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Food Labels and the Ethics of Consent

Should the information on food labels always be based on science? The answer to this question is not as simple as one might think. Current U.S. Food and Drug Administration (FDA) policy on food labels evolved under a mandate to impose standards of consistency, at least, on the welter of nutritional and health claims implied by food industry use of terms such as "light," "reduced calorie," and "low fat." The FDA established industry standards for many of these terms, and adopted a standard of "science-based" labeling, meaning that all claims must be supported by documented scientific evidence of benefit or risk.

Difficulty arose when the FDA began to formulate policy for foods made using genetic engineering—foods such as recombinant rennet, milk produced using recombinant bovine somatotropin (rBST), and Calgene's Flav'r Sav'r tomatoes. An overwhelming majority of adults polled indicated a desire to be informed about whether biotechnology had been used in producing their food (Hoban and Kendall; Hallman and Metcalfe). The FDA's quandary arose because there is no demonstrated scientific benefit to be derived either from eating or from avoiding such foods. There is thus no basis for requiring biotech foods to be labeled, nor is there even a basis for permitting "non-biotech" foods to proclaim their status on a food label (at least insofar as this claim implies a health benefit).

There are, however, many reasons why individuals might deem it important to know whether biotechnology has been used. Food process and origin information is generally recognized as important by a significant percentage of consumers. There are religious and aesthetic reasons. Finally, there are those who do not trust scientific assessments of safety. While none of these considerations seems appropriate for a public policy judgment against the use of biotechnology, they are examples of the individualistic values that have been traditionally protected by policies that require informed consent.

In the case of labeling, science has become unintentionally aligned with a policy approach that un-

dercuts the exercise of individual consent. Our belief that the legitimacy of government rests on consent of the governed places a heavy burden of proof on a policy that not only fails to require the identification of biotech foods, but which may make it difficult, if not impossible, for producers of traditional, non-biotech foods to so identify their products on labels. Science has here inadvertently come into conflict with one of the prevailing notions of democracy, and has aligned itself unintentionally with a traditional philosophical competitor.

There are two ethical issues here. One is whether scientists' commitment to truth implies that they should oppose labeling of biotech (or non-biotech) foods. The other is how consent should figure into the labeling debate. The recent controversy over rBST and milk provides an opportunity to consider each of these issues in turn.

Scientific truth and food labels

While many scientists and public officials have argued that food labeling policy must be based on science, it is not clear that they have made this argument in full cognizance of its implications. There is a strong and a weak interpretation of the argument for science-based labels. The strong view holds that only claims of a scientifically demonstrated benefit or risk should appear in product labels. The weak view holds merely that labels should be consistent with established scientific findings. Claims on labels must be true and should not lead a reasonable person to make false inferences, but science is relevant to labels only when it controverts a specific claim, and not as the gatekeeper for every claim.

For those who hold the strong view, what is important about labels is that health benefits may not be forthcoming when information is faulty. What is crucial for the weak view is that misleading claims are coercive; they weaken the individual's control over life choices. Misleading claims are wrong, whether benefits are promised or not (and consent must be protected, even when it means that

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some individuals will make a less than optimal choice).

Science bears heavily on our knowing the truth or falsity of some claims, and lightly on others. It is clear, for example, that a label explicitly claiming health or nutritional benefit for either the use or non-use of rBST would be misleading, though it is not uncommon for both claims to be made. Boosters of rBST have stated that rBST milk is "healthier" in virtue of the fact that producers who use it must be "good managers." Critics of rBST have stated any number of vague health related concerns, including concern about antibiotic residues. There is, however, no evidence that either of these claims are true, and considerable scientific evidence to doubt the concerns of critics. Freedom of speech protects the right of both boosters and critics to make these

claims, but the prohibition of misleading claims curtails the use of either claim on a food label. Science bears on the misleading character of both claims because scientific research can establish (with some reasonable probability) whether or not these claims are true.

Other claims are less amenable to scientific testing. Foods are labeled or advertised as "fresh," "homemade," "welfare-friendly," "raised on family farms," "imported," "Kosher," "genuine," and (my favorite) "made in Texas, NOT New York City." While scientific testing might be applied to assessing some elements of claims such as "welfare-friendly" or "fresh," others such as "Kosher" or "made in Texas" refer to conditions that do not require any special scientific expertise for assessment.

Labels that make these claims are not based on science. Furthermore, the strong view of science-based labels would prohibit most, if not all, of the above claims. There are no scientifically demonstrable risks or benefits for Kosher foods, nor for being made in Texas, rather than New York City. Yet both of these claims are of some importance for a minority of food consumers. Prohibiting the dissemination of such information is inconsistent both with consent criteria and with common practice.

Any of these claims might be false, of course, but science will be of little help in establishing truth or falsity of claims about the religious status or regional origins of foods. The legal mechanisms for enforcing the prohibition of misleading claims need not involve scientific testing in any significant way. Yet there seems to be no call for eliminating

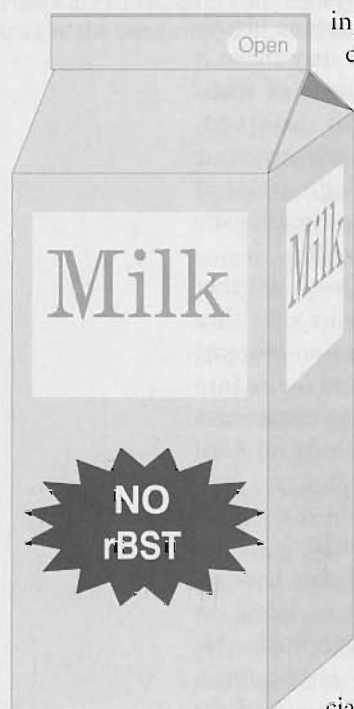
either the use of such claims on food labels, or for attacking the religious, ethnic, or aesthetic reasons why people want to retain control of food choices in the corresponding areas. As such, we can conclude that those who call for science-based labels should be calling for the use of science in ascertaining the truth or falsity of misleading claims, and even then only when scientific methods are amenable to the task.

