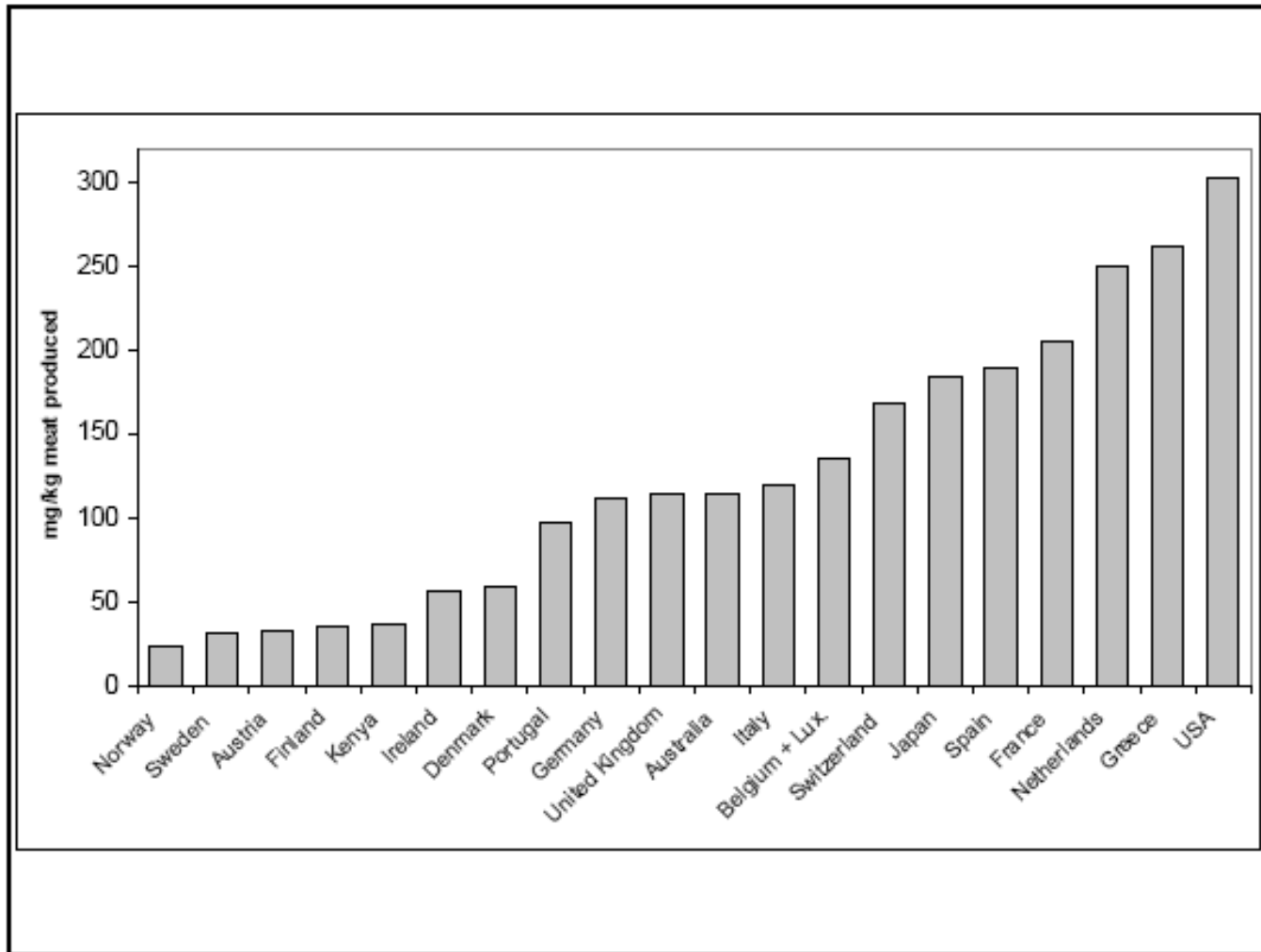
