

Worm turns sheep clone to 'good' fat

HONG KONG: Chinese scientists have cloned a genetically modified sheep containing a "good" type of fat found naturally in nuts, seeds, fish and leafy greens that helps reduce the risk of heart attacks and cardiovascular disease.

"Peng Peng", which has a roundworm fat gene, weighed in at 5.74kg when it was born on March 26 in a laboratory in China's far western region of Xinjiang.

"It's growing well and is healthy like a normal sheep," lead scientist Du Yutao at the Beijing Genomics Institute (BGI) in Shenzhen in southern China said.

Du and colleagues inserted the gene that is linked to the production of polyunsaturated fatty acids into a donor cell taken from the ear of a Chinese Merino sheep.

The cell was then inserted into an unfertilised egg and implanted into the womb of a surrogate sheep.

"The gene was originally from the *C. elegans* (roundworm) which has been shown (in previous studies) to increase unsaturated fatty acids which is very good for human health," Du said.

China, which has to feed 22 per cent of the world's population but has only seven per cent of the world's arable land, has devoted plenty of resources in recent years to increasing domestic production of grains, meat and other food products.

But there are concerns about the safety of genetically modified foods and it will be some years before meat from such transgenic animals finds its way into Chinese food markets.

"The Chinese government encourages transgenic projects, but we need to have better methods and results to prove that transgenic plants and animals are harmless and safe for consumption, that is crucial," Du said.

Other collaborators in the project were the Institute of Genetics and Developmental Biology at the Chinese Academy of Sciences, and Shihezi University in Xinjiang.

The United States is a world leader in producing GM crops.

Its Food and Drug Administration has approved the sale of food from clones and their offspring, saying the products were indistinguishable from those of non-cloned animals.

US biotech firm AquaBounty's patented genetically modified Atlantic salmon are billed as growing at double the speed and could be