

## عنوان مقاله:

Antibiotic Resistance in Diarrheagenic Escherichia coli Isolated from Broiler Chickens in Pakistan

## محل انتشار:

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## نویسندگان:

M. Amir - *Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, Cornell University, Ithaca, NY 14853, USA*

M. Riaz - *Institute of Food Science and Nutrition, Bahauddin Zakariya University, Multan 60800, Pakistan*

Y.-F. Chang - *Department of Population Medicine and Diagnostic Sciences, College of Veterinary Medicine, Cornell University, Ithaca, NY 14853, USA*

A. Ismail - *Institute of Food Science and Nutrition, Bahauddin Zakariya University, Multan 60800, Pakistan*

A. Hameed - *Department of Food Science and Agricultural Chemistry, Macdonald Campus, McGill University, Ste (Anne de Bellevue, Quebec H9X 3V9, Canada (UK*

M. Ahsin - *National Institute of Food Science and Technology, Faculty of Food, Nutrition and Home Sciences, University of Agriculture, Faisalabad 38000, Pakistan*

## خلاصه مقاله:

Background: Diarrheagenic Escherichia coli (DEC) strains are predominant cause of gastrointestinal tract illnesses. The main objective of the study was to determine antibiotic resistance in various types of DEC isolated from chicken broilers farmed in Pakistan. Methods: A total of 200 feces and 200 meat samples from broiler chickens were collected from the slaughtering shops in Southern Punjab, Pakistan. The confirmed fecal (n=150) and meat (n=150) E. coli isolates were investigated against 16 antibiotics. Fourteen virulence genes specific for Enteropathogenic (EPEC), Shiga Toxin-producing (STEC), Enteroinvasive (EIEC), Enteroaggregative (EAEC), and Enterotoxigenic (ETEC) E. coli were identified using Polymerase Chain Reaction. Results: EPEC was the most detected pathotype in both feces (76%) and meat (90%) samples, followed by STEC, EIEC, and ETEC. The highest resistance (40-90%) was observed against penicillin, oxytetracycline, and nalidixic acid in fecal isolates. More than 50% EPEC and EAEC fecal isolates, and 60% EAEC meat isolates were simultaneously resistant to 6 or more antibiotics. Conclusion: Conclusively, the broiler meat sold in open markets of Pakistan was considerably contaminated with multi-drug resistant DEC. To mitigate the issue, the government should regulate the use of antibiotics at poultry farms and monitor slaughtering practices in slaughterer houses. DOI: 10.18502/jfqhc.8.2.6472

## کلمات کلیدی:

Escherichia coli, Drug Resistance, Microbial, Poultry, Pakistan

## لینک ثابت مقاله در پایگاه سیویلیکا:

