

Do European consumers use nutrition labels?

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ABSTRACT: Nutrition labelling on food packages becomes more and more widespread in the European Union. Such information is not compulsory, unless a nutrition or health claim is made. However, how do consumers use nutrition information? Two European studies are currently assessing whether nutrition information on food labels is exerting an effect on healthy food choices among consumers. Based on in-store observations and interviews, these studies give a real-life insight into consumers' shopping behaviours. The major outcomes to date are that most European consumers have reasonable knowledge about nutrition and are able to use nutrition labels to identify healthier products within a category.

INTRODUCTION

Consumers across the European Union (EU) are confronted with an increasing variety of foods, especially processed and packaged products. Faced with such a range of foods, and with less and less time available for food shopping, it is important that healthy food choices are made easy. In this context, nutrition labelling may represent a useful tool to highlight essential information about the nutritional value and composition of products. But do consumers really notice these nutrition labels, do they understand them, and do they use them when shopping? Although many research studies have tried to shed light on consumers' reactions to nutrition labels (1), little is known about how consumers actually use them in store and still less about if and how this impacts on product choice and diet quality. Two European studies are tackling these questions from multiple angles, and the first results are now available.

carbohydrates, fat) or the big 8 (big 4 plus sugar, saturated fat, fibre and sodium). Nutrition claims and GDA (Figure 2) were the most prevalent forms of nutrition information on the FOP, averaging 25 percent each. Among the 5 categories of products audited (sweet biscuits, breakfast cereals, pre-packed chilled ready meals, carbonated soft drinks and yoghurts), breakfast cereals showed the highest penetration of nutrition information, with 94 percent for BOP and 70 percent for FOP. Thus, nutrition information seems to be widely available on food products in Europe, despite the fact that its provision is voluntary unless a nutrition or health claim is made.

CONSUMERS AND NUTRITION

Another study, by the European Food Information Council (EUFIC) in collaboration with Professor Klaus Grunert,

NUTRITION LABELLING

Whereas nutrition information in the form of the nutrition table or in linear format on the back of food packages have been in use for some time, more recently, various front-of-pack nutrition labelling schemes have emerged such as the traffic-light system, guideline daily amounts (GDA), or health logos. The EU-funded project FLABEL (Food Labelling to Advance Better Education for Life) has studied the penetration of nutrition labelling on food packages in all 27 EU Member States and Turkey (2). After 6 months of research, more than 37,000 products from 5 food and beverage product categories have been audited in a total of 84 retail stores. This study showed that, on average, 85 percent (range: 70 percent, Slovenia - 97 percent, Ireland) of the products audited included back-of-pack (BOP) nutrition information versus 48 percent (range: 24 percent, Turkey - 82 percent, the UK) for front-of-pack (FOP) (Figure 1). The most widespread format across all countries was the tabular or linear listing of nutrition content on the BOP, highlighting either the big 4 (calories, protein,

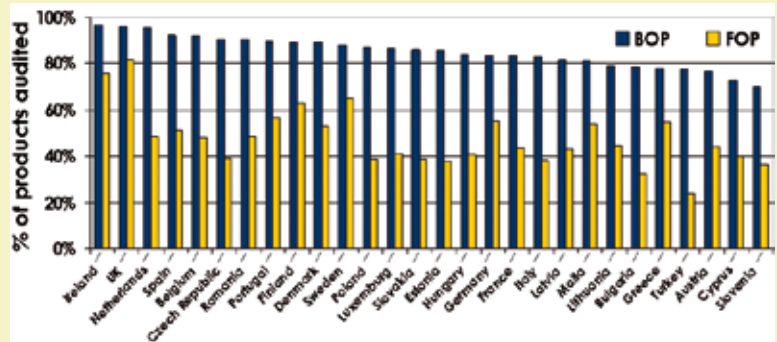


Figure 1. Nutrition information across 5 product categories front-of-pack (FOP) and back-of-pack (BOP). Data from the EU-project FLABEL (www.flabel.org).

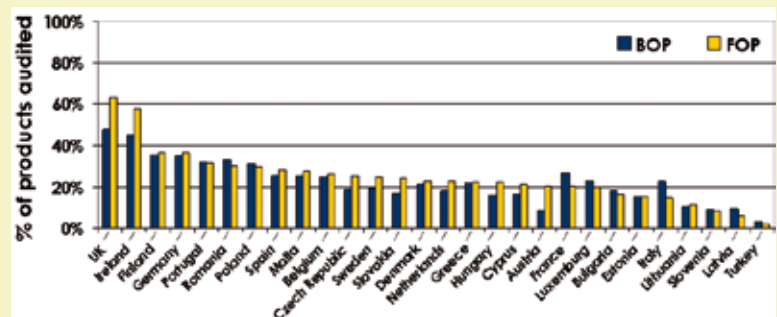


Figure 2. Guideline Daily Amount (GDA) penetration across 5 product categories front-of-pack (FOP) and back-of-pack (BOP). Data from the EU-project FLABEL (www.flabel.org).

