Would you like to eat cloned meat?

Elvis the cow is special. His parent was a steak. It may sound like a joke, but the story is true. Scientists at a company called ViaGen cloned Elvis from a side of beef. A clone is an identical copy of something. For example, a cloned animal has the exact same inherited features, such as fur color, as the original animal. And one day soon, milk and meat from clones like Elvis could wind up on grocery store shelves.

The U.S. Food and Drug Administration (FDA) recently ruled that it's safe to drink milk and eat meat that comes from cloned cows, pigs, and goats and from their offspring. Soon the FDA will decide whether to approve the sale of cloned foods. For some people, the FDA decision is no big deal. “If the government thinks it’s safe to eat food from a cloned cow, I’d eat it,” says Kevin, 13, of Brandon, Mich. “I think it would probably taste the same.”

Not everybody likes the idea of cloned food, though. Critics of the FDA decision say that more research is needed before people can be sure that eating food from clones is a smart idea. “No!” says Lauren, 11, from Waukesha, Wis., when asked whether she would eat food from a cloned animal. “I don’t know what is in that animal!”

True, some people are freaked out by the idea of cloning, Barbara Glenn, a scientist and spokesperson for the Biotechnology Industry Organization, admits. But you’ll probably never actually eat meat that comes from a cloned cow. It costs up to $20,000 to clone one bull. Farmers wouldn’t want to turn a $20,000

Cloned animals have the same genetics as the original animal. Strangely, they can look slightly different—such as Liz the cow and her clone Liz II (left).
Near You!

By Kirsten Weir

Meat Without Animals?

Cloning isn’t the only way scientists are tinkering with meat. Some researchers are working to grow animal muscle tissue in the lab. Lab-grown meat would be free of diseases that can infect people who eat it, say the scientists. One such disease is mad cow disease, which can cause damage to both human and animal brains. Scientists could also make meat healthier by creating versions with more protein and less fat, for example. Just think: If scientists succeed, someday your dinner might come not from living animals at all. Instead, it may come from sheets of meat grown in test tubes!
bull into steaks, Glenn says. They’d more likely use clones as breeding animals to produce top-notch offspring. The clones’ natural offspring are the animals that would wind up on the dinner table. Still, there are arguments for and against eating anything related to a cloned animal.

**How It All Started**

In 1996, scientists created the first mammal clone—a sheep named Dolly. Since then, scientists have cloned about a dozen different animals, including cows and pigs. Like identical twins, clones share exactly the same genetic material, or inherited characteristics. A clone, though, is often created years after its genetic “twin” was born. To clone a cow, scientists take a few cells from an adult cow and remove the genetic material, called DNA. They use that material to produce an embryo that develops into a second, genetically identical cow.

Why would anyone want to clone a cow? Currently, many farmers give their animals medications such as antibiotics to keep them healthy. But those antibiotics wind up in the meat we eat. If scientists could clone healthy animals that had natural resistance to disease, farmers would be able to give them fewer medications. Scientists could also make identical copies of the very best livestock. The average dairy cow produces about 2,305 gallons of milk in one year. But sometimes, super cows come along that give nearly three times that much milk. If scientists cloned those superior milk makers, farmers could raise fewer cows.

Not everyone thinks that’s a good idea. Charles Margulis, a spokesperson for the Center for Food Safety, said that cloned animals often suffer. Most cloning attempts are unsuccessful; it often takes many tries before a single calf is born. In addition, many cloned animals are born with birth defects or suffer from poor health. Dolly the sheep had to be put to sleep at a relatively young age. Scientists aren’t sure whether cloning caused her health problems.

Still, the science of cloning has improved a lot over the past decade, says Glenn. Birth defects and other health problems are becoming less common in clones, according to Glenn. “Significant improvements have been made since Dolly the sheep was born,” she says.

The Center for Food Safety is also worried that meat and milk from clones could be dangerous to eat. “The food from these animals has never been tested,” Margulis says. “We don’t know if it’s safe.” His group is asking the FDA to do long-term studies to make sure the food is truly OK to eat.

The FDA, though, has concluded that food from clones isn’t any riskier than the milk and meat we eat today. They studied hundreds of scientific reports before making the decision. “Cloning just produces a genetic twin of the very best animals,” Glenn said. “Healthy animals produce healthy foods.”

The FDA hasn’t approved foods from clones just yet but is planning to make a decision on the subject by the end of the year. One day in the not-too-distant future, your chocolate milk and cheeseburgers may come from some very specially bred cows.
Copyright of Current Health 1 is the property of Weekly Reader Corporation and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.