ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD

INFORMATION PAPER

Development of an FSA Strategy in Relation to the Problem of Antimicrobial Resistance in the Food Chain

The attached paper outlines the Food Standards Agency's proposed approach to antimicrobial resistance in the food chain.

Comments in response to the bullets in paragraph 4 should be sent to the Secretariat by the end of June.

Secretariat June 2007

Development of an FSA Strategy in Relation to the Problem of Antimicrobial Resistance in the Food Chain

Background

- 1. In 1999 the ACMSF published their report on Microbial Antibiotic Resistance in relation to food safety (ACMSF, 1999). Although the primary driver for the emergence of antibiotic resistant bacteria in humans is believed to be the use, or overuse, of antibiotics in human medicine, the Report highlighted the need to better understand the role of the veterinary use of antibiotics and the effect of this on bacteria in the food chain. After assessing the scientific evidence, the ACMSF concluded that this is a route by which antibiotic resistant bacteria capable of causing disease may be introduced to humans. Since the publication of the ACMSF report in 1999 considerable research has been undertaken on the antimicrobial resistance of bacteria in the foodchain. Much of this work has focussed on two major foodborne zoonotic pathogens, Salmonella and Campylobacter. Assessment of antimicrobial resistance in these two key pathogens has included work funded by Defra and the FSA and spanned the whole of the foodchain from primary production, through foodstuffs to strains causing human disease.
- 2. However, as highlighted by the ACMSF report (1999) antimicrobial resistance is found in a range of other bacteria carried by animals that may be transmitted through the foodchain to humans including some commensal organisms. These organisms often do not cause what would be considered a classical foodborne disease and less research on their antimicrobial resistance traits has been undertaken. Additionally, pathogens are constantly evolving and new antimicrobial resistance traits may arise or organisms not normally considered to be foodborne may colonise new niches and potentially acquire a foodborne transmission route.

Key Issue

- 3. In light of this the Agency feels that it is appropriate to formulate a new strategy for approaching the problem of antimicrobial resistance in the foodchain to take into account the research that has been undertaken since the ACMSF report in 1999 and to include new and emerging threats in this area.
- 4. To help with the formulation of the strategy the Agency intends to hold a stakeholder meeting towards the end of 2007. Any strategy that is formulated needs to take into account the work being done by the departments responsible for Health and Agriculture and current problems identified in both these sectors.

Members are invited to:

- Provide suggestions on the themes to be covered at the stakeholder meeting.
- Provide suggestions for individuals or organisations to be approached for consultation.
- Provide suggestions for expert speakers.

References

Advisory Committee on the Microbiological Safety of Food (1999). Report on Microbial Antibiotic Resistance in Relation to Food Safety. TSO, 1999.