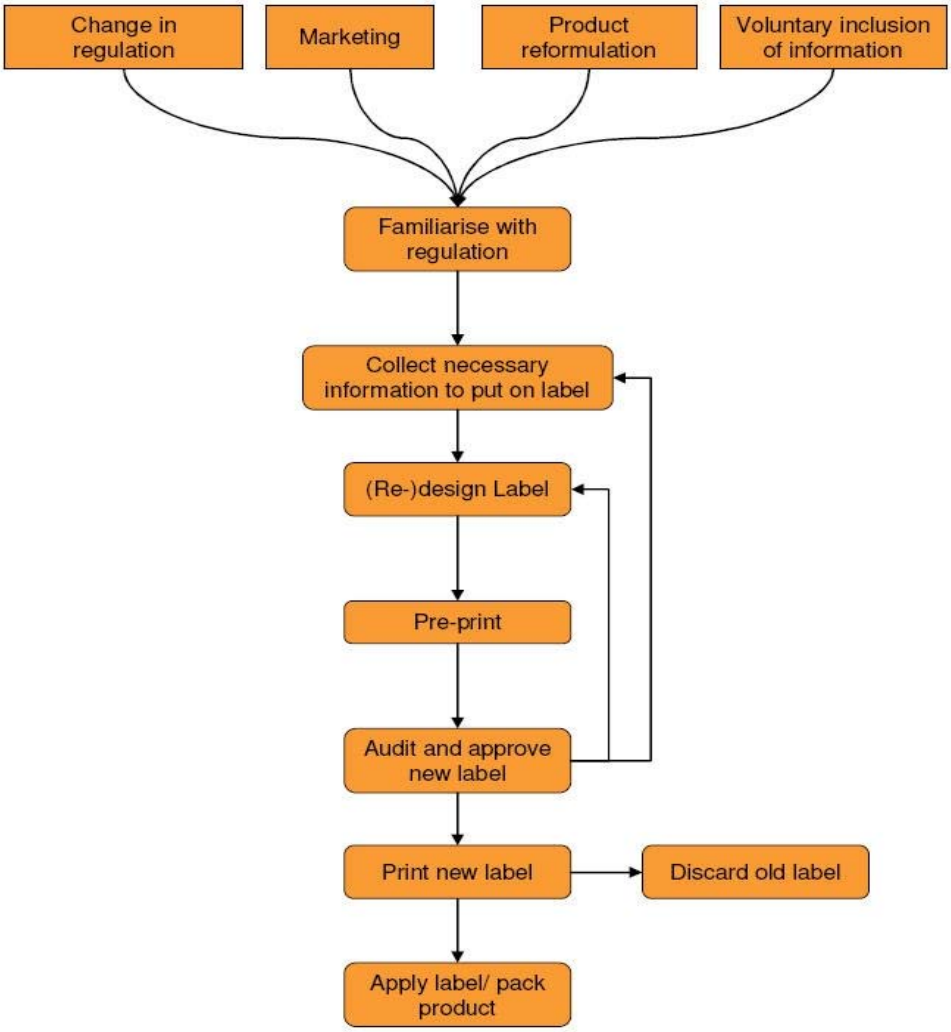
This brief background document explains the labelling processes and the main cost types that might be incurred by the food and retail industry. Costs typically accrue to food producers and retailers, while the benefits of labelling accumulate predominately with the consumers of foodstuffs.

1. The food labelling process

The costs of labelling legislation and changes to labelling legislation occur primarily at company level –at the level of producers of foodstuffs and, to some degree, at the level of retailers of foodstuff. They occur either 'in-house', or as costs for outsourced services[4].1 It is important to note that because labels are not changed for regulatory reasons alone, and food would be labelled in the absence of any regulations, the costs of food labelling legislation are not defined as the total costs of producing a food label, but only as the additional costs of including the specific requirements on the label. Figure 1 gives an overview of the major steps in the process of food labelling. The detailed steps of producing a label will be presented in the subsequent sections.

[3] For more information see www.flabel.org. The objectives of FLABEL are to determine how nutrition information on food labels can affect dietary choices, consumer habits and food-related health issues by developing and applying an interpretation framework incorporating both the label and other factors/influences, and too provide the scientific basis on use of nutrition information on food labels, including scientific principles for assessing the impact of different food labelling schemes, to be shared with the EU institutions, the food industry, especially SMEs, and other stakeholders.

[4] This briefing document is not intended for further distribution or citation. It is an extract from RAND Europe's report Assessing the impact of revisions to the EU horizontal food labelling legislation. TR-532. Santa Monica, CA, RAND, available at: http://www.rand.org/pubs/technical_reports/TR532/



Source: Rand
Figure 1: Labelling process

a) Label changes

A label change can be triggered by various factors, the most common ones being:

• changes in regulation

• marketing reasons

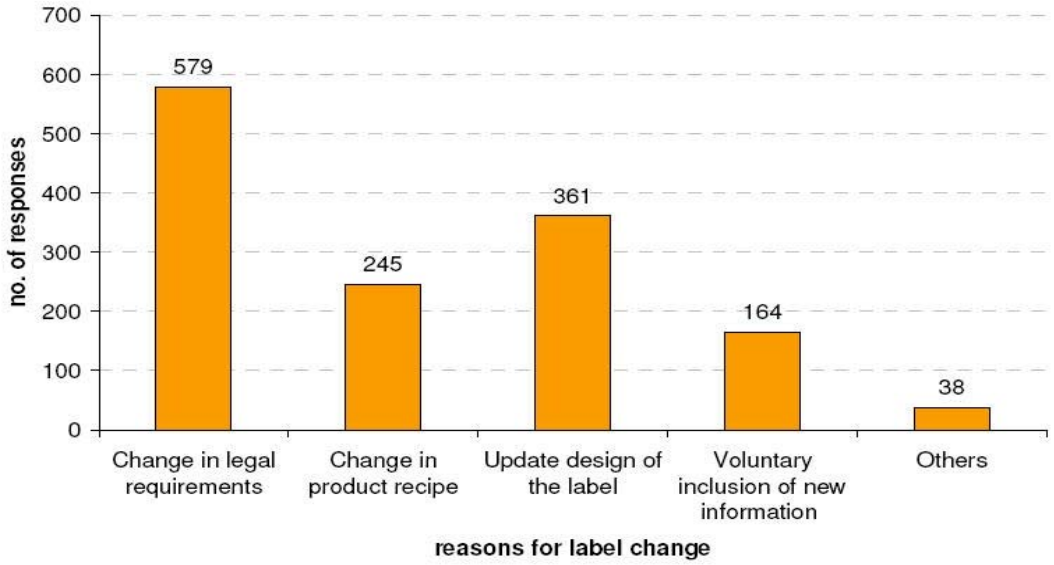
• product reformulation and recipe changes

