

Questions linger over European GM food regulations

To the editor:

On July 2nd last year, the European Parliament (Brussels) approved new regulations regarding the traceability and labeling of genetically modified organisms (GMOs), and the traceability of foodstuffs and animal feeds derived from them (*Nat. Biotechnol.* 21, 835–836, 2003). These regulations, which reinforce EC directive 2001/18/EC, were awaited by the European public with some expectation as their application in conjunction with rules governing genetically modified (GM) foodstuffs and animal feeds promises to smooth the way for the regulated commercialization of GM foods and feeds. The requirement established in the new legislation for detailed environmental risk evaluation of GM foods, as well as for their labeling and traceability to the marketplace, should avoid the polemics regarding safety and labeling, which have been evident within the European Union (EU). In addition, the possibility that the Council of Ministers can accept or reject the authorization of a GMO by a qualified majority ought to prevent situations such as the *de facto* GMO moratorium currently being exercised by certain EU member states. For these reasons the approval of the new regulations is good news for both European consumers and the European agro-food industry.

However, some perplexing incongruences remain. As in previous instances, much of what is laid down in the new regulations is based on the premise that traces of transgenic protein or genetic material, whether detectable or not, are present in those foodstuffs and animal feeds derived from GMOs or which contain additives of GMO origin. All such foodstuffs and feeds should thus be duly labeled to preserve the European

consumer's right to choose. All that is, except some, if we are to go by the information presented on the EU web page regarding the new rules¹. Annex 5 of this document notes that it is obligatory to label a food 'GM' if it contains glucose syrup produced from transgenic maize starch. Curiously, however, the use of a recombinant enzyme in the production of a food does not constitute a case for labeling the resulting food 'GM.' What then is the nature of the 'transgenic essence' possessed by the glucose syrup and what is the basis for supposing its complete absence in the case of the recombinant enzyme? No scientific data exist to suggest that commercialized enzymes obtained from GMOs present risks to either human health or to the environment but neither do such data exist for food additives obtained



from transgenic soya or maize. Thus, by the same token that the consumer should be informed if a biscuit contains transgenic maize flour, it can reasonably be expected that he/she should also be informed that a recombinant amylase was used in its production. Were this the case, however, two important consequences would follow: first, it would be necessary to label hundreds more foodstuffs 'GM,' thus magnifying the labeling problem (or, ironically perhaps, diluting it); and second, the multinational enzyme producers, the majority of which just happen to be European companies, would have to decide whether to produce enzymes from GMOs or not.

Another oddity of the new regulations concerns the GM content threshold beyond which labeling of a food or feed as 'GM' is obligatory. In an exclusively political decision, the new regulations require the 'GM' label when, in the case of material from EU-authorized GMOs, GM content is

greater than 0.9% (the previous threshold was 1%!), and 0.5% for a product that has received a favorable scientific evaluation but not yet been authorized.

Such anomalies are illogical and counterproductive and should be resolved. The case for GM foods would be best served by fully informing consumers of the data obtained from the health and environmental evaluations, pointing out that no other foods have ever been so rigorously evaluated. With regard to labeling, all foods derived from GMOs or containing GMO ingredients should clearly be indicated as such, thus maintaining the consumer's right to choose. However, the European health authorities should also start to actively tackle those organizations that seek to generate public alarm and fear of GM foods while failing to present a single piece of scientific data to back up their claims. These groups are in large measure responsible for the wholly artificial sense of risk that has been attached to GM foods by virtue of campaigns that would never have been so passively tolerated by the European authorities if instead of 'transgenic foods' the subject were 'transgenic pharmaceuticals.'

Despite the efforts of the European Commission last year to facilitate the commercialization of GM foods, we are thus still far from the ideal situation of transparency of information, the absence of unfounded propaganda and clear and straightforward labeling of GM foods.

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1. http://europa.eu.int/comm/dgs/health_consumer/library/press/press298_en.pdf