

Genetically modified organisms are in the news these days for two big reasons. First, California voters will decide in November whether to require the labeling of foods that have been [genetically engineered](#). And second, a new [study](#) — subject to significant criticism even from some who advocate labeling — found that rats fed with genetically modified corn developed tumors at a higher rate than rats fed with non-GMO corn. The study has [led](#) Russia to ban the import of genetically modified food pending further study.

First, the study. The findings are obviously alarming. But the study's methodologies have been widely criticized, including by Slate (here's the [latest](#), casting doubt not only on the methodology but on the study's author) and by [Marion Nestle](#), one of the country's [leading experts](#) on food safety. Two of the most potent criticisms are that the rats used in the study typically develop tumors by the age of two with or without eating GMO food (the study followed the rats until they turned two), and that there appears to be no relationship between the amount of GMO food the rats ate (the dose) and how large or numerous the tumors grew (the response), raising questions about causation. The study also contradicts years of study of genetically modified food. Here's an excerpt from a very powerful [blog](#) post from UC Davis Professor Pamela Ronald from Scientific American:

There is broad scientific consensus that genetically engineered crops currently on the market are safe to eat. After 14 years of cultivation and a cumulative total of 2 billion acres planted, no adverse health or environmental effects have resulted from commercialization of genetically engineered crops.... Both the U.S. National Research Council and the Joint Research Centre (the European Union's scientific and technical research laboratory and an integral part of the European Commission) have concluded that there is a comprehensive body of knowledge that adequately addresses the food safety issue of genetically engineered crops.

Despite serious concerns about its validity, the French study is likely to play a role in the California campaign for Proposition 37.

Prop 37 is a seemingly straightforward initiative that would require that food offered for retail sale in California that is genetically modified through DNA manipulation or cell fusion be labelled [“with clear and conspicuous words “Genetically Engineered”](#). The initiative is similar to California's [Proposition 65](#), passed in 1986, which requires the labeling of products known to contain carcinogens or birth defects. Both Prop 37 and 65 allow for citizen enforcement and the recovery of attorneys' fees, giving the law real teeth since vigorous enforcement is pretty much guaranteed (and potentially abused, as even Jerry

Brown [has said](#) about Prop 65).

Opponents of Prop 37 will spend tens of millions of dollars to try to defeat the initiative. [Ballotpedia](#) reports that Monsanto has already donated \$7 million to the anti-Prop 37 campaign. Combined with other food company donations opponents have raised north of \$32 million. Supporters, by contrast, have raised only about \$3 million. So the campaign looks like a classic David v Goliath fight, with big corporate interests working to defeat an initiative that early on has had widespread public support.

And who could be against labeling? Doesn't the public have a right to know about whether its food comes from genetically modified sources?

Here's why the question is, at least for me, a harder one than appears at first blush. Other labeling statutes like Prop. 65 and FDA cigarette warnings are aimed at chemicals and products that have known health risks. The link between cigarette smoking and horrible health effects is well known. Prop 65 applies only to chemicals known to cause cancer or reproductive toxicity. In fact the warnings themselves contain information about the health risks of exposure. But Prop 37 only requires that foods include the label "Genetically Engineered." There is no separate requirement that the genetic engineering causes or is even suspected to cause health problems of any sort. A genetically engineered food could, under the statute, actually have beneficial health effects (an [aim](#) of some genetically engineered crops that lessen the use of pesticides, for example) and still require the label. Of course the flipside is that the label doesn't say there's anything wrong with genetically engineered food but instead just informs consumers that the food is genetically modified, leaving consumers to choose for themselves whether to purchase it.

But the obvious implication of the label "Genetically Engineered" is that there's something wrong with the food. In fact the initiative is explicitly premised on arguments that "genetic engineering can increase the levels of known toxicants in foods and introduce new toxicants and health concerns" (that language is from the findings contained in the initiative itself).

One serious concern about the labeling requirement is that consumers will simply stop buying GMO food even if the food causes no harm. And there seems to me to be sufficient evidence that GMO food can produce benefits — insect resistance leading to lower pesticide use, [additives](#) that can increase the nutritional value of food — that a labeling requirement that may reduce the market for the food with little scientific evidence of harm may not be such a great idea.

I admit to be torn by Prop. 37. On the one hand, the initiative is simply calling for disclosure of information that can otherwise be hard to find. On the other hand, the

disclosure may, oddly, prove misleading to consumers, suggesting that something is wrong with genetically modified food with very little evidence that any harm exists. Right now, I'm leaning no.