Labels and consent

The strong view clearly entails no labeling with respect to rBST; there are no benefits or risks (relative to conventional milk) on which to report. As already argued, however, this view clearly does not govern the full range of current labeling practices, and individual liberties of conscience protect the right of individuals to control their lives where religious or other important philosophical considerations are at stake. Although we need not argue that foods produced using genetic engineering are inconsistent with the philosophical principles that a majority of Americans (including the author) would endorse, we should accept the fact that reasonable people disagree on matters of philosophy. Consent criteria and minority rights demand that public policy should, if practicable, permit this minority to avoid the consumption of foods that, to them, are questionable. Do consent criteria mandate the labeling of biotech foods?

Requiring labels on foods that are products of genetic engineering is neither practical nor desirable. First, given the climate of labeling debates over nutrition and health hazards, any regulation that requires a label would be reasonably interpreted as stigmatizing the labeled product. While most people want to know whether biotechnology has been used in producing a food, this does not imply that they wish to be *warned*. To stigmatize biotech foods is itself a misleading practice that serves the interests of neither producers nor consumers. Second, government should not promulgate regulatory requirements that are unenforceable. Given the present state of the science, it would be impractical for regulators, let alone food processors purchasing raw commodities, to determine whether a food or food component is the product of genetic engineering or not. Careful monitoring of the entire process of production would be needed, and requiring such monitoring for the entire food system is clearly cost prohibitive.

The alternative to requiring labels on foods that are products of genetic engineering is to permit labels on foods that are not products of genetic engineering. If so-called negative labeled or "no-biotech" foods were available in sufficient supply, the minority interests of those who wish to avoid them would be protected. Such a label would be



more like labels that say "Kosher," or "made in Texas," than like labels that give health warnings or nutrition facts. Just as ethnic, aesthetic, or religious labels currently protect minority interests, the principle of consent for genetically engineered foods and food products would be preserved.

How should "no-biotech" labels be used? This is not as simple as printing stickers and slapping them on products indiscriminately. The burden of proof would be quite different from that of required labels, but producers or retailers who apply such labels would have to be able to demonstrate reasonable assurances that the "no-biotech," claim is accurate. Such assurances would probably resemble programs of organic certification that function on a statewide basis, often under the supervision of producer organizations. Such certification would increase the cost of "no-biotech" foods, to be sure, but the burden of higher costs would fall on those who deem it important to have this option, rather than those who do not want it. Neither would the "no-biotech" label stigmatize unlabeled foods, since the cost premium of certifying the label would ensure that most foods would remain unlabeled entirely, as they currently are.

Labels and rBST

Would a "No rBST" label be misleading? First, a "No BST" label, as has appeared in some groceries, certainly *is* misleading. All milk contains BST. The addition of the "r" is vexing; it is not equivalent to the "no-biotech" labeling defended above. Clearly the debate over rBST has developed in such a way that the product is already stigmatized as a health risk for many people, but the ethical importance of this fact is double edged. On the one hand, scientific evidence is overwhelming that there is no health risk, hence any label which appears to reinforce the stigmata is misleading and therefore ethically wrong. On the other hand, some people have clearly adopted a deep mistrust of science, especially when it is employed in the service of government decision making. For these people, the fact that science has come out so strongly on one side of the risk issue is part of the reason why rBST is stigmatized and regarded as risky. The role of science, both in producing the new technology and in evaluating its safety, is the source of stigmatization for them. Their philosophical cynicism is an intense value, and just the sort of deeply held philosophical value that consent criteria are designed to protect.

There is no good answer for the rBST case. The

lesson to learn is that similar situations should be avoided in the future. The long-term interests of both the public and the biotechnology industry depend upon mechanisms that circumvent the stigmatization of the new food products that will become increasingly available. The biotechnology industry should look at the "no-biotech" label as an insurance policy, one that will allow both religiously zealous and generally disaffected people a principle of exit from the new food system based on genetic engineering. Accommodating the concerns of this minority both serves the principle of consent, and removes the basis for the kind of conflict that has stigmatized rBST. Scientists and industry leaders should actively support such labels, and should even spend money to help them become established. "No-biotech," labels will allow those who don't want our new foods to reject them, and they will sever the link between biotechnology and government interference in personal choice. The biotechnology industry is inviting a battle it does not need to fight. Discretion is the better part of valor in this instance, and it is also the best way to earn the public's trust. ■

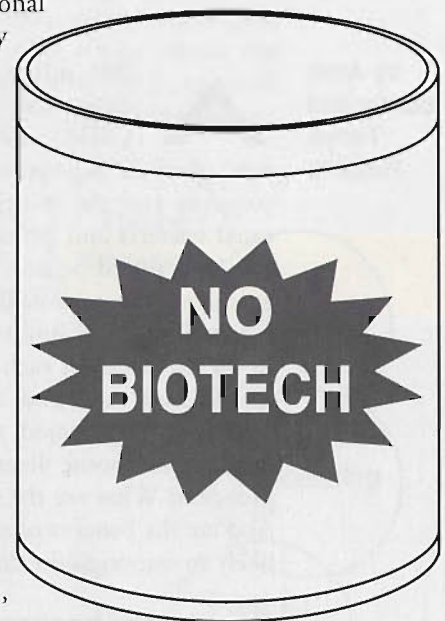
■ For more information

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