

## ***Salmonella* in Swine Research Projects in Denmark and EU**

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*Salmonella* spp. in pork has become recognized as a major source for human salmonellosis in Denmark. Consequently, a number of research activities, surveillance and control programs have been initiated during the last 4 years.

### **Feedmills and feedstuff**

Feedmills were found to be contaminated with many serotypes and feedstuff was recognized as a source of *Salmonella* spp. in swine herds. Today, all feedmills follow a mandatory *Salmonella* spp. control program. In 1995, the level of *Salmonella* spp. in raw materials and product were 5% and 0-1%, respectively.

### **Diagnostic assays**

A new test for serological detection of specific *Salmonella* antibodies in swine serum and meat juice was developed, and is now used for routine surveillance of all breeding, multiplying and slaughter herds in Denmark.

### **Epidemiological typing methods**

Pheno and genotyping methods for routine surveillance and outbreak investigations were implemented or developed: serotyping in microtiter plates, phage typing, antibiogram typing, plasmid profiling, ribotyping, and pulse field gel electrophoresis.

### **National project: Reduction and control of *Salmonella* in pig herds**

A 3 year research project was launched in January 1994 as a joint venture between the Danish Ministry of Agriculture and Fisheries and the Federation of Danish Pig Producers and Slaughterhouses. The project should provide the scientific basis for the recommendations given to pig producers and consists of 7 parts: 1) HACCP in pig herds, 2) herd management strategies, 3) eradication strategies, 4) vaccination, 5) immunological background for the intracellular carrier state, 6) epidemiological investigations, 7) database-epidemiology.

### **EU project: *Salmonella* in pork (SALINPORK)**

A 3 year research project beginning in the spring 1996. The participating countries are with number of scientists in brackets: Denmark as coordinator (17), The Netherlands (13), UK (5), Greece (5), Sweden (5), and Germany (2). The over-all objective is to establish the epidemiological basis, to develop the diagnostic tools, and evaluate options for control of *Salmonella* in pork at the pre-harvest and at the harvest levels.