University of Aarhus, Denmark, was designed to assess consumers' nutrition knowledge, as well as their use of nutrition labels when choosing products in store (3). The study was carried out in 6 European countries (UK, Germany, Poland, Hungary, France, Sweden) from February 2008 to February 2009. The project consisted of three parts: 1) Observing shoppers' behaviours during their product choice at the supermarket aisle, 2) A brief interview in the shop in order to obtain insight into what information they looked for and where on the label they found it, 3) A questionnaire to fill out at home and return, to investigate both use and understanding of nutrition information and nutrition knowledge. More than 11,700 in-store interviews were carried out and 5,800 of these participants returned the in-home questionnaire.

Nutrition knowledge

According to this study, people have a reasonably good knowledge that they should eat lots of fruits and vegetables, but only few consumers knew that eating a lot of starchy foods (such as bread, rice, pasta and potatoes) is recommended. Many consumers believed that foods high in fat, sugar and salt should be avoided, rather than eaten in smaller quantities. This reaction was strongest in the UK. Moreover, consumers tend to underestimate the calorie needs and expenditure of an average adult, whereas they overestimate children's calorie needs. This misconception (range: 32 percent, Sweden - 58 percent, Poland) could lead people to feed their children more calories than is actually needed. The study also showed that some nutrients were better understood than others. Saturated fat, trans fat, total fat and omega-3 are well understood, whereas polyunsaturated and monounsaturated fatty acids are less well understood. Overall, younger consumers and people with higher social grades had better nutrition knowledge.

Labelling awareness, understanding and ability to make health inferences

The study showed that most consumers are aware of the existing nutrition labelling schemes. Among the various systems, consumers look mostly at the nutrition table and GDA for nutrition information. About 60 percent (range: 40 percent, Sweden - 90 percent, UK) of respondents reported having seen a GDA label before. In Sweden, the keyhole logo achieved an overall consumer awareness of over 95 percent. In the UK, most of the respondents were also aware of the traffic-light system (79 percent). The study underlined that consumers' subjective understanding of the nutrition labelling schemes provided was reasonably good. For example, on a scale from 1 (not at all) to 10 (extremely well), respondents believed their understanding of GDA is between average and fairly well (between 5.3 and 7.1). When focusing on objective understanding, the meaning of the keyhole logo was broadly understood by the respondents in

Penetration of nutrition information is high on food and drink products in Europe

Sweden. On the contrary, colour-coded systems were often misinterpreted by consumers in the UK and France. Most respondents in both countries (73 percent in the UK, 63 percent in France) exaggerated the meaning of the highest nutrient levels (red in the UK, orange in France). The UK consumers wrongly believed that the red colour meant they "should try not to eat this product", while the correct definition is "It's fine to have this product occasionally as a treat." Moreover, less than 15 percent of UK consumers stated that the interpretive elements (colour-coding or high/medium/low) were the most helpful for indicating the healthiness of a product.

A majority of consumers (between 66 and 88 percent) in all six countries could correctly use the labelling system to identify the healthier option between different products within the same category regardless of the labelling system provided.

Consumers' awareness, understanding and ability to make correct health inferences are linked to their nutritional knowledge, age, social grade and interest in healthy eating. These results suggested that improving consumers' nutritional knowledge could help them interpret nutrition labels correctly.

Consumers are able to make healthier choices based on nutrition information but rarely do so when shopping

CONSUMERS' USE OF NUTRITION LABELS WHEN SHOPPING

Most people are able to use nutrition information when prompted, but do they use them when they are shopping? In the EUFIC study (3), people were recruited in supermarkets after they had just chosen a product (from one of the six different product categories). In this context, more than 60 percent of respondents looked at the front of the pack before putting the product into their shopping basket, with the exception of France, where only 31 percent did.



Few respondents (less than 15 percent) look somewhere else on the pack before putting the product into the shopping trolley, with the exception of Germany, where it was 32

percent. But, less than one-third of consumers had looked for nutrition information on the packaging (range: 9 percent, France – 27 percent, the UK). Moreover, in Sweden, though awareness and understanding of the keyhole logo is excellent, most consumers said they would buy the product even if it did not carry a keyhole symbol. Indeed, the major reason for choosing a product was taste, rather than nutrition and health.