• adding additional information to the label.

Figure 2, which reports findings from the SME Panel, gives an impression of the relative importance of the different reasons for changing labels.[5] While changes in regulation are identified as the single most common reason for labelling changes, fewer than half of the respondents consider it the main reason for changing the label. Labels are usually changed by producers at regular intervals, for marketing purposes, to reflect changes in the recipes of the product or for various other reasons.

[5] EICN, SME Panel, data collection

The life cycle of a label may range from a few months for highly marketed, branded products, such as cereals or soft drinks, to a few years for niche products and commodified products, such as sugar, salt or flour.[6]



Source:EICN (2006); Question 11
Figure 2: Reasons for modification of labels: "What is the main reason for changing a product label?"

If labels change frequently, regulatory changes can easily be incorporated into scheduled labelling changes at reduced cost. In order to develop a cost model of labelling processes, a study for the United States FDA estimated the number of stock keeping units' labelling changes could be incorporated into scheduled label changes given different compliance periods.[7] Using a transition period of 36 months, changes could be piggy-backed for all stock keeping units (SKUs) of branded products and 67 per cent of all private labels, i.e. non-branded products.[8] Unlike the current system in Europe, the US uses a system of uniform compliance dates, with new food labelling legislation coming into force every two years, leaving a maximum compliance period of 36 months and a minimum compliance period of 12 months.

When mandatory nutrition labelling was introduced in Australia and New Zealand, the lack of a sufficiently long transition period increased the costs for producers, who would have preferred a two-year transition period without further changes to the regulation.[9] However, some labelling requirements may shorten the life cycle of labels considerably.

[6] EAS, The introduction of mandatory nutrition labelling

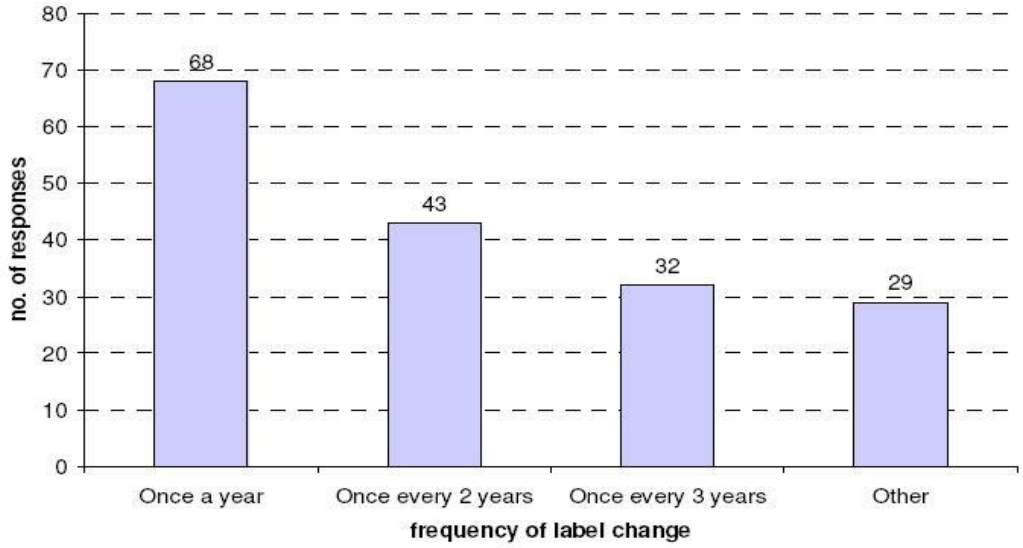
[7] M.K..Muth, E.C. Gledhill and S. Karns, FDA Labeling Cost Model, (prepared for Food and Drug Administration, RTI International 2003, Washington D.C., USA, 2003)

[8] It is worth nothing that these numbers are estimates by the authors based on a number of interviews rather than grounded in statistical data. For the purpose of their model, these numbers are thus used as assumptions.

[9] Donovan Research, Food Labelling Issues, - Stakeholder Qualitative Research (Report C01033 prepared for Australia New Zealand Food Authority, 2002)

Producers with diversified, variable and seasonal sourcing, for example, may need to adapt their labels several times a year (and for different batches of the same product) under more detailed ingredient listing and country of origin legislation.[10]

According to data from a RAND survey, most food manufacturers change their product labels at least once every three years. This is similar to the American FDA cost model finding, described above.
Figure 3 shows the distribution of survey responses by frequency of label change.



SOURCE: RAND Survey
Figure 3: Frequency of label change amongst respondents

b) Familiarisation with legislation

After the need for changing a label arose, the company has to familiarise itself with the legislation to establish the legal requirements for the new label. Costs related to this familiarisation occur as time spent on acquisition, familiarisation and understanding of the regulatory environment, or as fees for external consultants. It can be safely assumed that these costs vary with the:

• specificity of the regulation

• number of sources the regulation is found in

• clarity of the actual regulation.

