$\frac{1}{3}$

nature biotechnology

Caution: may be harmless if swallowed

Last month, the European Parliament voted to require labeling of all foods that contain genetically modified (GM) components in quantities greater than 0.5%. This will allow European consumers to specifically differentiate between foods produced by conventional means and those produced by genetic engineering. It doesn't matter that recombinant technology has absolutely no bearing on food safety or nutritional quality. The decision is simply a triumph for consumer choice.

GM products were first approved for human consumption in the United States in 1995. Since that time, one scientific panel after another has concluded that they are as safe to eat as non-GM foods. In the past seven years, tens of millions of US citizens have consumed GM food for breakfast, lunch, and dinner. Today, more than 60% of the foods on US grocery shelves are produced using ingredients from GM crops. In not one instance have human health problems been associated specifically with the ingestion of GM crops or their products.

No matter. European Commissioner David Byrne made it clear in his address to the European Parliament that it was consumer choice, rather than rational safety assessment, that was the guiding principle in approving the legislation: "Safety is not the issue here," he said. "...Labeling serves the purpose of informing consumers and users and allowing them to exercise choice" (see p. 756).

Of course, that choice does not come without a cost. Mandatory labeling of GM food will almost certainly lead to food price hikes as farmers, seed companies, and food manufacturers create the infrastructure to segregate GM from non-GM seed and seek to recuperate the costs of duplicating storage facilities, transportation, and production lines at factories and mills. It doesn't matter that consumers who wanted to avoid GM foods already had the means to do so by choosing "organic" food and paying for that privilege. And it doesn't matter that European consumers who had no interest in differentiating GM from non-GM will now have to pay more for the same food on their plates.

Whatever the rights and wrongs, labeling is coming and the agbiotech industry should stop apologizing for its products and start promoting them. Consumers have a right to know what they're eating. After all, other "processes" have been used to label foods: free-range eggs and organic vegetables are likely to be substantially equivalent to eggs from battery chickens and intensively cultivated vegetables, respectively. Consumers might therefore like to know "this GM food has been subjected to more thorough safety testing than conventional food." Similarly, eco-friendly shoppers might welcome labels indicating "this food has received 50% less herbicide than an equivalent non GM product."

Most compelling of all, labels could indicate the health benefits of foods in which genes have been added to provide added nutritional value or deleted to remove serious food allergens (such as in nuts, potatoes, or tomatoes). Such products are likely to be attractive at a time when in the United States alone, severe food allergies account for 30,000 emergency room visits and 200 deaths a year.

Biotech opponents hope that the European Union labels will

frighten consumers away from GM foods and render them extinct. In fact, mandatory labels might just be the opportunity that agribusiness has been looking for to promote its products in Europe.

Bogged down in CAP reform

In what it has dubbed as a "mid-term review," the European Commission (EC) is attempting to push through a major reform of the Common Agricultural Policy (CAP). The CAP, you may recall, is the farm support legislation that has enabled Europe to move beyond self-sufficiency to overproduction in agricultural produce. Subsidies to farmers under CAP, often for products that Europe already produces in vast excess, account for over half of the entire European Union (EU) budget. The main thrust of CAP reform is that subsidies will shift away from being productivity bonuses and toward being incentives for producing "quality" products in an environmentally sustainable manner.

This might not matter for biotechnology, except that there is a distinct likelihood that biotech legislation could become horribly entangled in CAP reform (as happened at the end of the 1980s when European "envirocrats" encumbered biotechnology with the draconian directive 90/220 covering GMO release). As CAP reform is being debated at the same time as GM regulations, it is highly likely that concessions made by one nation in negotiations on the former will be used to bargain concessions from another in the latter.

Until now, the introduction of GM products has in effect been blocked by a cabal of five nations—Greece, Luxembourg, France, Italy, and Denmark—whose environment ministers decided they didn't like the existing rules for GM product approval. Of those nations, France and Greece also oppose the CAP reform, primarily because their farmers reap disproportionate benefits from the current subsidy system. On the other hand, Spain and Portugal, agricultural nations that also oppose the current proposals for CAP reform, have not thus far opposed the progress of biotech crops. For the relaxation of rules on biotechnology products (see p. 758) to come into force, a "qualified majority" of environment ministers (voting weighted by the size of a country) needs to approve it. A tactical switch of allegiance by Spain or Portugal to a more anti-biotech stance could thus seriously threaten this process.

There is an alternative. Biotechnology could become synergistically integrated into the thinking that surrounds the new CAP. The reality, of course, is that GM crops contribute directly to the environmental sustainability apparently now desired by EU politicians. The EC's midterm review of the CAP ought to be a golden opportunity for agbiotech companies to make that point forcefully. Over the next few months, industry groups have the chance to press forward with what is already an exceptionally strong case in a political atmosphere that should be encouraging. If they fail to do so, then they will have failed not only the companies they represent, but all those Europeans who want to usher in an era of more sustainable agricultural practice.