

Genetic Engineering

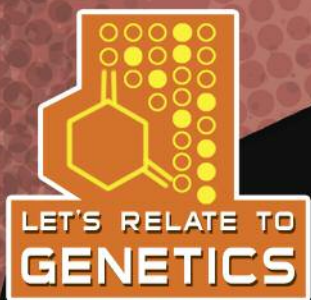


Can we improve on nature?



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Genetic Engineering

Marina Cohen



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Main image:

The double helix of DNA

Inset images:

The enviropig is genetically modified to produce about 75 percent less phosphorus in its manure than typical pigs. This is better for the environment. Scientists are working on trying to "silence," or shut off, the gene in the peanut that causes an allergic reaction. Will science be able to revive the dinosaur using genes from fossils, as they did in the Jurassic Park movies?

Can we improve on nature?:

This is a hotly-debated question. Can we, and should we, use what we know about the science of living things to improve our quality of life? On one side, there are unimaginable benefits, such as eliminating debilitating diseases; on the other side lies the potential for risks that we have no way of foreseeing.

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Contents

Chapter 1

Genetic Engineering 4

Chapter 2

Discovering Genes 6

Chapter 3

DNA at Work 10

Chapter 4

Same but Different 26

Chapter 5

Miraculous Medicine 34

Notebook 44

For Further Information and Web Sites 45

Glossary. 46

Index. 48

Genetic Engineering

What do you get when you cross a chicken with a centipede? You get drumsticks for everyone. How about a vampire with a snowman? Frostbite! A dinosaur with a termite? That would be “dino-mite.”

Okay, stop groaning. Let's consider the possibility of crossing unlikely pairs in a serious way. What if crossing a pig with a worm made the pig's fat more like the worm's body--and bacon more healthful? How about crossing a spider and a goat to make a goat that produces silk?

Welcome to the wonderful and sometimes weird world of **genetic engineering**. **Genes** are the chemical codes that determine how living things look and act. Tinkering with that code is the basis of genetic engineering. Sometimes genetic engineers simply remove a piece of chemical information. Sometimes they might transfer information from one living thing to another. By making slight changes in organisms, scientists hope to cure serious diseases. Researchers may even help end world hunger by producing stronger plants and healthier animals.

Imagine using genes from fossils to revive dinosaurs.