The main indicators used to infer healthiness were calories, fat and sugar levels. Salt was a major concern only for consumers in the UK. Nutrition information was mainly drawn from the nutrition table or from the GDA information, especially in the UK, France and Germany. Among all the product categories considered, people spent the most time handling ready meals. However, people were most likely to look for nutrition information on yoghurts and breakfast cereals, which already benefit from a healthy image.

FUTURE CHALLENGES

The overall picture emerging is that the majority of consumers are able to use nutrition information effectively for identifying a healthier product, if they choose to do so. But only a minority actually looks at this information when

Consumers have reasonably good nutrition knowledge but tend to exaggerate their response to foods high in fat, sugar or salt

shopping. This raises the question of how consumers could be encouraged to look for nutrition information on food labels? Moreover, the influence of nutrition labels on consumers'

purchasing decisions remains unknown as does the long-term impact on people's dietary choices. Further analyses of consumers' purchasing behaviour in supermarkets over time are needed.

ACKNOWLEDGEMENTS

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MORE THAN 200 YEARS: BENE0-Group

The **BENE0-Group** consists of three successful, global companies specialising in functional ingredients with nutritional and technical advantages; BENE0-Oraffi (functional ingredients sourced from



chicory roots), BENE0-Palatinol (functional ingredients derived from beet sugar) and BENE0-Remy (functional ingredients derived from rice). BENE0-Group will be announcing a major new initiative at this year's FIE exhibition to celebrate 200 years of experience in the functional ingredients industry.

www.beneo-Group.com

PALSGAARD

At the upcoming FIE, **Palsgaard** will present new innovations within all of its application areas: bakery, confectionery, dairy, ice cream, lipid and fine foods. Aimed especially at cake mix manufacturers, Palsgaard will present its new Emulpals® 400 series which is different from other emulsifiers as it is based on a new carrier system and, they explain, will offer excellent functionality at a competitive price. It is Kosher and Halal certified, 100 percent vegetable, non-GMO, and contains neither allergens, nor soy or milk. Moreover, Palsgaard presents a new, unique, fast reacting all-vegetable, non-trans and non-GMO functional emulsifier for industrial bakeries. Palsgaard® SA 6610 is a non-soy product with

functional properties designed to meet the uniformity- and stability demand from automated industrial production. Innovation will be presented moreover for: yoghurt, for ice cream, for margarine and for mayonnaise applications.

www.palsgaard.com

THE EXCLUSIVE SUPPLIER

Aker BioMarine has signed an agreement to be the exclusive supplier of the company's Superba™ Krill Oil dietary supplement to the market leader Schiff Nutrition International. Hallvard Muri, Aker BioMarine's President and CEO explains: "Schiff Nutrition is the ideal partner, and the agreement represents a major recognition of the quality of Superba™. Schiff's expertise and achievements in brand-building and sales of dietary supplement products are impressive [...] Schiff Nutrition has chosen Aker BioMarine as its exclusive krill oil supplier. This means that Superba™ will be found in thousands of stores in the rapidly growing US market for omega-3 products". The companies explain that Superba™ Krill Oil will be the branded ingredient in MegaRed®, a Schiff Nutrition product. Bruce Wood, President and CEO of Schiff Nutrition International, adds: "We are impressed by Aker BioMarine's quality and technical capabilities, as evidenced by its EcoHarvesting™ technique of Antarctic krill [...] Aker BioMarine controls every step in the value chain and provides complete traceability of the raw material, supported by detailed documentation of every processing stage. This gives us confidence in Aker BioMarine's quality, supply reliability, and sustainability, all

critical factors for selection as a Schiff Nutrition supplier. We look forward to a productive, long-term cooperative relationship with Aker BioMarine".

www.akerbiomarine.com

DSM FOOD SPECIALTIES & SANOVO ENGINEERING A/S

DSM Food Specialties and **Sanovo Engineering A/S** have announced their partnership in egg processing. The companies explain that this partnership will focus on bringing the leading edge technologies of both companies to market. For more than 40 years, SANOVO Engineering has been a dedicated partner and supplier to the global egg processing industry. Thor Stadil, Chairman of the Board, SANOVO Engineering said: "By joining forces with DSM, we are convinced we have chosen the best company to strengthen our offering to the egg processing industry. SANOVO Engineering and DSM Food Specialties truly complement each other as partners. Today's egg processors and food manufacturers welcome innovative egg products as well as effective alternatives to traditional processing methods. They are also keen to replace energy intensive processes with enzyme driven processes. Through this partnership we can now offer such key technologies to our customers, in addition to our current products and services, such as egg-sorting, egg-breaking and turn-key plants and process automation".

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