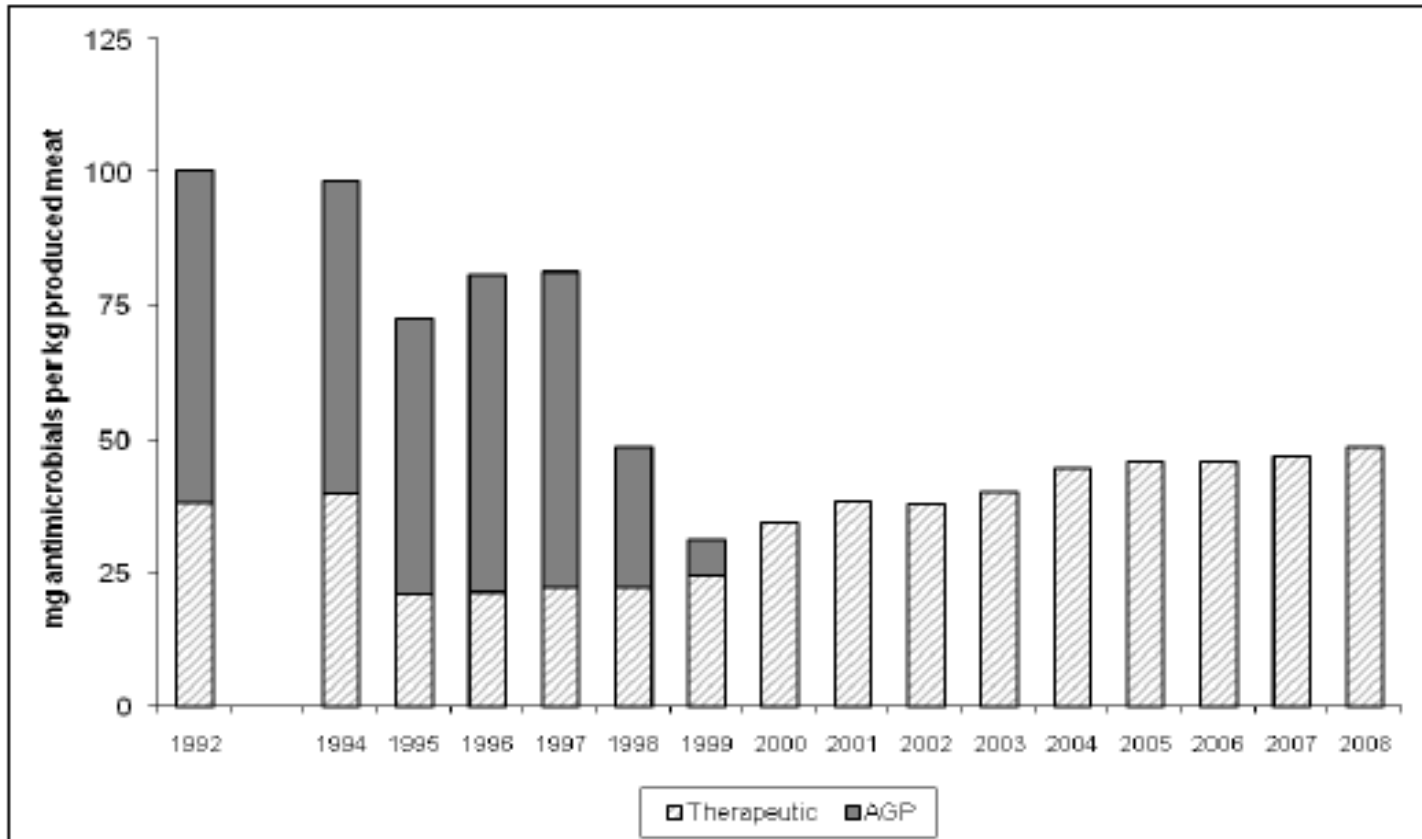


