As state GMO labeling laws are proposed, critics wonder about logistics and costs

With a mandatory GMO label law recently passed in Vermont, and campaigns active in Oregon and Colorado, legal experts, scientists and the food and agricultural industries are looking at how these state level laws would play out in terms of logistics, costs and benefits to consumers.

About the Colorado initiative, University of Colorado biology professor Andrew Staehelin recently asked:

A recent analysis of GMO labeling costs by two Cornell University scientists pegged the costs at $500 per family of 4 per year. Three similar studies carried out in California and Washington State have calculated price tags of $400-800. Why do we need to have mandatory GMO food labeling when voluntarily labeled non-GMO products are readily available?

In Connecticut, Beau Kjerulf Greer, professor of nutrition at Sacred Heart University in Fairfield pointed out:

A “right to know” argument is a common tenet of pro-GMO labeling arguments, but it is often in the interest of public health that people are protected from their own acquired misinformation. Fat grams are not listed on baby foods because parents may restrict their infant’s fat intake for perceived health effects, not understanding the necessity of high amounts of fat in the infant diet. And if the rationale for labeling is transparency for transparency’s sake, why not direct our limited resources to labeling arsenic levels in rice, mercury levels in fish or other contamination that actually has documented potential for harm? And do we really want to increase food costs for the poor via labeling because the upper middle class currently enjoys playing the role of armchair nutritionist?

Earlier this year in a devastating blog on Biofortified.org, genomics scientist Mary Mangan asked whether a mandatory label proposed in Massachusetts would actually give consumers useful information:

In the case of the single ingredient in tofu that might be clear what is “produced with genetic engineering”. But let’s examine another label. Let’s pick Cheddar Whole Grain Goldfish® as an example.

Current ingredient label:

“MADE WITH SMILES AND WHOLE WHEAT FLOUR, UNBLEACHED ENRICHED WHEAT FLOUR (FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE [VITAMIN B1], RIBOFLAVIN [VITAMIN B2], FOLIC ACID), CHEDDAR CHEESE (CULTURED MILK, SALT, ENZYMES, ANNATTO), VEGETABLE OILS (CANOLA, SUNFLOWER AND/OR SOYBEAN), CONTAINS 2 PERCENT OR LESS OF: SALT, AUTOLYZED YEAST, YEAST, LEAVENING (BAKING SODA,
As I understand it, this package would probably now likely carry the “Produced with Genetic Engineering” label, due to soybean oils or possibly the vitamins. However, because the specific item will not be designated, this may lead consumers to mistakenly conclude that the wheat is GMO. There is no commercial GMO wheat. I do not believe consumers would benefit from a misleading label. Further, since oils are refined and have neither DNA nor protein that differs from conventional oils, the production by GMO methods offers no useful ingredient information either.

It is also possible that the food producer would switch to only sunflower oil to avoid this label. The irony of this, however, is that most sunflower oil comes from herbicide-tolerant sunflowers which are cultivated with an herbicide that has created more “superweeds” than the one that Roundup Ready soybeans employ. (This is what happened when Chipotle labeled their products and moved away from soybean oil.) Or food producers may opt for herbicide-tolerant canola which is not GMO. But since so many people are already convinced that all canola is GMO, they may then challenge this product for presumed mislabeling. This could hurt grocers and bodegas, unfortunately, with nuisance legal action, if I’m reading the legislation’s implementation process and penalties properly.

At io9, Mark Strauss points out a number of problems relating to conflicts between the Vermont law and competing private labeling programs. Strauss explains that the law would temporarily exempt dairy products despite the fact that most dairy cows are fed GE crops and 90% of cheese uses GE rennet to start fermentation. However, this may keep Vermont wrong footed with anti-GMO activists. GMO Inside has a campaign underway to force Starbucks to source only from cows that have not been fed GE crops. Whole Foods already dropped Chobani yogurt due to a similar campaign and it plans on including GE rennet cheese in its labeling program, meaning the Vermont labeling law would be out of sync with the labeling program of a grocer of major consequence and the largest specialty cheese purveyor in the country.

What is especially worrying is the Rube Goldberg collection of conflicting laws being written from state to state and the question as to how state governments would take on the task of certification and enforcement. The certified organic label and the Non-GMO label already provide the relevant information for those wishing to avoid GMOs and the organizations behind them already have the necessary infrastructure to carry out their mission. The state of Oregon does not currently have that infrastructure. It’s hard to see any reason to further stretch an already overextended government. (See more of my thoughts on this from a previous post here.) Is Oregon or Vermont going to hire a staff of inspectors to police the national food chain?

There are a few key differences between the law passed in Vermont and the one facing voters in Oregon that would present difficulties for national food suppliers attempting compliance in the two states. The Vermont bill would exempt processed foods that “includes one or more processing aids or enzymes produced with genetic engineering” the Oregon initiative does not make that exemption, so that cheese makers would be confronted with the same conflicting rules between the two states that they are between...
the Vermont law and the private labeling programs. The Vermont law also would make the standard exemption for foods that contain less than 0.9% genetically engineered material by weight. This is not written into the Oregon initiative and in fact the language makes the general statement: “all raw food and processed food that is entirely or partially produced genetic engineering must be labeled”. It’s possible that a product that would not require a label in Vermont, would in Oregon if the general language is interpreted to mean a zero tolerance policy on trivial segregation issues.

In high school American history we learned about the Articles of Confederation. A patchwork system of state laws governing commerce didn’t turn out very well the first time we tried it. Is there any reason to believe that approach is going to work any better today?

Personally, mandatory GMO labels make no sense to me, but a hodgepodge system of state laws and private labeling schemes makes even less sense.

Marc Brazeau is a writer and editor for the Genetic Literacy Project. Follow Marc on Twitter @realfoodorg