

Genetic engineering 13185

Engineering



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Genetic Engineering

When we envision our future, we usually imagine a future free of disease and physical sickness, but have you ever wondered how a disease-free society will be accomplished? In the twenty-first century our world will be a very different place because of genetic manipulation and engineering. There are many pros and cons to this debate, but it is undeniable that the effects from the new revelations in the field of genetics are far-reaching and deep impacting. Genetic engineering is a radical new technology, one that breaks down fundamental barriers, not only between species, but also between humans, animals, and plants. By combining the genes of dissimilar and unrelated species, permanently altering their genetic codes, novel organisms are created that will pass the genetic changes onto their offspring through heredity. Scientists are now snipping, inserting, recombining, rearranging, editing, and programming genetic material. Animal genes and even human genes are being inserted into plants or animals creating unimagined transgenic life forms. For the first time in history, human beings are becoming the architects of life. Bio-engineers will be creating tens of thousands of novel organisms over the next few years. The prospect is frightening.

First we must see that genetic engineering offers many potential benefits to the twenty-first century in the two fields of agriculture and medicine. In agriculture, we can now grow plants and animals faster, stronger, and easier. We can alter plants to have them grow ten times larger than their original size, and we can create animals without parents by cloning (Scott). In medicine, genetic engineering has revolutionized the field into something

completely new. We now produce cures that are specifically tailored to diseases, which have lengthened the average life span by almost ten years, detect and eliminate birth defects in babies, and have people that are healthier now than at any time in history (Epstein).

But with that almost unlimited power, there is a high price for the twenty-first century to pay. With each bonus we as a society receive from genetics, we also created genetically altered super-diseases. Genes from bacteria, viruses, and insects, which have never been part of the human diet, are being spliced into our food. Genetic engineering is not an exact science. Scientists can unintentionally create changes in the genetic make-up of plants that result in new, unknown proteins with unknown results ("Health"). Mixing the genetic properties of unrelated species carries with it such risks as creating life-threatening allergic reactions in humans, or more resilient crop pests, weeds, and bacteria (Hawaleshka).

Uses of these genetically engineered products are just now being done and allowed into our shared food supply, and now is the time to try to stop it. It is always easier to stop something when it is first starting than after it becomes established in our mindsets and our economic system. Now is the time when we are conscious enough to be horrified. We will get more and more indoctrinated to the genetic engineering ideas until we cannot even remember what it was like to trust God and have caution about tinkering with such things. I think we should use our horror well, and now. This issue gets much harder if we wait until it is established, if we accept their framing that it is a "fait accompli, and you better get used to it". That disempowers the very principle of democracy better than any foreign

country ever has, and leaves us to be victims nibbling at the edges of corporate policy, instead of sovereign citizens declaring our vision of the world we want our shared future to be.

Some see genetic engineering as just more tinkering, but we are crossing species barriers for the first time, and we really do not know what that looks like, even if we think the risk is small. Just the genetic engineering process itself brings risk, no matter the potential benefit or desired outcome. For instance I know that some genetic engineered crops include an antibiotic resistant gene. Does one need a science degree to recognize that this is not an intelligent thing to introduce into our population? Already, doctors struggle with the increasing antibiotic resistance that is making deadly again bacteria that were once killed by antibiotics. Do we want to assist this? Same thing with putting toxins in plants. There are risks in making plants more herbicide tolerant. It will result in increased use of herbicides, and thus increase harm to health and the environment, and increased resistance. Plus the economic, social, and sociological cost of having to return the seeds to the corporation, cutting us off from our own birthright of saving seeds, of having a direct relationship to the natural process, and instead having that replaced by corporate products and corporate objectives, and much more money spent along the way.

If you think these corporations can be trusted with our genetic heritage, our economic system, our farming social structures, and our food supply, and they will think only of the community's best interest, I think you are naive.

We must recognize their interests are not always what is best for the community. They want to charge for products, and a high market share. I

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feel there are fundamental flaws with the genetic engineering approach, and am highly skeptical of those who would be driving its direction. I affirm our rights as individuals and as a community to make a choice about the direction we take, for if we do not have that, then why put up with all the messy aspects of having free will? So, as we approach the twenty-first century, we go into the realm of the unknown. However, it is assuredly a future that will be blessed and cursed with genetic engineering, and one that will look back at the nineteenth century and remember the development that influenced it the most as genetic engineering.

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