24th August 2016

New research reveals soaring levels of antibiotic resistance in UK supermarket meat

Testing commissioned by The Alliance to Save our Antibiotics has shown that resistance to antibiotics essential for treating serious E. coli infections has shot up since last year.

189 samples of UK supermarket pork and chicken meat from the seven largest supermarkets in the UK were tested, with samples being taken from different regions across the country.

25% of chicken meat tested contained antibiotic-resistant E-coli (ESBL E.coli, which is resistant to modern cephalosporin and penicillin-type antibiotics.) This is four times higher than in the Alliance's 2015 testing, in which just 6% of chicken tested positive for the strain.

A shocking 52% of pork and poultry samples contained resistance to the antibiotic trimethoprim, which is used to treat over half of lower urinary-tract infections.

A number of these samples – 19% – also contained E-coli which showed high levels of resistance to gentamicin. This drug too is of critical importance in treating serious urinary-tract infections.

Emma Rose of the Alliance to Save our Antibiotics said: "It is clear from this testing that decisive action is needed both on retailer and Government level to dramatically reduce antibiotic usage. Future generations are set to pay a high price for our antibiotic abuse. A future in which it is no longer possible to treat life-threatening diseases with antibiotics is increasingly becoming a reality."

E-coli is by far the most common cause of urinary-tract infections and of dangerous blood poisoning, and can also cause meningitis. These infections must be treated with antibiotics.

The last 25 years has seen a steady increase in resistance to some of the most important remaining antibiotics which can treat these infections. No genuinely new antibiotics for treating E. coli infections have been discovered for over 35 years.

These findings reveal for the first time the full extent of resistance to key human antibiotics in E. coli present on UK supermarket meat. This includes a class of antibiotics classed as 'critically important' for humans by the World Health Organisation, the cephalosporins.

The overuse of antibiotics in both human medicine and farming is creating this crisis. While GPs overprescribe the drugs, animals on intensive farms are routinely dosed with important antibiotics to prevent them getting sick in disease-inducing conditions.

Trimethoprim - an antibiotic to which over half of the samples showed resistance - is commonly used to mass-medicate whole groups of animals via their feed or water, and significantly more trimethoprim is used in animals than is used in human medicine.

In response to the testing, the Alliance is calling for urgent action from all seven major supermarkets to tackle the use of antibiotics in their supply chains, by immediately banning all routine preventative mass-medication of groups of animals, and dramatically curbing farm use of the 'critically important' antibiotics.

The Alliance is also calling on the UK Government to urgently bring forward testing regimes to monitor the rise of antibiotic resistant ESBL E.coli and to assess the degree to which the resistance is of livestock-origin.

ENDS

Notes to Editors:

The testing was carried out by Dr Mark Holmes - Reader in Microbial Genomics & Veterinary Science at the University of Cambridge.

The Alliance to Save Our Antibiotics is an alliance of health, medical, environmental and animal welfare groups working to stop the overuse of antibiotics in animal farming. It was founded by Compassion in World Farming, the Soil Association and Sustain in 2009, and is supported by the Jeremy Coller Foundation. Its vision is a world in which human and animal health and wellbeing are protected by food and farming systems that do not rely routinely on antibiotics and related drugs.

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