

Human genes for breakfast?

You may one day be eating steak, chicken, pork or lamb made from human and animal genes. Genes are the building blocks of life. They control eye colour, height, intelligence, and a million other things that make us human.

Scientists can swap genes from one person to another, between plants, animals or insects to see what happens. Salmon with extra mouse and human genes grow fast - up to four times normal size in a few months. Designer meat can be made by mixing our genes with animals to make superbreeds. (Article written in 1994).

Humanised cows, pigs, rabbits, sheep and fish have already been born - just some of 60,000 mutants made each year by British scientists.

Some of these animals may bring medical benefit. An Edinburgh company (Pharmaceutical Proteins) has made a sheep called Tracy. She adds human protein to her milk which may help people with lung disease.

Miracle cures could come from genes. New microbes already make human insulin for diabetics. Soon we may have a cure for cystic fibrosis and new treatments for cancer. Gene research will help us fight AIDS.

One set of humanised pigs grew fast but were blind, impotent and crippled with arthritis. They were almost all pig and looked like pigs but scientists can make them half human if they like.

Geeps have already been made from sheep and goat - so why not humigs or humonkeys too? They could try to make monkeys with human speech. We can try just about any mix of genes we like.

Scorpion poison genes have been given to cabbages. The cabbages kill caterpillars but what about people?

Poison genes from bacteria have been added to potatoes. These mutant vegetables look and taste identical. Non-bruising tomatoes have also been made. While this meat and veg is not yet on sale you are already eating other gene food. Mutant yeast in bread for example.

The government says labels are a waste of time and effort. They test new [foods](#) and reckon those on sale are safe. Supermarkets don't want gene labels on bread, beef or canned tomatoes because they think people will be scared off. No labels, no choice. They remember the big fuss over nuclear radiation used to stop meat getting too bad to eat.

The moment they were forced to tell shoppers which [foods](#) had been treated they knew the battle was lost. Most of us didn't want to eat irradiated food, even if it was as safe as experts said. One by one, the big food chains banned the process - by popular demand.

However there is one big difference when it comes to mutant meat. You might be happy the meat is safe, but do you really want to eat someone else's genes?

Even hungry meat eaters may turn up their noses at humanised pork chops with their scorpion salad and rubberised tomatoes.

The Co-op group has just banned genetically modified food. Other supermarket chains have followed.

Many MPs are worried that profits may come before safety. They want labels on all these [food](#)
[s](#) so
you and I can choose.

Scientists have never had so much power with designer food.

We need a Gene Charter allowing the best and protecting us from the worst. Proper food labelling will do for a start.

Dr Patrick Dixon is author of Futurewise.