Here’s some unpalatable news. Antibiotic-resistant bacteria are hiding in your food, not just in the meat, and fish, but also in your tomatoes and apples. That’s right. Samples of raw food lifted across Chennai have tested positive for colistin-resistant bacteria, conforming to a global trend.

A paper in the Journal of Global Antimicrobial Resistance by a group of researchers from Apollo Cancer Hospital, Chennai, and Christian Medical College, Vellore, carried out the survey in one city alone, lifting samples from 22 locations — shops and homes — between October and November 2017; 46.4% of the samples were found to harbour the highly-resistant bacteria.

Lead author Abdul Ghafur, of Apollo Hospitals, said: “In the practice of medicine, colistin is called ‘holy water’. It’s the last resort for very sick patients. Colistin resistance is already a problem in clinical practice, now we have established food origins in India.”

“Globally, there are many publications outlining the route of transmission of colistin resistance via the food chain. So, frankly, when we found the colistin-resistant bacteria in our samples, we were not surprised at all.” Dr. Ghafur explained. While handling of produce could play a role, the main cause of contamination in fruits and vegetables is a spillover from the poultry industry. Colistin is used as a growth factor in poultry, and poultry litter is used as manure in agricultural fields. Eating such contaminated food every day will allow the resistant bacteria to invade the human gut, rendering the host resistant to the powerful antibiotic Colistin, in case he/or she were to develop an infection. Undoubtedly, cooking the food will kill the bacteria. But, meanwhile, the food has already contaminated the surface in the kitchen, and people who handle the food have also been exposed, researchers said.

Colistin is used extensively as a growth promoter and India has no regulations to prevent this practice, though many European countries have banned the use of colistin in poultry, the paper says.