Consumers Union Critique of
"Costs of Labeling Genetically Modified Food Products in N.Y. State"
by Professor William Lesser

Overview

"Costs of Labeling Genetically Modified Food Products in N.Y. State," by Cornell University Professor William Lesser, released May, 2014 and funded by companies opposed to labeling, maintains that the costs of A3525, a New York Assembly bill that would require labeling of genetically engineered foods or food products made with genetic engineering, could be quite large. The study found that the annual cost of A3525 for a family of four could range from a low of $44 to a high of $1,552. The study gave as its "best estimate" that the bill would cause food costs in New York State to go to go up by $500 a year for a family of four.

Consumers Union found that this industry-funded study is based on many faulty assumptions. Consumers Union believes that A3525 will not lead to any appreciable increase in the price of food bought by consumers.

Consumers Union believes that predictions of greatly increased food costs to New Yorkers in the Lesser study result from various unreasonable assumptions made for each of the scenarios that the study examines. As detailed below, we explain why we think the various assumptions lead to a grossly over-inflated estimate of the cost impact.

It should be pointed out that this study was funded by, and is the intellectual property of, the Council for Biotechnology Information, whose members consist of the major global biotechnology companies—Monsanto, DuPont, Syngenta, BASF, Bayer, and Dow—all of whom oppose A3525.

The Lesser study provides a huge range of estimates as to cost to a family of four. This is mainly due to the fact that the study looks mainly at three different scenarios of what would happen as a result of passing A3525. The three scenarios are: i) simply labeling food as GE, ii) reformulate the covered food items to replace all GE ingredients with non-GE ingredients, and ii) reformulate the covered food items to replace all GE ingredients with organic ingredients. The study then looks at couple of more scenarios that assume a combination of the first three scenarios.

Looking at each of the scenarios, we have found that unreasonable assumptions are made to come up with the cost figures for each scenario.

Problematic Assumptions in Lesser Study

Assumes unreasonably large percentage of food items are covered by law

First, before discussing each of the three scenarios, the study has to estimate what percentage of all the food eaten by people is actually covered by the law. The law

exempts a range of food—including animals fed GE grains or injected with GE drugs and vaccines, most restaurant and take-out foods, organic food, and alcoholic beverages. To estimate what percentage of the money spent on foods would be spent on foods that would be required to be labeled under law (A3525), they study looked at two sources—data from the federal Bureau of Labor Statistics (BLS) and from the Food Marketing Institute. Based on the BLS data from the Northeast, the study estimates that "just over one fourth [e.g. 25%] of all food and alcoholic beverages consumed in NY State will need to be labeled under the proposed law" (pg. 10). Based on the FMI data, the study estimates "the share of food subject to the proposed labeling law is 40 percent" (pg. 11). Lesser chooses to use the FMI data rather than the BLS data, thus estimating that the law would require labeling of 40% of foods rather than 25%. This is a very significant difference. Use of the FMI data means that the cost estimates will be 60% higher than using the BLS data. Thus the overall estimated annual cost of $500 to a family of four would have been $312.50, had the study relied on BLS data.

Scenario 1. Label all foods that contain GE material

Assumes all foods would be produced, warehoused and sold in twin labeled and unlabeled versions, incurring high warehousing and extremely high shelf space charges in supermarkets

The first scenario covers the cost implications of simply labeling processed foods and raw agricultural commodities if they have a GE content that exceeds 0.9 percent by weight. This scenario is the cheapest, as the estimated yearly increase in cost for a family of four ranges from a low of $64 to a high of $68, with an average of $66. This scenario includes the costs of physically labeling the product, the costs of warehousing additional food items and the costs of supermarkets for stocking and tracking the "new" products. Although $66 a year doesn't sound like a lot of money, this figure is still grossly overinflated, as a result of the assumptions used to derive each of the cost components. Of that $66, warehousing costs comprise $8.66, store shelf space fees costs $56.10, and actual labeling costs just $1.30.

First, the study estimates that between 50 and 58 percent of all the food items in a store would potentially need to be labeled under A3525. In 2012, the average supermarket contained about 42,686 different food items (called stock keeping units or SKUs). Thus, the study estimates that the law roughly would require labeling of 21,000 to 25,000 SKUs.

