

## **WHAT LIES BEHIND THE GM LABEL ON UK FOODS**

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This paper delineates the identity preservation strategy being implemented by the British Retail Consortium and the Food and Drink Federation towards genetically modified foods. The strategy is in direct response to British consumer concerns about genetically modified foods in the wake of the “mad cow” crisis. Consumer needs are being addressed through labeling based on robust global traceability systems of food ingredients. However, uninhibited information flows are needed for an effective food system that respects consumers’ needs.

*Key words:* British Retail Consortium (BRC); Food and Drink Federation (FDF); genetically modified foods; consumer needs; identity preserved systems; traceability.

**B**ritish food retailers must ensure the food they sell is wholesome, safe, and properly labeled. But big food retailers are also brand owners in their own right. Some 45% of United Kingdom (UK) food is sold under a supermarket brand, compared with an European Union (EU) average of about 25%, a figure inflated by the success of own brands in Britain. Most big food retailers are neither for nor against genetic modification (GM), they are just trying to give customers what they want.

### **Why Label? How To Educate?**

After the bovine spongiform encephalopathy (BSE) or “mad cow” crisis, British retailers knew that it would be essential to introduce genetically modified foods sensitively. Genetic modification is considered a new technology and, therefore, consumers would view its launch without full disclosure with suspicion, as reflected in media coverage of food irradiation in the late 1980s and early 1990s. British retailers saw labeling as playing a central role in such disclosure, but felt that more was needed in order to educate the public about biotechnology.

Choosing the quiet month of February 1996, two of Britain’s biggest retailers, J Sainsbury and Safeway supermarkets, launched GM tomato puree sold in cans. A large number of open briefings of interested journalists, press advertisements, shelf-edge labeling, and in-store leaflets were made. The GM tomato puree sold side-by-side with the non-GM products, at the same price, although the GM variety was in a 10% bigger can to pass on the process cost savings of this new, riper tasting

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tomato puree. Sales exceeded those of the standard product over the ensuing three years until the GM supplier ceased production in California. The puree itself was labeled on the front because the whole product was genetically modified, not just one or more of the ingredients for which a declaration in the ingredients box on the back would have been appropriate.

Food labels can tell customers about content but label space is too limited to take on an educational role. Instead, in-store leaflets and in-house magazine articles were used to educate consumers. For example, Sainsbury's in-house magazine, which is the second biggest selling women's magazine in the UK, was used. Research conducted in August 1997 by the Institute of Grocery Distribution (IGD) confirmed that retailer magazines were a good communications tool and more likely to be read than leaflets (Institute of Grocery Distribution [IGD], 2000). Certainly, one of the UK's leading consumer lobby groups, the Consumers' Association, disliked leaflets, claiming consumers often did not read them.

### **Labeling Fronts Robust Supply Systems And Testing**

Another weakness of labeling is that it operates in a world of "absolutes" when in the world of commodity supply there can only be best practice. Hence, this is the reason for the inclusion of tolerances around legal residue limits in EU law. Under the EU labeling law for genetically modified foods, introduced in September 1998, a product that contains GM ingredients has to be labeled as such (Council Regulation (EEC) 1139/98). For non-GM products, which do not have to be labeled, the brand owner has to have taken demonstrable measures to ensure the ingredient is non-GM. However, the law allows a 1% threshold, or allowance, for some GM material to be present through accidental mixing. Existing suppliers could not have met a zero-tolerance threshold at the time that the law was enacted. The official and rather alarming term for such accidental mixing is "adventitious contamination."

There are precedents for such thresholds elsewhere in EU law. While zero contamination is the aim, up to 3% soft wheat is allowed in durum wheat pasta, and up to 3% of carry-over is allowed in refined oils from one type to another. For organic products there are no tests to prove their authenticity, so the robustness of the supply system essentially controls quality. Keeping organic products segregated from the commodity chain, with a supporting paper trail, gives consumers confidence. The organic model has inspired retailers in their efforts to implement an identity preserved (IP) system for non-GM supplies.

European Union retailers' calls in the early summer of 1997 for United States (US) commodity suppliers to arrange segregated supply routes for GM food products were ignored. A British Retail Consortium (BRC) presentation to the Food and Agriculture section of the Biotechnology Industry Organization (BIO) elicited interest from the National Corn Growers Association, but was not followed through by its' membership. Hence, deprived of any chance to offer choice to customers as more GM-crops were grown, and tired of waiting for EU law on GM labeling, British food retailers and manufacturers published their own code of voluntary food labeling in November 1997. This code pledged to give on-packet information, in a positive format. It shunned the "may contain GM ingredients" labeling approach, for which consumer research had found no support.