A British administrative burden exercise estimated the costs attributed to familiarisation and understanding the regulation as being 13 per cent of all administrative costs (across all the regulation). An administrative measurement exercise conducted in Denmark estimated that the costs associated with familiarisation with food labelling legislation accounted for 5 per cent of the total administrative burden.[11]

[10] Centre for International Economics (CIE), feasibility of extending CoOL, A benefit cost analysis (prepared for Food Standards Australia New Zealand, Australia, 2006)

[11] Ervers- og Selskabstyrelsen, AMVAB Ministeriet for Familie og Forbrugerlanliggender, (conducted by Muusmann Research & Consulting and COWI A/S : Copenhage, 2006)

c) Information to be provided on the label

If the information to be provided on the label is not readily available within the company, additional costs are involved in collecting this data. Typical missing data include:

• nutritional values for products, which is covered by the parallel impact assessment

• information on the country of origin of ingredients

• full ingredient listings in pre-products delivered by external suppliers.

d) Design costs

After the food business has collected all the necessary information to be presented, the design of the label is the next step. The design costs vary with the extent of the overhaul of the label, with a complete overhaul being the most expensive option. Table 1 gives cost estimates from US research, reflecting the bandwidth of actual costs that can occur in the design stage.

Table 1: Graphic design cost estimates (US)

Table 1: Graphic design cost estimates (US)

Extent of redesign	One-colour change			Two-colour change			Full Redesign		
Cost estimate	low	medium	high	low	medium	high	low	medium	high
Graphic design	$300	$450	$600	$900	$1,350	$1,800	$1,500	$2,250	$3,000

Source: Muth et al. (2003), FDA Cost Model

Source: Muth et al. (2003), FDA Cost Model

If only minor changes in the label are required, the design phase might be skipped entirely, and the company might just add the additional information themselves and go straight to the printing phase.
The two small companies we interviewed for the research were using computer software which allowed them to easily add and edit the information on the label, and which could be used to feed the information straight into the printing process.

e) Printing costs

The costs of the actual printing process vary considerably with the number of labels actually printed, with a smaller number of labels printed being more expensive, since fixed costs (such as printing plates)are a considerable factor. Additionally, the number of colours used significantly increases the costs of producing a label. Printing costs are estimated to be 15% higher for a five-colour label compared to a three-colour label.[12] If the production of labelling is in-house, label changes might produce sunk costs, as machinery might have to be adapted or even replaced.

[12] EAS, The introduction of mandatory nutrition labelling

f) Writing off existing label stocks

Writing off existing stocks of food labels is also a relevant cost implication of labelling changes. To reduce costs, companies usually order packages and labels in bulk. A previous impact assessment illustrated the cost differences between different amounts of labels ordered based on information received from label suppliers: if the price of 100,000 adhesive labels is set as 100 per cent, that of 50,000 labels would be 122 per cent and that of 25,000 would be 150 per cent. Labels printed on pack need to be ordered in even larger amounts to be an economically attractive alternative; the same study estimates a minimum order amount of 1 million units.[13]

Data on the typical stock of labels is available for the UK, where a recent study commissioned by the UK's Food Standard Agency found that 69 per cent of companies use their labels within 12 months, and only 11 per cent need more than 24 months to use their labels.[14] However, small companies tend to use their label stock more slowly than large companies.[15]

g) Types of labels

Very generally, three types of labels can be distinguished:

• labels printed on pack

• labels applied to the packed product

• off-product labelling for food sold loose.

Labels printed on pack have the longest lead time in label changes and are most expensive if stocks of labels have to be written off.[16] Applied labels, such as adhesive labels, shrink sleeves, etc. have shorter lead times and writing off stock is cheaper. Displays at the point of sale for food sold loose are a flexible and easy form of labelling to amend; however, the costs have to be borne by the retailers[17]. In addition, displays at the point of sale require trained staff to keep the information up to date and in accordance with legislation.

h) Size of labels

The size of labels can be an important factor increasing the cost of labelling. If labelling requirements exceed a product specific threshold, the producer might be forced to increase the size of the package to accommodate the necessary information, or increase the number of stock keeping units, for example by abstaining from multilingual labelling.[18] One of the interview respondents illustrated this with a chocolate bar, which currently only has a label on one side. Including more information would mean, in this case, including a label at the back of the pack, which would in turn require a new machine to stick adhesive labels to both sides of the final product.

---

[13] Ibid

[14] Leatherhead Food International, Evaluating the Impact on Business of Changes to Nutrition Labelling Requirements in the UK (project undertaken for the Food Standards Agency, 2006).

[15] Ibid

[16] EAS, The introduction of mandatory nutrition labelling

[17] See Food Standards Agency, Regulatory Impact Assessment Fish Labelling Regulation (FSA, 2006)

[18] EAS, The introduction of mandatory nutrition labelling, p.31

Estimates from previous research suggest the following ranges of total costs of changing a label (see Table 2).[19]

Table 2: Estimates of total costs for changing a label per SKU

Table 2: Estimates of total costs for changing a label per SKU

	Small change	Extensive redesign
Cost range	€ 2,000 – € 4,000	€ 7,000 – € 9,000

Source: EAS (2004): *The introduction of mandatory nutrition labelling in the European Union.*

2. Company size

For a variety of reasons, SMEs are likely to incur relatively higher costs than larger enterprises from labelling changes. In general, SMEs command far fewer resources and cannot realise economies of scale in reacting to changes in labelling regulation, compared to large companies. These resources might be needed to:

• acquire information on the regulation

• comply with regulation by overhauling labels

• reposition and re-brand products affected by changes in consumer demands as a result of information disclosure.[20]

Overall, labelling requirements might lead to higher-per-unit costs for SMEs, thus reducing their competitiveness.[21] An analysis of British SMEs, in the wake of the full introduction of European regulation in 1993, found no considerable effects of the labelling regulation on SMEs' competitiveness.[22] However, a recent study shows that the introduction of mandatory nutrition labelling in the US increasedthe likelihood of SMEs exiting the food market compared to large companies.[23]

3. Mandatory vs. voluntary labelling

Economic theory suggests that firms will disclose information on their products as long as it increases the revenues from this product either through increased sales or through a higher premium[24]. This might lead to a spread of labelling information on positive food characteristics through the market and increased information for the consumers, the so-called 'unfolding theory'. However, evidence from the US, before and after the introduction of mandatory food labelling, suggests that 'incentives for voluntary disclosure of nutritional content by food processing did not generally result in reliable and consistent quality signals to consumers in the US'.[25] Following this reasoning, any mandatory labelling requirement would have a net cost to the producers.