# Danish (and American) Antibiotic Usage Compared to the World



Source: Technical University of Denmark

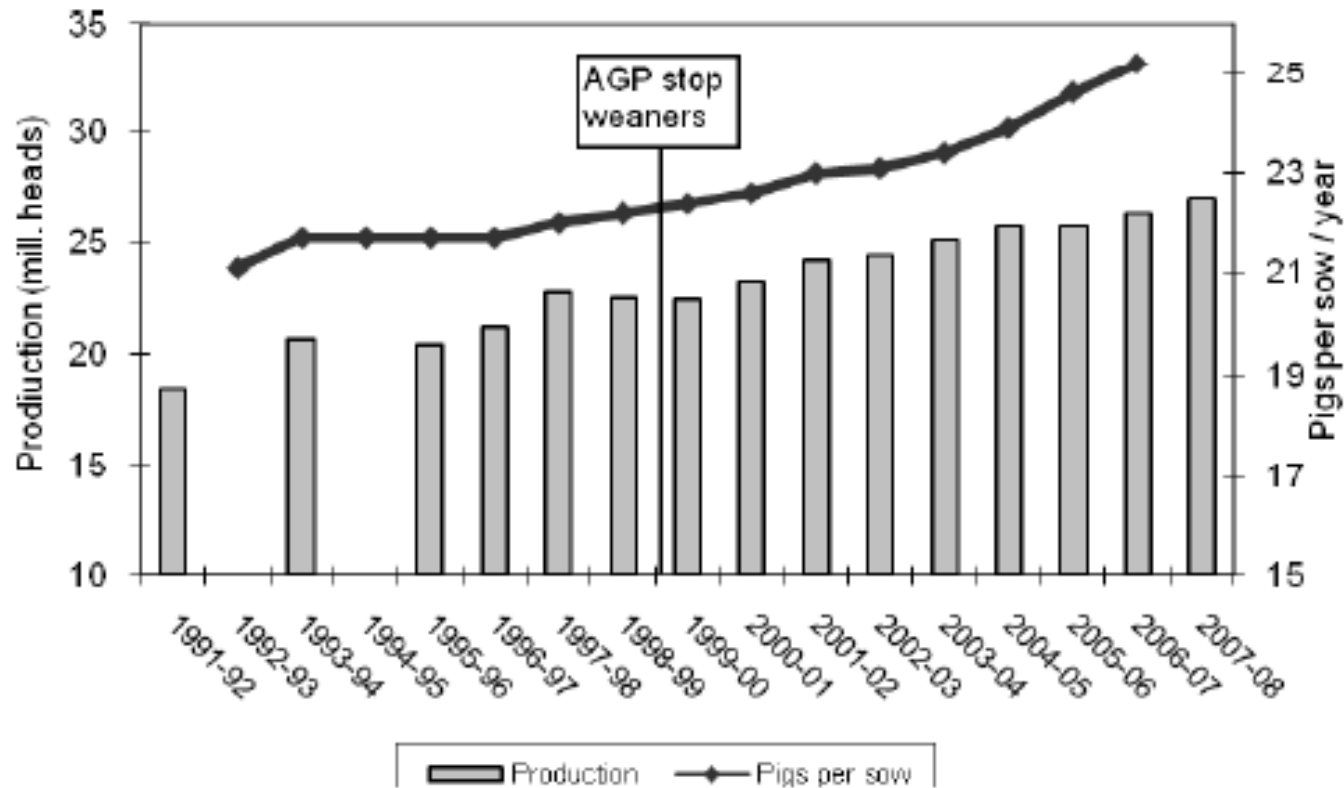
# Antibiotic Consumption in Denmark Before and After the 1998 Ban on Non-Therapeutic Use



**Consumption of antibiotics – therapeutic and non-therapeutic (AGP) - in swine in Denmark. Swine consume >80% of the total antibiotic usage in animals in Denmark.**

