

US could approve clones as food

The US could approve cloned animals for use as food in two to three years, according to experts.

But cloned meat is unlikely to appear on supermarket shelves in Britain or elsewhere in Europe anytime soon.

Currently, most cloning is carried out for scientific reasons, but it could one day be used to help improve the quality and efficiency of livestock.

However, observers say cloning is not likely to supercede any of the other techniques used by livestock breeders.

At a news conference in London, scientists said they could think of absolutely no health risk to consumers from eating cloned meat.

Elite animals

Following a five year study, the US Food and Drug Administration (FDA) issued a draft ruling last year that meat and milk from cloned animals was safe for human consumption.

The European Food Safety Authority (EFSA) is also carrying out its own investigation into the safety of cloned food.

You could even take cells from a beef carcass on the slaughterline and recreate the animal that produced that very impressive carcass

Chris Warkup, Genesis Faraday

EFSA will also look at its impact on animal welfare, biodiversity and the environment.

The first mammal to be cloned from an adult cell, was Dolly the sheep, born at the Roslin Institute in Edinburgh more than 10 years ago.

Since Dolly, cattle, pigs, goats, dogs, cats, horses, mice and rats have all been cloned.

Chris Warkup, director of Genesis Faraday, a scientific partnership based in Edinburgh, said that cloning "elite" animals to breed from might prove useful in the meat and dairy industries. "If the FDA say what they seem minded to say, you might expect meat and milk from the progeny of clones - not clones themselves - to be on the US market in the not-too-distant future," Mr Warkup said.

"There is a pyramid structure in animal breeding. All the breed improvement occurs to a few elite animals at the top of the pyramid."

But Mr Warkup added that cloning was likely to be used in combination with other techniques such as artificial insemination.

Meat and milk

He continued: "The big advantage of the Dolly technology (somatic cell nuclear transfer) is that you know what the animal's potential is, because you are taking the DNA from an adult."

"You could even take cells from a beef carcass on the slaughterline and recreate the animal that produced that very impressive carcass."

However, researchers said there needed to be more research on some of the stillbirths and abnormalities which are more common in cloned animals compared to those born naturally.

The efficiency of the cloning process remains a key issue in the viability of commercialisation. Early attempts at cloning produced very few viable clones; most of the animals died during gestation or shortly after birth.

Nikki Osborne, senior science officer at the Royal Society for the Prevention of Cruelty to Animals (RSPCA), said: "We are totally opposed to the cloning of animals for food production purposes.

"The process is inefficient, and has a huge potential to cause the animals involved unnecessary pain, suffering and distress - for absolutely no valid reason."

Professor Keith Campbell, from the University of Nottingham, one of the original Dolly scientists, said some groups had reported an efficiency of 80% in terms of successful births and embryo transfers for cattle.

Dr Simon Best, chairman of the BioIndustry Association, warned that labelling cloned food for no scientific reason risked delaying the introduction of cloned meat in Europe and would be unhelpful and confusing for consumers.

"It's a Pandora's box and we could end up with the kind of meaningless labels you have on cigarettes, for instance," he said.

Story from BBC NEWS:
<http://news.bbc.co.uk/go/pr/fr/-/2/hi/science/nature/6288814.stm>

Published: 2007/07/10 17:23:30 GMT

© BBC MMVII