---

[19] Ibid

[20] Christine Moorman, Rex Du and Carl. F. Mela, "The effect of Standardized Information on Firm Survival and Marketing Strategies", Marketing Science 24 no. 2 (2005): 263-274

[21] Gola, "Economics of Food Labelling" 117-184

[22] A.Cumbers, R. Leigh and D. Smallbone, "The Single European market and the new regulatory regime in the food sector: The impact on small and medium-sized manufacturing firms" British Food Journal 97 no. 4 (1995) 13-19

[23] Moorman, The Effect of Standardized Information, 263-274

[24] Golan, "Economics of Food Labelling", 117-184

[25] Drichoutis, "Consumers' use of nutritional labels"

4. Opportunity costs

A third source of labelling costs is opportunity costs. Without labelling requirements, companies would make the best use of their labels for marketing purposes, which might include providing some information they assume the consumer will value, promoting their brand, etc. Labelling requirements limit the free use of the label for these purposes, thus reducing a perceived benefit for the company. Evidence about opportunity costs for the industry is rare. However, it seems reasonable to assume that opportunity costs increase with:

• The space taken by the mandatory labelling requirements

• The placement of mandatory requirements on the front of the pack

• The value of the brand marketed.

5. Administrative burden

Finally, administrative burden measurements can provide insights into the scale of the costs incurred by industry and, in some cases, per type of industry. We have found examples of such measurements in Denmark, the Netherlands, Sweden and the UK. These countries, in particular the Netherlands, have been at the forefront of the development of administrative burden measurements. (See table 3 below.) However, it is important to note that these exercises have tried to establish the current costs of compliance to industry. Therefore, they are not able to anticipate what the costs to industry arising from revisions in labelling regulations might be and where specifically these costs will be incurred. In addition, the data that the measurement exercises generate are not entirely comparable and therefore making generalisations of the impact across countries is challenging. Some countries, such as the UK, give an idea of the cost per information request, while other countries, such as the Netherlands, aggregate data. Therefore, it is difficult to arrive at average costs or even comparable levels of administrative burdens. In short, these exercises can only give us an indication of:

• The scale of the burden

• The scale of the types of burden incurred

• The distribution of administrative burden according to type of regulation

• The distribution of costs across the food chain.

Table 3: Administrative burdens associated with food legislation and labelling regulations compared between countries[23]

	Denmark		The Netherlands[24]	Sweden	UK
Definition of administrative burden used	Administrative activities (e.g. collection of information within the company) to meet data requirements, consisting of internal resource use in the form of the employees' time consumption and occasionally an external resource use in the form of costs to accountants, external experts, etc. In total, these administrative costs constitute the costs that are related to the performance of different administrative activities.		The costs to Dutch industry of complying with the information requirements of government regulation. These concern the collection, processing, registering, storage, and provision of information.	Administrative costs are defined as costs born by business to gather, store or transmit information which is required in regulation.	UK calculates the sum of internal, external and overhead costs to meet an information obligation and adjusts it for the business-as-usual costs (costs that would have been incurred in the normal business process), which gives a net administrative costs.
Total amount of total administrative burden associated with all food regulations identified	€ 554.9 million (current exchange rate) per year as of 2005 (all regulation within the Danish Veterinary and Food Agency)		€940 million per year as of January 2006	€ 913 million (current exchange rate) per year as of 2006	€180 million (current exchange rate) as of May 2005 over 53 regulations
Total amount of administrative burden associated with European regulations	(all regulation within the Danish Veterinary and Food Agency) Category A[25]: 45 % Category B: 26 % Category C: 30 %	Horizontal labelling regulations Category A: 95 % Category B: 0% Category C: 5%	€535 million per year	Category A: € 900.1 million Category B: € 12.5 million Category C € 0.005 million	Category A: 49% Category B: 49% Category C: 2%.
Total amount of administrative burden associated with food labelling	Horizontal labelling: € 93.2 million per year		€337.5 million per year	Horizontal labelling: € 62.5 million per year Vertical labelling: € 0.842 million per year Nutrition labelling € 2.8 million per year Traceability: € 37.9 million per year	UK assessed the impact of the 1996 Food Labelling Directives, total administrative costs were: 10.2 million (current exchange rate) or 6% of total administrative burdens. Net administrative costs adjusted for normal business practices were: €6.87 million (current exchange rate).
Distribution of total administrative burden per type of industry			Food production: 3.3% of total administrative burdens Packaging productions: 0.03% Food and drinks industry: 33.5% Transport: 0.8% Wholesale and importing: 15.4% Retail: 26.5% Hotels and restaurants: 19.3%		Not given
Type of administrative cost incurred	Horizontal labelling only: - Familiarisation with requirements: 5% - Collection of information. 5% - Text description: 30 % - Copying, distribution, archiving 60%			n.a.	62% of the administrative cost associated with complying with the Food Labelling regulations of 1996 was an internal cost. The remainder (38%) was external. The main categories of administrative burdens identified for the total measurement are: - Gathering and assessing relevant information/figures (28%) - Familiarisation with requirements (7%) - Reporting - including written descriptions, copying, filing, distributing or submitting information / reports (5%).

[23] Denmark: Ervers- og Selskabstyrelsen, AMVAB Ministeriet for Familie og Forbrugeranliggender.