Source: Danish Veterinary and Food Administration

# Danish Swine Production Trends

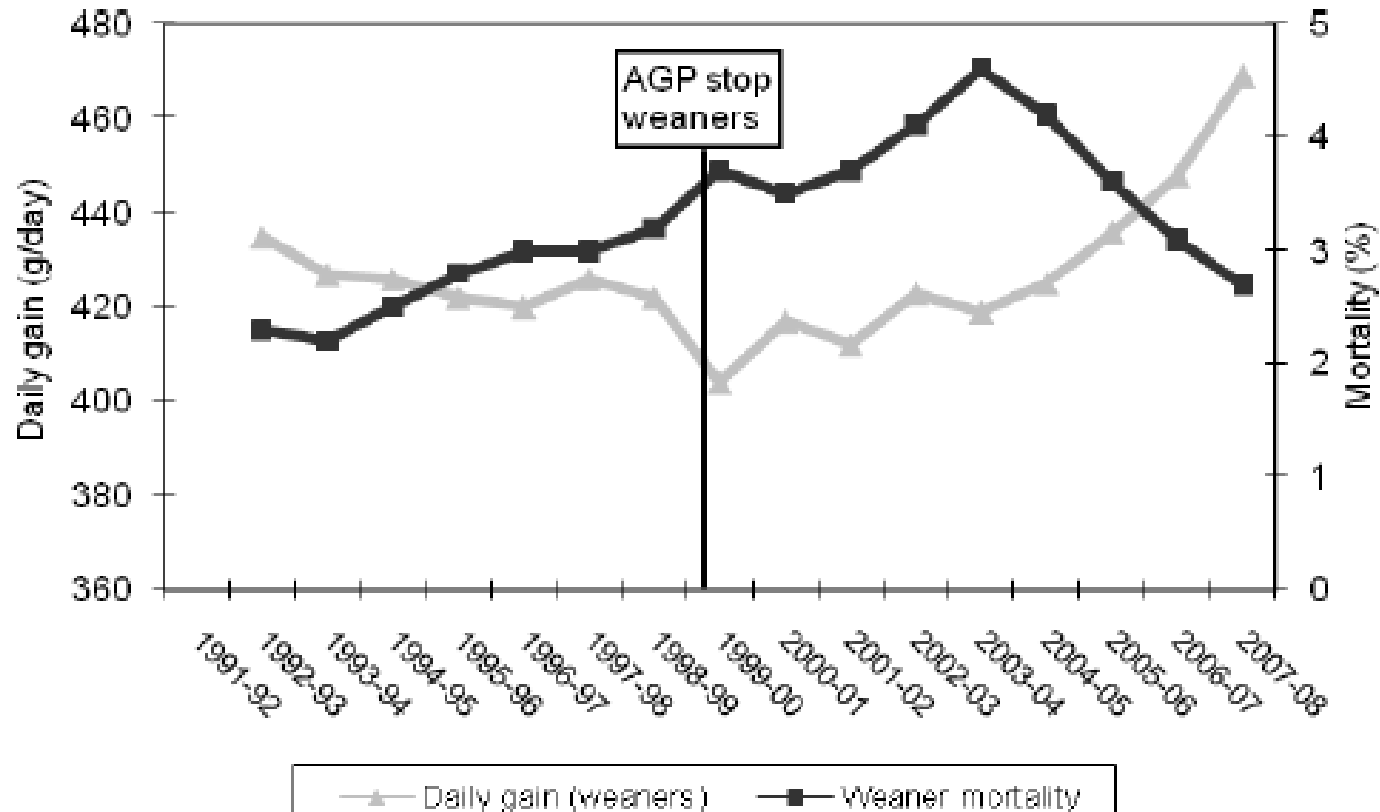


**Figure 2. Production of swine and No. pigs produced per sow/year in Denmark**

Note: “AGP stop” is the ban on non-therapeutic use of antibiotics in food animals.

Source: Danish Veterinary and Food Administration

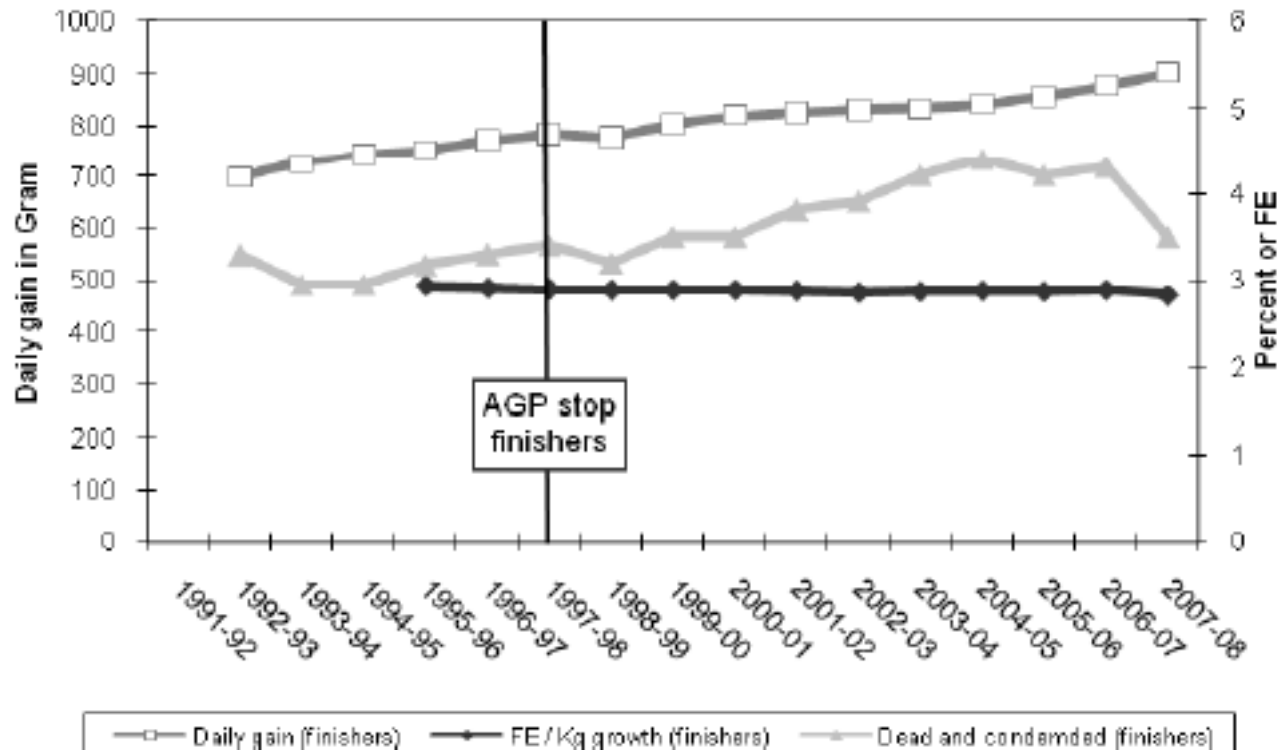
# Daily Weight Gain and Mortality in Young Danish Swine



