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Commentary

A BRIEF NOTE ON GENETIC ENGINEERING

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DESCRIPTION

Genetic engineering is a fixed of technology used to alternate the genetic make-up of cells, consisting of the switch of genes inside and throughout species barriers to provide advanced or novel organisms. New DNA is obtained by either isolating or copying the genetic fabric of interest the use of recombinant DNA strategies or with the aid of using artificially synthesizing the DNA. Usually an array is created and used to insert this DNA into the host organism. Genetic engineering has led to the manufacture of medically important products such as human insulin, human growth hormone, and the hepatitis B vaccine, as well as the development of genetically modified organisms such as disease-resistant plants. DNA fingerprints from samples collected at crime scenes provide strong evidence in trials, helping to solve many violent crimes. DNA can easily be isolated from tissue left on the scene, a blood spatter, a sample of hair, or even the skin underneath the victim's nails. Today, a variety of techniques can be routinely used to determine the likelihood of a match between a DNA sample and a suspect's DNA fingerprints.

Genetic modification of plants involves adding a specific section of DNA to the genome of the plant, which gives it new or different properties. This can include a change in the way plants grow or resistance to a particular disease. Genome of the plant that contains the seeds produced by these plants. Genetic engineering of Filamentous fungus is an established approach in biotechnology that affects processes in many industrial sectors. Non-GMO approaches have the broadest applicability as they are not subject to GMO regulations, which restrict the use of GMO-based approaches in many applications. Recent advances in tissue culture technology have opened up new avenues for recombining genes from various plant sources. In somatic hybridization, a process also known as cell fusion, cells growing in a culture medium repel their protective walls, generally using Pectinase, cellulase and hemicellulase. These stripped cells, called protoplasts, combine from different sources and fuse together through the use of different techniques such as electrical shock. Modern cattle breeds differ significantly from their ancestors due to the breeding strategies used. For example, the milk yield per cow in Holstein dairy cattle has increased. Similarly, breeding programs have resulted in fast growing and lean pigs.

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CONCLUSION

Biotechnology can be used to alter the endocrine function of animals and affect reproduction, lactation and growth. In pigs and rats, the specific hypothalamic expression of the growth hormone-releasing hormone is not essential, since the ectopic expression of a cloned DNA for this neuropeptide can be genetically controlled by a muscle-specific synthetic transcription promoter in order to induce growth increases both hormone and insulin-like growth factor-I. This biotechnology has the potential to improve uterine capacity and increase milk production through the use of specific hormones and growth factors in critical development phases. Genetic engineering has improved understanding of many theoretical and practical aspects of the function and organization of genes. Recombinant DNA techniques have created bacteria that can synthesize human insulin, human growth hormone, alpha interferon, a hepatitis B vaccine, and other drugs useful substances.