The Netherlands: for full details see, Bex and Duits, "Administratieve Lasten in de VWS Voedselketen" Interdemartementale Projectdirectie Administratieve lasten, "Meten is Weten: Handleiding voor het Definieren en Meten van Administratieve Lasten voor het Bedrijfsleven" Den Haag, December 2003.

Sweden: NUTEK, Näringslivets administrative kostnader på livsmedelområdet, (Sotckholm: NUTEK - Verket för Näringslivsutveckling, 2007).

UK: Food Standards Agency "Food Standards Agency, Administrative Burdens Measurement Exercise, Final Report" (FSA, June 2006)

[24] The Dutch measurement of administrative burden is compared to a baseline measurement undertaken at the time of their introduction of the overall regulation. Compared to this baseline measurement, administrative burdens in the 2006 report were € 111 million less. For full details see, P.H. Bex nd B.H. Duits, Administratieve Lasten in de VWS Voedselketen (Nieuwegein: SIRA Consulting, 2006). Interdepartemental Projectdirectie Administratieve Laste, Meten is Weten: Handleiding voor het Definieren en Meten van Administratieve Lasten voor het Bedrijfsleven (Den Haag, December, 2003).

5. Proceedings - summary of the Workshop

Ms. Renata Sommer (EPP-ED, DE) MEP Rapporteur on Food Labelling introduced and chaired the Workshop.

5.1 Expert presentations

Label content and health effects

(**Ms. Liisa Valst**a, Finnish National Public Health Institute, Dept. of Health Promotion and Chronic Disease Prevention)

The proposal for Regulation of the European Parliament and of the Council on the provision of food information to consumers can be seen as a good step in improving food labelling in Europe. In addition to public campaigns on diet and health and product development aimed to promote healthier food choices, clear labelling of foods is a very important element of the activities to improve diet in all of Europe. Labelling works both for consumers as well as for product development. Legislation is one effective tool among these activities shown, for example in case of setting maximum salt levels for normal products. In all signpost labelling systems it is crucial that the criteria are food-group based – a single set of criteria for all foods does not work. These efforts require long-lasting, systematic work and overall agreement within Europe is helpful, because food travels among the Member States.

How consumers perceive and use the label on foods

(**Mr. Klaus Grunert**, Director Centre for Research on Consumer Relations in the Food Sector (MAPP), Denmark)

Nutrition information is viewed as a major contributor in encouraging consumers to make healthier choices when shopping for food. Labels have taken on various formats, the most well-known of which are the guideline daily amount (GDA) and traffic light scheme (TL). Both formats are based on a five-key nutrient concept, i.e., contain information on calories, fat, sugar, salt and monosaturates. New legislation is currently being proposed that would make some of this information compulsory. Mr. Grunert proceeded to answer the important questions about labelling: do consumers notice such labels, do they read and understand them, and do they make use of them in their daily shopping? He concluded that according to his studies, consumers do seem to look for nutrition in the supermarket, but we still do not know neither if this has resulted in healthier choices, nor whether the nutrition information available on packaging has long-term effects on their product choices, and eventually, on dietary patterns. The European Commission has funded a study within the FLABEL research project that will research these (and other) topics over the next three years.

Implementation and its Costs on Food Labelling

(**Mr. Jan Tiessen**, Rand Corporation Europe, UK)

Mr. Tiessen illustrated a brief background and presented statistics in order to explain the labelling processes and the main cost types that might be incurred by the food and retail industry. Costs typically accrue to food producers and retailers, while the benefits of labelling accumulate predominantly with the consumers of foodstuffs.

Mr. Tiessen's speech outlined the changes required in labels, the costs of design and printing, writing off existing label stocks, different types of labels. Further, he examined the different impact on companies based on their size, on the loss of space otherwise dedicated to marketing, and the administrative burden they incur due to the changes proposed.

5.2 Question and Answer session between Members of the European Parliament, representatives of the European Commission and the experts

Chairman asked Commission's representative for comments on the proposal on Food Labelling. The representative of the Commission conjectured that perhaps consumers looking at the nutrition label, may also look for other types of information: price, protected origins, information that is related to product quality, but necessarily to product nutrition. Other topics to consider when discussing labels are the burden on small and medium size companies, product traceability and the readability of the label. Sometimes labels are simply printed too small to be legible.

The debate between MEPs and experts focused on the following main issues:

- On the clarification if "sodium" or "salt" content are the real problem for health. Ms. Liisa Valsta answered that the major part of sodium intake comes from table salt used in cooking. There is some confusion for consumers because some products, mainly milk and meat, have natural sodium that is not harmful for health and does not accumulate with sodium that comes from other salt. It is better to talk about "salt" to consumers, rather than "sodium". In response to another question about salt, Ms. Valsta commented that consumers do not normally add more table salt to foods that are called "low salt". Almost 70% of all salt intakes come from consuming processed foods, not from added table salt.

- On the traffic light system of labelling. When the system was first introduced, legislators were concerned that it was too complicated, but it was well-accepted and does seem to promote healthier choices and lifestyles. **A MEP asked Mr. Grunert what the consumer difficulties might be with the GDA, traffic-light or hybrid systems.** Mr. Grunert noted that these systems are well-liked in the UK, but this may point to a cultural predisposition present in the UK, but less evident in countries like France. Further, we must go beyond the "liking" of the system to discover if the added information is used by consumers.

- On consumer groups desire that labelling regulations would be left to the discretion of the Member States. On this issue, several industry representatives complain that this would entail extra costs. **What are the Pro's and Con's of leaving Regulation to Member States?** Mr. Tiessen answered that in general industry prefers European rules to Member State rules. Some discussion ensued about the advantages and disadvantages of GDA, traffic-light or hybrid labelling systems.

- On how to define standard portions that are used in measuring foodstuffs. Ms. Valsta admits that this is a challenge. In Europe the size of 100g is well understood, but that does not describe portion, just defines a standard for comparison purposes. Portion sizes vary a great deal from country to country. Chairman noted that Mr. Grunert has mentioned that consumers like front of pack nutrition information. **Where is the limit? How much information can actually be placed on the front of the package?** Mr. Grunert says that trade-offs have to be made, but the five-nutrient concept is an acceptable compromise.

