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Anti-Microbial Resistance Along Food Chain †

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Abstract: Anti-Microbial Resistance (AMR) is the result of the change in the microbes, which no longer responds to the medicines and make the infections harder to treat, and increase the risk of spreading the disease, which can result is fatal. AMR is usually depicted as a challenge to the world with the current circumstances. The AMR zoonotic pathogens in food are of a risk to public health. This creates a gene pool from which pathogenic bacteria picks its resistant traits, which affect the health of individuals. The AMR can be implemented first by spraying antibiotics on the food crops while in the agricultural procedure. This is said to be the Anti-Biotic Resistance (ABR). The second way of it is during the processing of crops into food items. A third and possibly the last way is due to the cross-contamination with AMR (mostly bacterial resistance) during the food processing. Raw food is mostly of a huge risk as it has no prevention or antimicrobial method already used. This generally creates an entry path for the microbes (bacteria) to get ingested into the body and cause high risks. To decrease the transfer of bacterial genes into the human body and increase the chances of maintaining the food at a good rate is preventive measures and antibiotic spraying. These AMR are a good sustaining process for the health and care of humans and animals, but the major drawback is said to be the usage of antibiotics as therapeutic drugs in veterinary husbandry. It is also used as a possibility to act as an Antibiotic Growth Promoter (AGP). The foodborne pathogenic microbes (bacteria) have led to the emergence and spread of AMR as an essential factor in the food chain.

Keywords: antimicrobial resistance; zoonotic pathogens; sustaining process; veterinary husbandry; antibiotic growth promoter

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Conflicts of Interest

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