But during February 1999, a collapse of confidence in genetic modification on the part of the British public raised the issue of IP again. There was a need for retailers to secure non-GM supplies from a robust traceable supply source. As a result, British retailers, through the British Retail Consortium, agreed to work with manufacturers in the UK, under the auspices of the Food and Drink Federation

(FDF), to devise what is known in shorthand as the “BRC-FDF IP standard.” This standard was published in digest form in March 2000 and was available free on our organization’s website (BRC, 2000).

The motivation for this IP standard was to develop a “best practice” system in the public domain, and to encourage feedback from operators worldwide and, in particular, from organizations further up the food supply chain, in order to improve standards through experience. The British Retail Consortium has received insightful suggestions from supply chain partners within Europe, such as the European Union Starches Association, but we have been struck by the lack of input from overseas players. We have specifically sent a copy of the IP standards to a number of trade and expert bodies like the American Soy Association and the United States Food and Drug Administration (US FDA) but have had no response. However, British food companies are already asking their suppliers to operate such an IP system, and they intend to enhance the BRC-FDF IP standard through experience. The British Retail Consortium and the Food and Drink Federation have now reviewed the draft of the IP standard with a view to launching it as a formal industry standard in May 2001 (BRC, 2001).

This effort extends beyond the food industry to animal feed since there are a significant number of customers who want livestock raised on non-GM feed. While this has only been achieved for a small number of meat lines, retailers continue their efforts behind the scenes to achieve it for all their meat supplies. A recent incident has confirmed that using an IP system was the right way forward. This incident is discussed next.

### **Testing Alone Is Not Enough**

In early November 2000, Friends of the Earth (FOE) challenged the GM status of certain maize tortilla chips in Denmark and the UK. The Danes took their product off the shelves but the UK brand owners, private firms and supermarkets, did not take similar action, as they believed their non-GM supplies were robust. They instigated rigorous checks of their supply streams both in the UK with suppliers and in the US with their suppliers’ suppliers and testing of the maize flours from which the tortilla chips were made. The BRC-FDF IP system was used as the basis for independent inspection and stood up well to scrutiny, confirming the industry’s belief that such best practice standards were the way forward. Without IP systems in place, the US agricultural commodity system would not have delivered non-GM product to the robust standards demanded by EU law.

Testing is a useful adjunct to good traceability systems, but was shown to be time-consuming and divisive. The tests carried out on retained samples by a US laboratory confirmed the presence of GM material at very low levels, but subsequent varietal tests showed this was of EU approved varieties and not the non-EU varieties alleged by the Friends of the Earth tests carried out by a laboratory in Germany.

We learned a number of lessons from this experience. These lessons are as follows:

- We can expect the science to be uncertain below given levels; at the moment, the Food Standards Agency regards 0.1% as the level below which results are not reliable (FSA, 2000).
- While tests from one sample from a batch of product may give a certain result, positive or negative, the nature of low level cross-contamination is such that the next sample from the same batch may give a very different reading. Hence, testing for very low levels of cross-contamination

may not be reproducible, as sample size and sampling techniques are crucial to guarantee consistency.

- It is impossible to get authentic samples of GM varieties that have not yet been authorized in the EU; yet these samples are needed to verify the absence or presence of non-authorized strains if and when allegations are made.
- The backlog of GM varieties awaiting EU approval is a handicap to the EU food industry even though that industry is not (yet) willing to sell them owing to customer response.
- Currently, no alternatives of the right quality of maize are available in the EU to manufacture certain products. Even if brand owners wished to switch sources to European ones in order to purchase with confidence, the EU is no longer a GM-free maize growing environment; several member states grow GM maize for animal feed.
- That we need global risk assessment of food, or at the very least, a system for sharing risk assessment data among top national or regional assessors.

### **Retailers Source Globally And Need Global Risk Assessment**

Uninhibited information flows are the essence of an effective food system that respects consumer needs. Kearns (2000) of the Organization for Economic Cooperation and Development (OECD) Secretariat recently made this point at an OECD conference on the Scientific and Health Aspects of GM Food. Despite reassurances at that time from Randall (2000), of FAO-WHO's Codex Alimentarius Secretariat, that top scientists do share data, experience indicates otherwise. The EU and US have had disputes on the use of growth promoters in beef production (the so-called beef hormone case), in milk production (recombinant bovine growth hormone (rBGH) or recombinant bovine somatotropin (rBST)), and now the snails' pace of EU approvals of GM varieties hints at an incipient squaring up of authorities on this issue.

As we are seeing in Codex work, a number of countries around the world are acknowledging the need to inform consumers about the GM status of foods, even if they are not yet calling for global risk assessment. The food industry is addressing consumer needs via honest labeling based on robust global traceability systems of food ingredients. It needs governments to address consumer needs via risk assessment derived from global sharing of data. In time, this should lead to a global food information (labeling) system.

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