Representative from the Rand Corporation suggested that since labelling contexts are so variable, work should be done to shift from the label to the label's context, for example we could guide peer-group pressure through education.

- On how does age play into this? Can you elaborate on your statement that your findings indicate that young people are more informed about nutrition than older people? Mr. Grunert defined his "younger group" in terms of age: 18-35yrs, pointing out that teenager were not studied. But this does indicate an issue to develop: "life-long learning", which means that notions learned at one point in life may be applied to everyday life at a later time. The absence of immediate application is not the failure of education.

The European Commission pointed out that there are other types of labelling beyond nutrition labelling: Origin Labelling, which is important for consumers and a choice driver; Animal Welfare Labelling, Environment Labelling (CO2 footprint is an example): language issues and so forth.

6. Annex: Workshop presentations

Content of the Label: Case salt and beyond

- Improving food labelling
- Case: Salt labelling in Finland
- Signpost labelling – different food groups need different criteria
- Conclusions

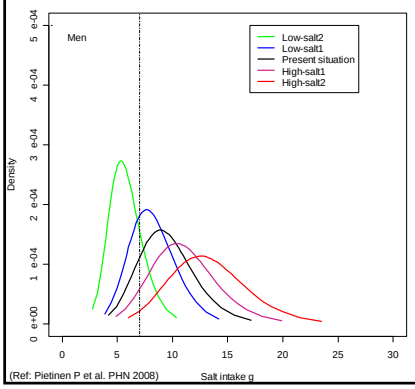
Liisa Valsta* and Pirjo Pietinen
*Senior Researcher, Adjunct Professor
National Public Health Institute,
Nutrition Unit

Labelling of salt in Finland

	NaCl % limits	
Food category	"Extra salt" (1.1.2008-)	"Reduced salt" >25 % less salt than normal product
Fresh bread *	>1.2	max 0.9
Crisp bread*	>1.6	max 1.2
Cheese*	>1.3	max 1.0
Sausages *	>1.7	max 1.3
Cold whole meat cuts* and fish products*	>1.9	max 1.4
Breakfast cereals	>1.6	max 1.2
Soups, broths, sauces*	>0.9	max 0.7
Prepared and semi-prepared foods*	>1.1	max 0.8

***) Compulsory labelling of salt: also mixed spices containg table salt**

Salt intake by choice of low- or high-salt products among men (FINDIET2002 Survey)



(Ref: Pietinen P et al. PHN 2008)

The Finnish Heart Symbol

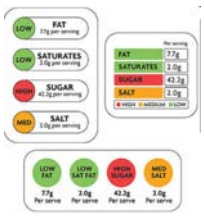
The Nordic Keyhole Symbol

Different food groups need different criteria

Beauties and challenges of the traffic light labelling

Beauties:
- Clear colors
- Includes nutrients that are relevant in prevention of chronic diseases.
- Quick decisions possible based on fat, saturated fat, sugars and salt
- Works well for composite, processed foods

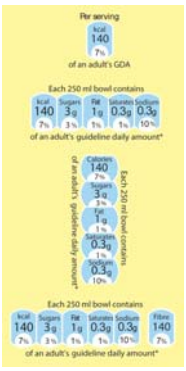
Challenges:
- Same criteria for all food products (not recommended to drinks – separate criteria)
- Does not show important nutritional differences between certain foods
- Tolerance from declared value?



	Sugars (g/100g)	Fat (g/100g)	Saturates (g/100g)	Salt (g/100g)
Butter	0	80	53	1,5
Margarine (40%)	0	40	11	1,4
Rape-seed oil	0	100	6	0
Skim milk*	5	0	0	0,1
Semi skimmed-milk*	5	1,5	1	0,1
Milk*	5	3,5	2,2	0,1
Candy	54	0	0	0,2
Chocolate	50	33	17	0,3
Fish soup	1,8	2,6	0,6	0,5
Pizza (ham)	2,2	10,3	5,6	1,0

(* Criteria for drinks)

Beauties and challenges of the GDA system (Guideline Daily Amount)



Beauties:

- Helps consumers to get information of the nutrient content of a food.
- Includes nutrients that are relevant in prevention of chronic diseases.
- Reference values are close to the internationally recommended values.

Challenges:

- Evaluation of the whole diet – foods eaten several times a day
- Reference values of GDA
  - same for men, women and children
- - need for evaluation by independent experts
- Portion sizes may not be universal (e.g. 250 ml of soft drink, i.e. 2 portions/"small" bottle)
- Sugars including natural sugars, i.e. lactose in milk, sugars in fruit and berries
- Salt – natural sodium in milk and meats
- Tolerance from declared value? (minerals e.g. sodium, non-fortified foods ± 50% ; CIAA recommendation, gda.ciaa.eu)

Conclusions

- Improving diet (e.g. reducing salt intake) in the population requires long-lasting, systematic work.
- Legislation works – e.g. setting maximum salt levels for normal products.
- Labelling works for consumers as well as for product development.
- Food group based criteria are crucial – a single set of criteria does not work.
- Tolerance from declared value – what is tolerable?
- Consumer education is very important.
- Overall agreement within Europe helps - food travels.