Incredibly, the study then assumes that each of the 21,000 to 25,000 SKUs would be offered and sold in both labeled and unlabeled versions: "The dollar estimate though assumes that all the 'new' food items created by the proposed labeling law will indeed be made available in both unlabeled and unlabeled forms" (pg. 11). We think this is a highly unrealistic assumption. We think it extremely unlikely that Kelloggs corn flakes would be sold with two versions side by side, some boxes labeled "produced with genetic engineering" and other boxes with no labels. We believe manufacturers will likely produce either a labeled or unlabeled version of a product, not both. For example, when Cheerios recently announced its main brand would go GE-free, they made the change for

the entire product line simultaneously. However, even if a manufacturer decided to produce both, it is extremely unlikely that a supermarket would choose to stock both versions at once. So it is highly unrealistic to assume that there would be an increase of 21,000 to 25,000 new products in every supermarket.

The Lesser study nevertheless uses the unrealistic figure of some 21,000 to 25,000 new products to estimate the costs for warehousing and for shelf space at the supermarket. In terms of warehousing, the study assumes that "the gross number of additional pallets spaces required *per warehouse* for the to-be-labeled products is equivalent to the number of new SKUs, 21,0000 – 25,000" (pg. 11). Using this assumption, the increase in warehousing costs translates into an increase in annual food cost for a family of four of $7.95 to $9.36, with an average of $8.66. If there were no new SKUs, e.g. if companies just decided to offer either a labeled or unlabeled version (but not both), then there would be no extra warehousing costs and thus no related increase in annual food cost for a family of four.

The Lesser study also computes a $56.10 food cost increase for a family of four related to something called "slotting fees" at supermarkets, essentially a fee supermarkets charge for giving shelf space to new products. Supermarkets use a system known as a "slotting allowance" of charging manufacturers to allocate shelf space to new items. As the study notes, "The 'introduction' of potentially 21,000 – 25,000 newly labeled items under the proposed law could trigger similar costs for stores" (pg. 11). The study goes on to assume that slotting-like charges wouldn't be applied to all the "new" SKUs, but would apply to about 25% of them (although it doesn't explain why). The study then estimates that the one-time cost for these new slotting-like charges would be roughly $75 million per food store chain. Given that there are some 28 food store chains operating in New York, this leads to a total onetime cost of $2.1 billion. The study assumes this up-front cost of $2.1 billion will be spread out over ten years (with an average annual interest rate of five percent), for annualized cost of $272 million, which translates into an increase of $56.10 in food costs for a family of four for one year. If the study didn't spread out the up-front cost over ten years, the first year store cost would then translate into an increase of $561 rather than $56.10. But even the figure of $56.10 is based on slotting-like charges for 25 percent of the new SKUs. Again, we feel this is a gross overestimate as we don't think there will be a significant increase in new food items, aka SKUs. It should be noted, however, that at the end of ten years, after the $2.1 billion is paid off, the store costs should then drop to zero.

For labeling costs, the study assumes that labeling costs include the initial design cost plus an annual cost for labeling the "new" product. The design cost is considered to be minimal. To estimate what the annual cost might be, the study refers to a US Department of Agriculture (USDA) study on the annual cost of labeling meat products by country of origin. The USDA study assumed that the country of origin labeling would involve some 121,350 unique labels (analogous to SKUs), so the present study just extrapolates from the USDA figures, noting "The estimated food SKUs which must be re-labeled (21,000 – 25,000) then represent respectively 17 and 21 percent of the annual labeling and related costs. That computes to a range of $2.9 – 9.9 million, with a midpoint value of $6.3

million" (pg. 13). For a family of four, this would represent an increase in annual food costs of from 59 cents to $2.06 with a mean of $1.30.

While these figures are small, we also believe they represent overestimates. First, country-of-origin labeling (COOL) of meats is not appropriate to use as an example as the COOL law require stores to keep track of where animals used in their meat products have been born, raised and slaughtered. For A3525, the bill only requires labeling of foods that contain or are derived from GE materials. Those labeling costs should be simply for the ink to add the phrase "produced with genetic engineering," and so should be quite small. Also, since the law would not be implemented until two years after passage, this would give companies plenty of time to print new labels for food products. Since food companies routinely change wording on the food packaging once or more times per year, the cost of such changes are miniscule.

The bottom line is that Scenario 1 comes the closest to actually trying to look at the real cost impact of A3525, but still comes up with cost figures that are wildly exaggerated due to the outlandish assumption that all food products that would need to be labeled under this law would be produced in both labeled (e.g. with GE ingredients) and unlabeled (e.g. without GE ingredients) versions. We believe that the actual cost would be closer to zero.

Scenario 2. Substitute non-GE ingredients

Assumes all genetically engineered ingredients will be eliminated, and non-engineered ingredients substituted, although this is not required by AB3525.

