

Pro genetic engineering 1989

Engineering



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Genetic engineering has struck a major controversy concerning issues in health care, engineering of food and other biological agents, and cloning. Genetic engineering is the process of manipulating the genetic code or DNA of a particular organism. Compared to most sciences genetic engineering is quite new to our society. The moral and religious implications have been controversial issues since the inception of the concept. Many believe that we have crossed the line with genetic engineering and that it is not our place, but with the modern breakthroughs that genetic engineering research has unturned it is undeniable that it is extremely valuable tool to modern society, and everyday life.

Genetic engineering has found its main place in health care. The benefits to the human race in this field are unlimited. Many of the medicines you see on the shelves today are created to some degree using genetic engineering. Insulin that is used today for diabetics is created using genetically engineered bacteria. Scientist will soon be able to use engineered animal organs to transplant into patients needing a heart, a liver, or any other similar part. This process is known as xenotransplantation. Still people question the ethical implications of a procedure that could save many lives. Without genetic engineering we would never have found cures and treatments for some of the most deadly diseases that are threatening mankind. How can we expect to find the cure for AIDS without performing such research? Genetic engineering is one of our most powerful tools in health care today.

Breeding plant and animal species has been a long time practice of mankind. The selection and reproduction of desirable traits by breeding can be

observed in many places. Just about everything we eat has been scientifically bred to be that way. Scientists have taken that process a step farther by adding genetic engineering into the mix. Imagine a tomato the size of your head. Impossible, right? You'd be surprised in all we can do with the help of genetic engineering. Advances in genetic engineering have now made it possible to crossbreed between organisms that are not alike. For example, to combine plants with animals, and so on. We have the ability to create great tasting, fat free, healthy foods, without the butchering of animals. But scientists don't stop at foods; genetic engineering has also been implicated into cleaning products, garden accessories, and much more.

Probably the most controversial subject in genetic engineering is doing it to ourselves. The scientific world was rocked in 1997 by the cloning of a sheep named Dolly at the Roslin Institute. Dolly was cloned from a mammary gland cell of an adult sheep. This brought on the question that people are faced with today. Can we, and Should we attempt to clone a human being? Well there are two possibilities on how we can clone humans. The first way involves splitting an embryo into several halves and creating many new individuals from that embryo. The second method of cloning a human involves taking cells from an already existing human being and cloning them, in turn creating other individuals that are identical to that particular person. Think about it, no more nasty surprises like sickle cell or Down syndrome; just 100% healthy human beings. Mothers will no longer have to worry about their unborn children. Genetic diseases will have been a thing of the past. The benefits to researching cloning are unimaginable.

To conclude this paper, my point is simple. We can gain so much, and end so much suffering by this magnificent tool. No more genetically related disease, or genetic disfigurement. No more worrying about heart disease or going bald because it runs in the family. Genetic Engineering is forced upon no one, but to have the choice would be something that many people would be eternally grateful for. Genetic engineering has proven itself useful in so many fields, ranging from the food we eat to the medicines we take, and has perhaps been the greatest scientific advancement in history.