Acknowledgements: Marjaana Lahti-Koski, The Finnish Heart Association, Annika Marniemi, The Finnish Consumers' Association

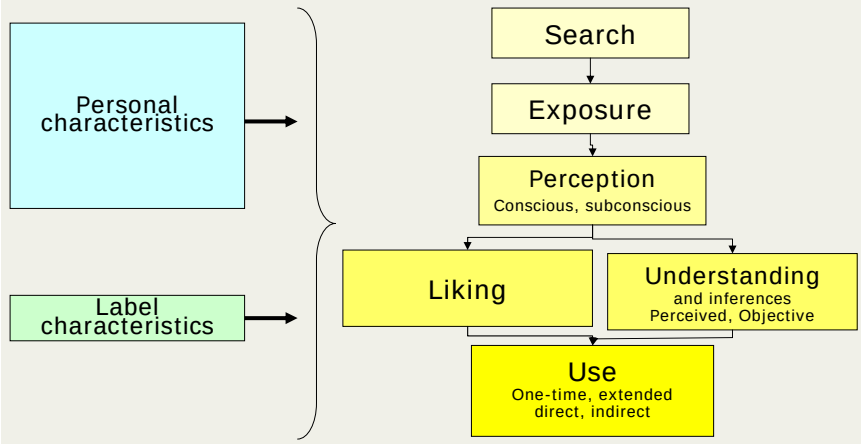
Nutrition information on food labels: Use, understanding and effects

Klaus G. Grunert
MAPP Centre for Research on Customer Relations in the Food Sector
Aarhus School of Business, University of Aarhus, Denmark

MAPP
Aarhus School of Business
University of Aarhus

Dias 2

Nutrition information on food labels: How it works



MAPP
Aarhus School of Business
University of Aarhus

Dias 3

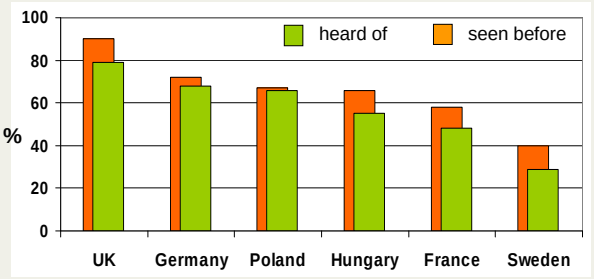
Conclusions from earlier research in Europen

- Widespread interest in nutrition information
- Consumers like the idea of simplified front of pack information
  - But differ in their 'liking' of different formats
- Most consumers believe they understand the most common graphic formats
- Very little insight into how labelling information is/will be used in real life.

MAPP
Aarhus School of Business
University of Aarhus

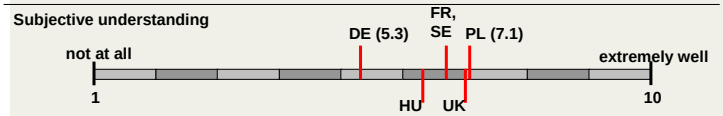
Dias 4

Awareness and subjective understanding of GDAs in six countries



•In UK also high awareness of traffic lights

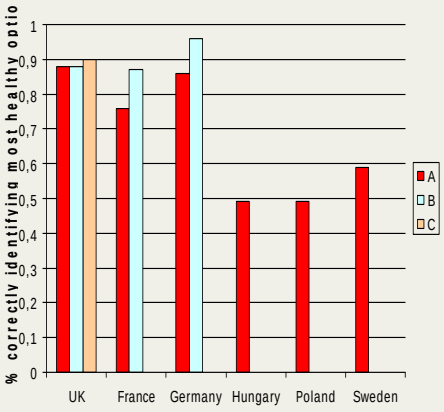
•In Sweden very high awareness of keyhole



MAPP
Aarhus School of Business
University of Aarhus

Dias 5

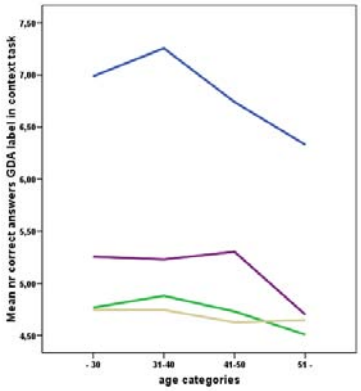
Use of label information to infer healthiness when prompted

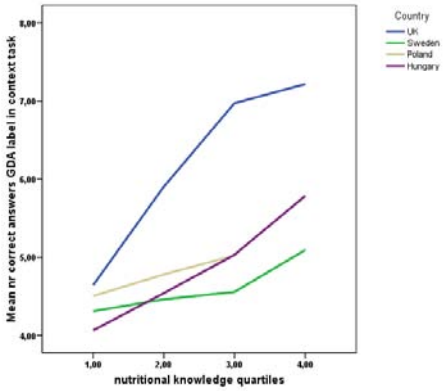


MAPP
Aarhus School of Business
University of Aarhus

Dias 6

Age and nutritional knowledge play a role



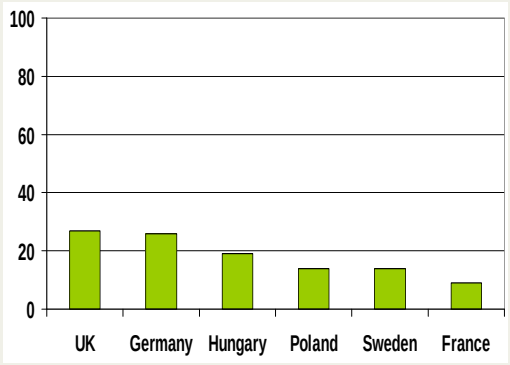


MAPP
Aarhus School of Business
University of Aarhus

Dias 7

How many do actually look for nutrition information when shopping?

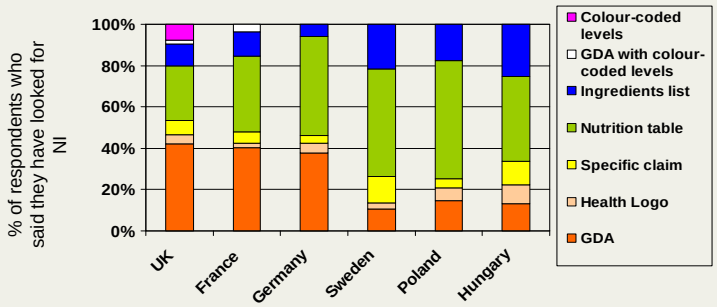
- Data for six product categories: ready meals, carbonated soft drinks, yoghurt, breakfast cereals, salty snacks, confectionary
- Respondents could say which nutrient they looked for, and where they found the information
- Mostly looked for calories, fat, sugar
- Also saturates, salt, carbohydrates, food additives



MAPP
Aarhus School of Business
University of Aarhus

Dias 8

Where did they look?