The second scenario assumes that in every case, food processors will substitute non-GE ingredients for GE ingredients, so that no labeling is required. This results in a projected increase in food costs for a family of four from between $44 and $412, with an average of $228. The costs increases result from higher ingredient costs for non-GE ingredients and also keeping inputs separate (e.g. identity preservation costs).

This scenario makes assumptions about both the potential increased price for GE soy and GE corn, compared to their non-GE counterparts, as well as how many food items will need the non-GE ingredients. However, this scenario does not provide any useful information about the impact of A3525, because the law does not mandate any substitution of non-GE ingredients for GE ingredients. A3525 simply requires labeling of any food that contains GE materials (the outcome covered in Scenario 1). Furthermore, if companies choose to reformulate products so that they do not contain GE materials, the cost of the food item doesn't necessarily need to change. For example, original Cheerios is now GE-free, but the price of Cheerios didn't increase after the reformulation. Likewise, Post Grape Nuts also went GE-free in 2014, with a Non GMO Project Seal. Again, there was no measureable increase in the price of Post Grape Nuts.

But even if the companies do decide to reformulate products so that they don't contain GE materials and then raise the price of those products, that is not a cost that should be attributed to A3525. Companies always have the option of finding more expensive ways

to implement the law than the law requires. Car companies had the option of installing gold-plated seat belts when seat belts were required. However it is not useful or appropriate to attribute the cost of high-cost implementation scenarios to a law, if the law does not require them. Companies can always just add labels, with a very small price impact. If they choose to offer more expensive products without labels, and consumers choose to buy them, that is an example of markets in action.

Scenario 3. Substitute organic ingredients

Assumes all genetically engineered ingredients will be eliminated, and organic ingredients will be used instead, although this is not required by AB3525.

The third scenario involves substituting any GE ingredient in a food product covered by the law with an organic counterpart. This scenario is the most expensive, as the estimated yearly increase in food costs for a family of four ranges from between $360 and $1,552, with an average of $956. The costs include much higher costs for organic ingredients and also keeping inputs separate (e.g. identity preservation costs).

Like Scenario 2, this scenario also tells us nothing about food costs as a result of enacting A3525 because the law does not mandate any substitution of organic ingredients for GE ingredients. It simply requires labeling of any food that contains GE materials. The assumption of a complete substitution of organic ingredients for the GE ingredients is so extreme and unlikely as to not really be credible.

Combinations of Scenarios 1, 2 and 3.

Assumptions behind best estimate are not explained.

The study also includes scenarios that are combinations of scenarios 1, 2 and 3, which also include the regulatory cost to the State. One model looks at various surveys that show that roughly 50% of people say they would avoid buying GE food products. Given that roughly 10% of the food market is organic, this model looks at the cost of a diet consisting of 50% labeled (e.g. GE) food, 40% with non-GE ingredients and 10% organic and predicts that the increased food cost for a family of four will range from low of $88 to high of $360 with an average of $224.

Finally, the report also notes that considering average values, the best estimate for annual increase in food costs for a family of four is $500. As the report states in the Summary: "CONSIDERING MIDPOINTS: Annual Family 4: $500 annually best estimate with full labeled/unlabeled product range" (pg. 3). Unfortunately, we cannot see how the report comes up with this figure of $500 as the only place this number appears is on the Summary page. There is no discussion of this $500 per family of four value or how the cost was even estimated. Consequently, we cannot discuss this model and wonder why it is even present in this paper.

Conclusion

In summary, the industry-funded Lesser study dramatically overestimates the cost of implementing A3525 by utilizing unreasonable and outlandish assumptions--such as that the law would result in an average of 21,000 to 25,000 new food products (labeled products and their unlabeled twins) appearing in the average supermarket, or that the companies would immediately switch to all non-GE or all organic ingredients. These scenarios yield estimates of cost increases of from $44 to $1552 annually for a family of four.

Consumers Union maintains that the two highest cost scenarios, 2 and 3, are irrelevant since switching to non-GE or organic ingredients are not required by A3525. The law only requires labeling.

Scenario 1, examining labeling, is relevant. However Consumers Union maintains that the major assumption underlying it, of 21,000 to 25,000 new labeled food products that would exist side by side with unlabeled products, thus engendering vast increases in warehousing and shelving fees, is not realistic.

Even the assumption underlying a cost projection of $1.30 per year for a family of four for actual design and printing of labels seems exaggerated to Consumers Union since it is based on costs of much more complex requirements for country of origin labeling for meat and poultry.

The reasoning behind the study's "best estimate" of $500 is not explained at all, but appears based on an amalgam of all three scenarios, two of which, as noted, are not relevant to A3525.