

Why chunky chickens are better for your health

A CHEMICAL that makes chickens grow bigger and faster also suppresses the bacteria that have become the leading cause of food poisoning, researchers in Britain have found.

Fresie Fernandez, a microbiologist from the University of Bristol, found an enzyme called xylanase can dramatically limit numbers of the bacterium *Campylobacter jejuni* in chickens' gut. Almost all chickens carry the bacteria without becoming ill. But if humans eat *Campylobacter*-infected poultry that hasn't been cooked properly, the corkscrew-shaped bugs squirm into the slimy mucus that lines our intestines, causing cramps and diarrhoea. In Britain and the US, *Campylobacter* has become the leading cause of food poisoning.

Fernandez and her colleagues fed *Campylobacter*-infected chicks wheat laced with 0.1 per cent



xylanase, a natural enzyme already used by some poultry farmers to promote growth. The enzyme is also used in breadmaking. It makes the mucous lining of chickens' stomachs thinner and less sticky, allowing nutrients to be absorbed more effectively and helping the birds to grow.

But Fernandez found that after a month, the number of bugs in the chickens' guts fell by up to 99 per cent. The researchers suspect that the bugs are flushed from the

chickens' systems more quickly when the mucous lining is thinner and more fluid.

Fernandez thinks that chicken farmers could use xylanase as a simple way to make poultry meat much safer to eat without having to use antibiotics. "I think that all companies should use this," she says.

Nicola Jones

New Scientist, 24th March, 2001.

Key words: Avizyme 1300, xylanase, protease, broiler, microflora, zoonosis, Food safety