Antibiotics lurk in vegetables

Scientists at the University of Minnesota in the US Mid-West have clearly shown that antiobiotic residues in livestock manures are readily absorbed and retained in crops. Their study looked at maize, green onions and cabbage under glasshouse conditions to determine whether or not plants grown in manure-applied soils absorb the antibiotics present in the muck.

All three crop types were found to take up and absorb chlortetracycline but did not absorb the other antibiotic in the study – tylosin. The scientists point out that although the concentrations of chlortetracycline in the crops were small their volume increased in line with any increase in antibiotics present in the manure.

"With this Minnesota study we once again see the food chain risks of routine antibiotic use in farm livestock affecting produce at some considerable distance from the original application," says EFRC Director Lawrence Woodward. "Such contamination of crops poses a high risk to us all through from enhanced microbial resistance generated through consuming such vegetables with an even higher health risk for those of the population allergic to antibiotics."

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