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In focus

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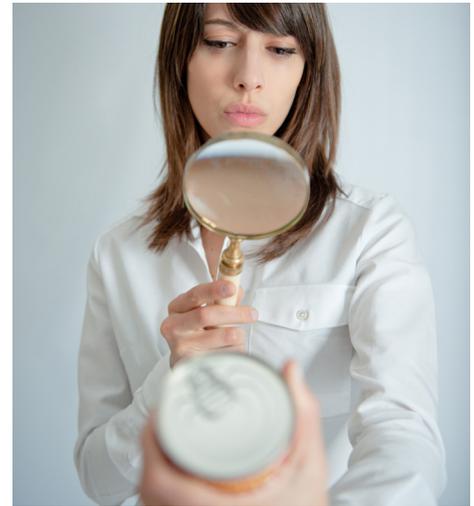
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GMO Products and Labeling



This week's Biotech in Focus came from a paper written by Judy Cacal, a University of Hawaii at Manoa student who recently enrolled in TPSS 416 (Introduction to Social, Ethical, and Political Issues Associated with Biotechnology). Designed for non-majors, this class is offered by the Department of Tropical Plant and Soil Sciences in UH Manoa's College of Tropical Agriculture and Human Resources.

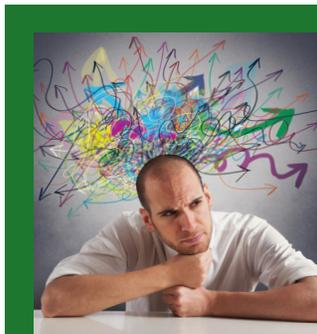
The U.S. Food and Drug Administration requires food manufacturers to highlight information on a label relating to a food's nutritional value, ingredients, and country of origin. All food labels must be truthful and not misleading. Why are food labels in the United States not required to report genetically modified (GM) ingredients?



Food labels must be both science-based and easily understood by the general public. Supporters assert that identifying GM products with mandatory labels can help consumers make purchasing choices that are consistent with their personal preferences and their religious and ethical beliefs. The view is widely shared that consumers have the right to know what they are buying; however, there is little thought given to processes by means of which foods are produced, in terms of labeling. At present, U.S. consumers can avoid GM foods by purchasing certified organic products.



GM labeling enjoys wide public support. In 2013, more than 9 in 10 consumers surveyed by the New York Times favored adding labels to foods that contain GM ingredients, or ingredients that originate from GM crops, and about three-quarters of participants in a Rutgers University survey felt that such labels should be mandatory.



However, given that the much of the general public has a limited understanding of food biology and biotechnology, labeling has the potential to confuse rather than inform some consumers. A 2015 survey by agricultural economists at Oklahoma State University found that 80% of respondents supported mandatory labeling for food that contains DNA. Since DNA is present in all living organisms, it is a part of all unprocessed and processed foods. If the buying public fears DNA, an essential constituent of life, consumer education in food science has been inadequate.



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Drawing Conclusions

Detractors note that labeling GM ingredients can mislead consumers and has the potential to diminish sales by singling out certain products. This premise is supported by the lack of evidence that genetically engineered crops differ from conventional crops in terms of safety or nutrition. Labeling products that have GM ingredients could act as a red flag to many consumers, because the presence of such labels will suggest that GM foods are notably different, and therefore may not be as safe as non-GM products – at least for poorly informed consumers.

Unlike the United States, Europe has implemented a mandatory GM product labeling system, even though GM and non-GM food products are not considered different in terms of quality or safety. The European Commission in 2010 stated that “The main conclusion to be drawn from the efforts of more than 130 research projects, covering a period of more than 25 years of research, and involving more than 500 independent research groups, is that biotechnology, and in particular GMOs, are not per se more risky than e.g. conventional plant breeding technologies.”



Allowing Labeling



In the US, producers, food handlers and processors are allowed to label their products as GMO-Free. The FDA allows such labeling as long as it is true and the person who labeled the product can prove the label is truthful. Organizations such as the Non-GMO Project, will verify your product to not contain any product of GMO crops after an investigation and payment of their fee.

Local Mandates

Since the United States has not implemented mandatory GM product labeling, some states have pursued local labeling mandates. Vermont's GM labeling law, passed in 2014, is currently being challenged before the Second Circuit of the U.S. Court of Appeals; Hawaii's Attorney General has filed a brief in support of the Vermont statute. Connecticut and Maine have passed GM labeling laws that will go into effect if neighboring states enact similar laws.



Establishing a Standard



The Hawaii legislature has considered labeling laws, but has not passed any. For a small, geographically isolated state that relies on imported food, a labeling law would involve some risk that manufacturers might prefer to not ship products to Hawaii rather than invest in GM labeling. Earlier this year, the U.S. House of Representatives passed a bill that would establish a federal standard for voluntary labeling of GM ingredients. Questions of whether and how GM foods might be labeled in the United States remain far from being resolved.