## Salmonella – A Brief Summary

By Esko Nurmi

Hopeasalmentie 22, SF-00570 Helsinki, Finland.

## Abstract

Salmonellosis is the main cause of human bacterial gastroenteritis in most European countries. Infections with Salmonella is usually subclinical, whereas clinical cases show symptoms with a wide range of severity. Infection is most commonly associated with the consumption of meat, especially poultry or pork, and eggs and their products.

Salmonella can enter the food chain at any point throughout its length. The principal reservoir of Salmonellae is the gastrointestinal tract of mammals and birds, but Salmonellae are able to survive and even multiply in many external environments.

In Norway, Sweden and Finland cost effective prevention methods have been used for several years to prevent and control Salmonellea infections. In addition, competitive exclusion (CE) and vaccination might be relevant as biological methods to prevent colonisation of bird intestines by enteropathogens, especially Salmonella.

Antibiotic drug resistance has been a problem since the start of the antibiotic era. The cause for anxiety is that more and more bacteria are becoming resistant, often to a whole range of antibiotics.

The debate on the use of antimicrobials in veterinary medicine and animal production dates back almost as long as the use itself. There is a clear evidence to show that antibacterial agents given to animals for growth promotion, prophylactic purposes or treatment induce a rise in the number of antibiotic resistant strains isolated from the animals. These bacteria may be transmitted to humans by several possible routes.

There are thus strong arguments for preventive efforts which have to be directed towards identifying real critical control points (HACCP) throughout the whole food chain, which starts from the farm and ends at the consumer's table.