

# [The application of genetic engineering biology essay](https://assignbuster.com/the-application-of-genetic-engineering-biology-essay/)

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Familial technology is defined as the engineering whereby the cistrons of an being are manipulated straight.

The construction and the features of a cell are altered straight through the usage of transmutation and molecular cloning techniques. The term familial technology originated from Dragon ‘ s Island, a scientific discipline fiction novel written by Jack Williamson and published in 1951. Scientists have advanced in the field of familial technology. After the successful cloning of animate beings, they are now developing human root cells. The cloning of animate beings is done intentionally for modifying and bettering the utility of the animate beings to human existences. But the contention arises in that there is no important addition in the overall production quotient of the cloned animate beings. The genetically engineered animate beings are fundamentally used as theoretical accounts of human disease.

When done in workss, it can increase the overall harvest production by bettering disease opposition and increasing the growing rates. Therefore by utilizing of merely a few resources e. g. fertilisers and pesticides, this engineering can take to an addition in the nutrient production ( Brunner, 525-6 ) . It can besides be usage to increase the population of endangered species and enable them to accommodate good to their home ground. Besides the exposure of these animate beings to common diseases and pathogens is reduced. Even after these benefits, Genetic technology has been a subject of much contention in the universe.

The difference revolves around church leaders, biotechnology companies, authorities, the populace and scientists with each holding different base points. But the greatest concern that has sparked this argument is the safety concern of nutrients that have been genetically modified. Scientists have non come to to the full understand familial technology field to execute DNA transmutation. Their experiments on the delicate but powerful forces of nature may take to creative activities of mutants.

The reverberations that are associated with this engineering are besides non good known. Tight limitations and prohibitions should be placed on this engineering because of the safety concern that is involved. There has non been adequate research on the effects of these nutrients on the wellness of human existences. The research that is available so far shows that the deduction on wellness depends on the type of alteration made ( Key, 290-8 ) .

Though the nutrients produced so far shows no inauspicious wellness effects, there are some that have been known to distribute allergic reactions ( Leary, 7 ) . Therefore tight limitations should be imposed on this engineering. This is because engineering is bettering and more alterations are being done. Besides wed have no grounds of the effects continual usage of the merchandises for a long period of clip. The engineering is immature and new. Therefore we do non cognize the future effects of eating genetically modified nutrients. Though the nutrients may look to be proven safe to eat for now, the advocators of the same engineering do non hold the grounds of effects or stableness of the same nutrients to human wellness in the following decennaries. If anything, the genetically modified nutrients should be banned as there is no available informations to back up their hereafter stableness and safety in human wellness up until that clip when more vigorous scientific research is done and the grounds that they are stable and safe for human ingestion is presented.

Because there has non been a long clip proving that has been carried out, there is no grounds that these nutrients are safe for human ingestion. This engineering can besides take to development of unknown allergens in nutrients which may do terrible allergic reactions ( Nordlee, 726 )The beings that are modified genetically have the ability to crossbreed with the natural beings and spread in our natural environment. This leads to taint of the environment with genetically modified elements. Hence there is loss of biodiversity and this will impact negatively on future coevalss of workss, animate beings and human existences. Once this happens, there will be a familial pollution of our natural environment ( Emberlain, et Al, 36 ) .

Therefore there is demand to censor familial technology engineering because one time released into the environment, the genetically modified beings can non be recalled. The negative effects of familial technology can non be compared to the effects of chemical or atomic taints. The taint of the non familial environment will be unmanageable one time this engineering is allowed to develop and continue. To protect our biological diverseness, tight limitation must be enforced in this engineering. It should merely be practiced in a smaller grade in the field of medical specialty and non otherwise. If it can non be restricted to these countries, so it should be banned. Because the environmental impact and the effects on the wellness of human existences is unknown, the GMOs should neither be released into our environment nor be fed to human existences ( Greenpeace. org ) .

The debut of the foreigner cistrons into our environment could take to taint of the natural cistrons which mazy lead to extinction of the bing cistrons and/ or outgrowth of other harmful species. The mutants caused from the familial technology can great toxins in the genetically modified nutrients which may be harmful to human wellness ( Inose, 141 )The Genetically engineered nutrients which had been introduced with an purpose of increasing nutrient production have non performed as expected. Alternatively they have brought forth other jobs. Those modified to defy plagues and insects have imbalanced the ecology of these insects and plagues ( Metz, 442-450 ) . As a consequence other plagues and insects emerge and these may necessitate usage of heavier, more powerful and more expensive insect powders and pesticides. The rhythm may reiterate itself until there are no Insects in our ecosystems. The usage of genetically modified weedkiller has led to the growing of weeds that are immune to the same. The usage of weedkiller immune genetically engineered harvests leads to the overall lessening of herbs in the environment.

This may impact negatively on the herbivores wildlife which depends on these weeds for subsister. When the figure of herbivores decreases it can take to the lessening in the Numberss of carnivores and this affects the wildlife at big. Besides the genetically modified seeds are similar in their construction and composings. Therefore when attacked by a disease or a plague, all the seeds may be attacked and this can ensue in monolithic harvest failure ( Robinson, 56 ) . From a theological point of, nature belongs to God who being its Godhead has the exclusive intent of finding its class.

God has given human existences domination of all His creative activity, to command, take attention and develop nature for our benefits. He has given us technological cognize how to make this. But as stewards to His creative activity, we have bounds to which we can utilize this engineering. Therefore, whatever we do with this engineering we are non merely answerable to the hereafter coevalss, but to God every bit good. Human existences are besides portion of the creative activity but are non Godheads ( Page, 58 ) .

Though God has non flatly stated that Genetic Engineering should non be practiced, the bounds to it are set by God ‘ s rules of creative activity. In this respect, all engineering is good every bit long as it is non a agency to an terminal. When familial technology reaches a point where by it produces a perfect animate being or works, so God ‘ s original creative activity will go less desirable. The perfect animate being or works species genetically engineered will be in high demand and high production hence the less coveted original creative activities will go nonextant. A good illustration of this is the selective genteelness of Canis familiariss whereby merely those Canis familiariss with desirable traits are chosen while those with unwanted traits are about going nonextant. The overall pool of natural cistrons available in the universe may finally be reduced. In kernel adult male has no right to command nature.

Therefore, familial technology engineering should be banned on moral evidences. The patenting of genetically altered cistrons is another menace that genetically technology has posed. Large corporations have monopolized the supply of genetically modified seeds and they are harvesting maximal net incomes from these. What is worrying is whether one time human cistrons have been genetically modified, will the tendency still go on? Will a individual with altered cistrons be patented by these corporations? Will he or she be required to pay truenesss to those corporations that hold the patent for the altered cistrons? If familial technology engineering is non restricted or otherwise banned as a whole, future coevalss may be held at a ransom by big corporations.