Source: Danish Veterinary and Food Administration

# Daily Weight Gain and Mortality in Adult Swine in Denmark

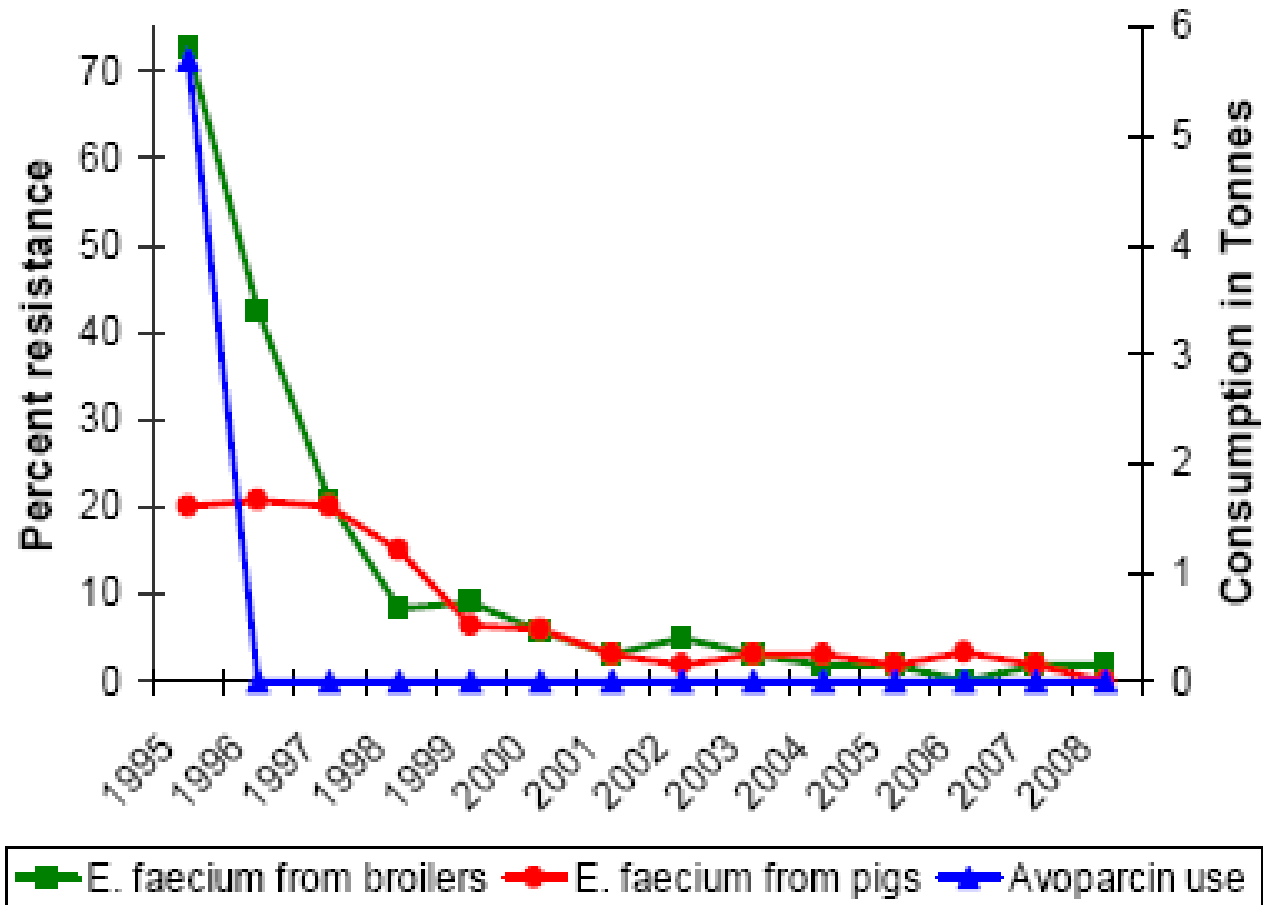
**Figure 3. Daily weight gain of weaner pigs and mortality of weaner pigs in Denmark**