- **People look for NI more when the product has a healthy image (yoghurt, cereal) and when health / nutrition is the prime reason for choice…**
- **…but usually, the prime reason for choice is *taste***
- **People with *better nutritional knowledge* and people in the *higher social grades* are more likely to look for nutrition information when shopping**

MAPP
Aarhus School of Business
University of Aarhus

Dias 9

What we don't know – but will know in 2 years

- How does nutrition labelling affect product choices and dietary patterns – in the short and in the long run?
- Is the optimal label format still to be found?
- How to deal with cultural differences in the EU?

- The European Commission is funding the FP7 project FLABEL (started Aug 1, 2008), which will give answers to these and other questions

MAPP
Aarhus School of Business
University of Aarhus

RAND EUROPE

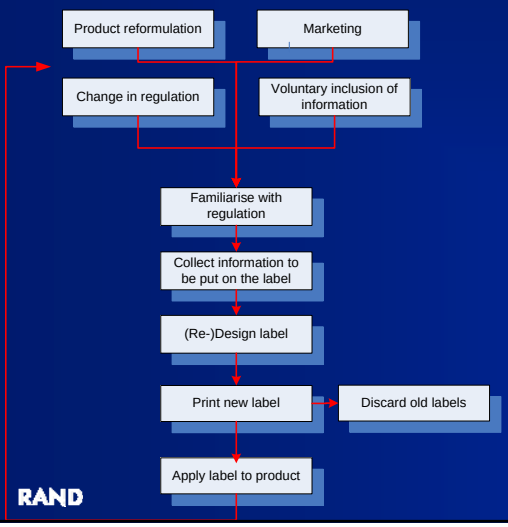
Assessing the impacts of changes to European Food Labelling regulation

Workshop Food Labelling - 5 November 2008

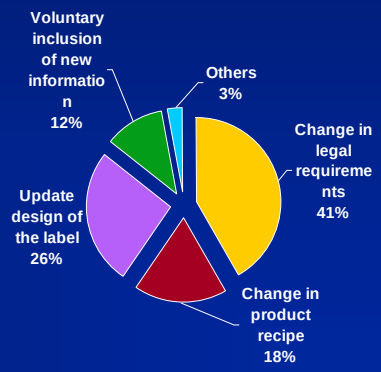
Jan Tiessen

1. Understanding the cost impacts of labelling regulation

The labelling process



Reasons for label change

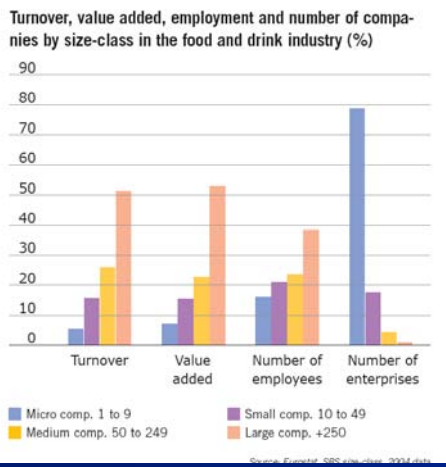


RAND

2 5/11/2008

2. The Impact on SME's

Industry structure



Cost implications

- SMEs cannot realise economies of scales in:
  - Acquiring information on changes in labelling regulations
  - Complying with regulation by overhauling labels
  - Repositioning and re-branding products affected by consumer demands as a result of information disclosure

RAND

3 5/11/2008

3. Costs: General labelling

Horizontal labelling regulation may increase costs substantially when it:

- Requires tracing of ingredients
- Requires tracing of origin for multiple ingredients
- Results in frequent label changes (e.g. seasonal sourcing, changes in product composition)
- Increases the number of SKU, e.g. through space limitations

RAND

4 5/11/2008

4. Costs: Nutrition labelling

Nutrition labelling involves some particular costs:

- When it is not provided yet (ca. 45% of products)
- When nutrition information for ingredients has to be generated (e.g. laboratory costs)
- When it leads to an increase in SKU (e.g. abandonment of multi-lingual labelling)
- May have substantial opportunity costs for front of pack labelling

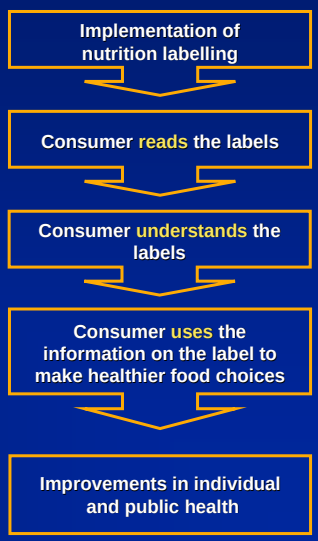
RAND

5 5/11/2008

5. Health Impacts

There are two main avenues of health impacts:

1. Labelling of Allergens
   - extension of labelling to food sold loose makes food related allergy incidents less likely
2. Improvements in Nutrition
   - Mandatory nutrition labelling will provide information about the nutritional value of a wider range of products (currently around 55% have nutritional labels)
   - This information could be used by consumers to change their diet, however evidence on the effect of labels is scant



RAND

6 5/11/2008

6. Impact on Consumer Protection

- Besides the described health impacts, the proposal will have an impact on consumer protection by increasing the possibility for informed consumer choice:
  - Improving legibility and accessibility of provided information (FOP; minimum font size)
  - Inclusion of a wider set of information (nutrition, allergens)
  - Clarifying some information (e.g. Origin labelling)

RAND 7 5/11/2008

RAND EUROPE