



Fidelis International Institute

Moral Questions Concerning Genetically Modified Organisms

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Many products found at the grocery store now feature labels that boast “no GMOs.” Plainly there has been enough concern about GMOs that many companies take pains to distance themselves from them. On the other hand, GMOs are useful for developing pharmaceuticals (genetically modified bacteria are used to produce large amounts of human proteins for use in medicine—insulin being the best known example), and for increasing the yield of food-crops by increasing crop resistance to wide-spectrum insecticides and herbicides.

But are GMOs safe? The principal concerns regarding GMOs can be brought under the following headings:

- (1) There is a concern that tampering with genetic materials in our food-crops could produce new viruses harmful to human, animal, and plant health.
- (2) The production of new allergens is another concern.
- (3) There is fear that the resistance conferred upon food-crops will somehow be transferred to disease-causing bacteria.
- (4) Transgenic DNA (DNA resulting from the combination of genetic material from different species) is believed by some to be capable of entering human cells and triggering cancer.
- (5) The possibility of adverse ecological effects due to introduction of plants with new properties is still another concern.
- (6) Some are alarmed by the impossibility of controlling cross-contamination between GMO crops and non-GMO crops.
- (7) The use of dangerous pesticides and herbicides, made possible by the resistance-properties of GMO crops, is another potential problem.
- (8) The “unnaturalness” of GMOs causes many people to regard them with suspicion.

- (9) The character of those who produce GMOs, namely large corporations with controlling interests in food crops, is a cause of concern and distrust.

Given this list, should GMOs simply be banned? That is not so clear. As to the first five items, most sources report no widely-accepted findings of any such adverse effects of consuming or using GMOs or GMO-based products. These therefore appear to be, at least for the moment, purely concerns, possibly reasonable ones, but so far without hard evidence that any such fears are being realized. Still, these things must be carefully monitored by scientists—and not only those in the pay of the corporations producing GMOs.

As to (6) Contamination, there can be no doubt that this has taken place, but to what extent it is uncontrollable is unclear. Also, the evil of contamination is predicated on the dangers of GMOs themselves. If the GMOs in production and use are not dangerous, then their “contamination” of other crops would seem to be little different from any other varietal grown in the world which can “contaminate” other crops.

As to (7), The use of dangerous pesticides and herbicides, this is a separate issue. Steps should be taken to prevent corporate use of unacceptably dangerous pesticides and herbicides, regardless of their involvement or non-involvement with GMOs.

As to (8) The unnaturalness of GMOs, there seems to be some oversimplified reasoning behind this concern. The world is filled with quite “natural” things which are entirely deadly to us—such as arsenic, or the poisons in various plants, or pathogenic bacteria that were never modified by human manipulation, but which simply evolved by “natural” processes. Conversely, there are many things which are artificial or not natural, such as artificially conditioned and purified air or water, which are not dangerous simply for being not natural. While it is true that GMOs are novelties, and hence their properties are not well known, this is a reason to study them and regulate them and use them with caution, but not a reason simply to outlaw them. Human life cannot be risk-free; we cannot restrict ourselves to the use of things we know through and through—we know nothing through and through. And some risks must be taken. Indeed, many of our race face death, disease, or starvation if we do not make use of our God-given reason in order to harness the powers of nature in new ways.

It is possible, nevertheless, to produce, by human interference, varieties and breeds with undesirable qualities, and to do so through ignorance or negligence—“killer bees” are an example. But it does not follow simply from the human interference or manipulation that the result is undesirable or unnatural; the art of medicine is an “interference” or a human manipulation, but one that helps nature toward the desirable result which nature cannot attain unaided. The art of agriculture is similar; if we left it entirely to nature to produce our food, the human race would be much smaller, sicker, and less happy.

As to (9) The character of the corporate interests behind GMOs, one must confess that such corporations are not fitting objects of implicit trust. It is desirable that they be regulated by law (to a greater extent than smaller entities are), and held responsible for any adverse effects of their research or production or sales.

So it appears that the development, production, sale, and use of GMOs is not yet known to be an evil in itself. But if certain GMOs were to be conclusively linked to

undesirable effects on human health or on the environment, the particular GMOs responsible should be banned, and the oversights involved in their production should be studied in order to avoid repeating the same mistake in the future. Production and use of GMOs should be regulated by law, and subject to approval by some credible institution above the suspicion of being in the pay of the corporations whose GMOs are to be regulated. Certainly if there were any GMOs used in some product, the label should say so. While they might well be a boon, they could also be a threat, and people have the right to know what sort of thing they are eating.