**Figure 4. Daily weight gain, mortality and feed efficiency of finishing pigs in Denmark**

Source: Danish Veterinary and Food Administration

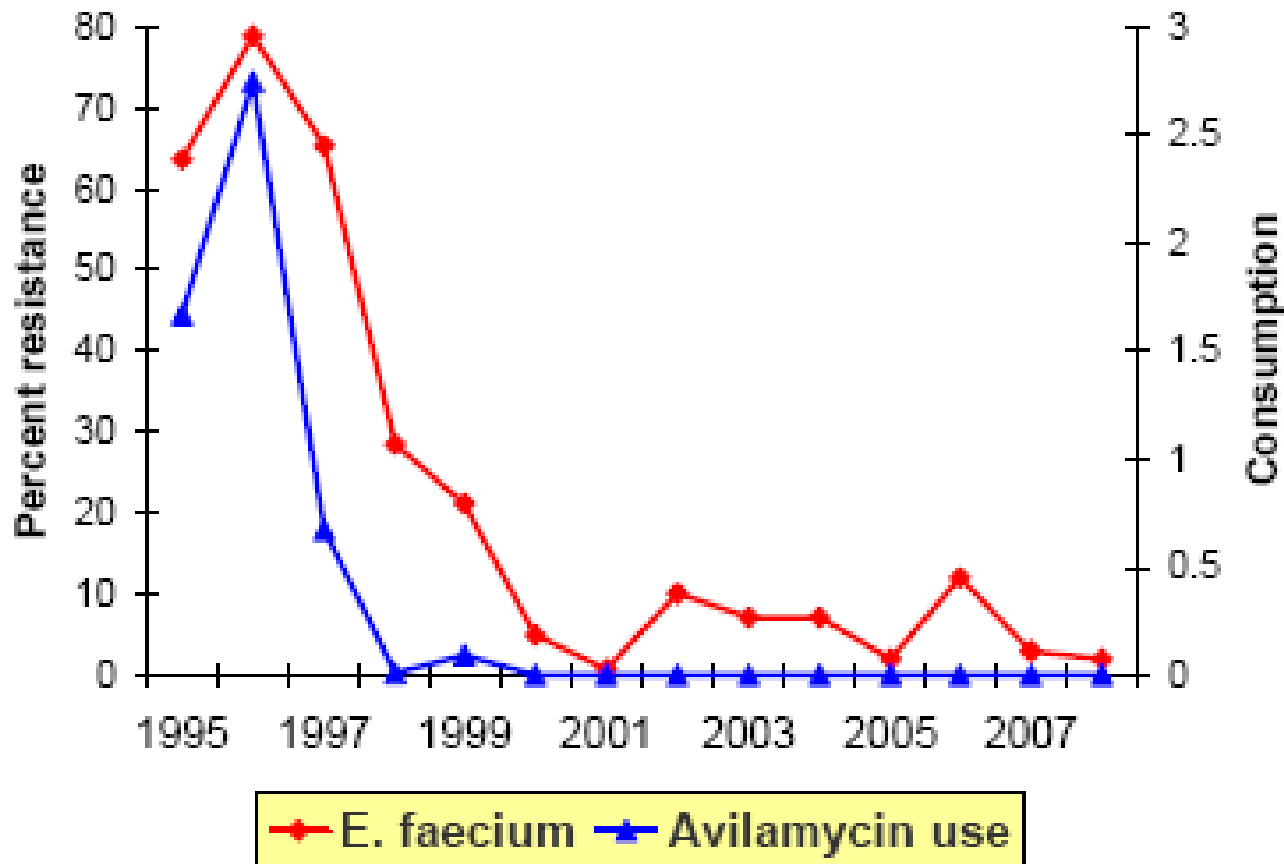
# Decline in Avoparcin Use and Related Antibiotic Resistance in Swine



Source: Technical University of Denmark

# Decline of Avilamycin Use and Related Antibiotic Resistance in Chickens

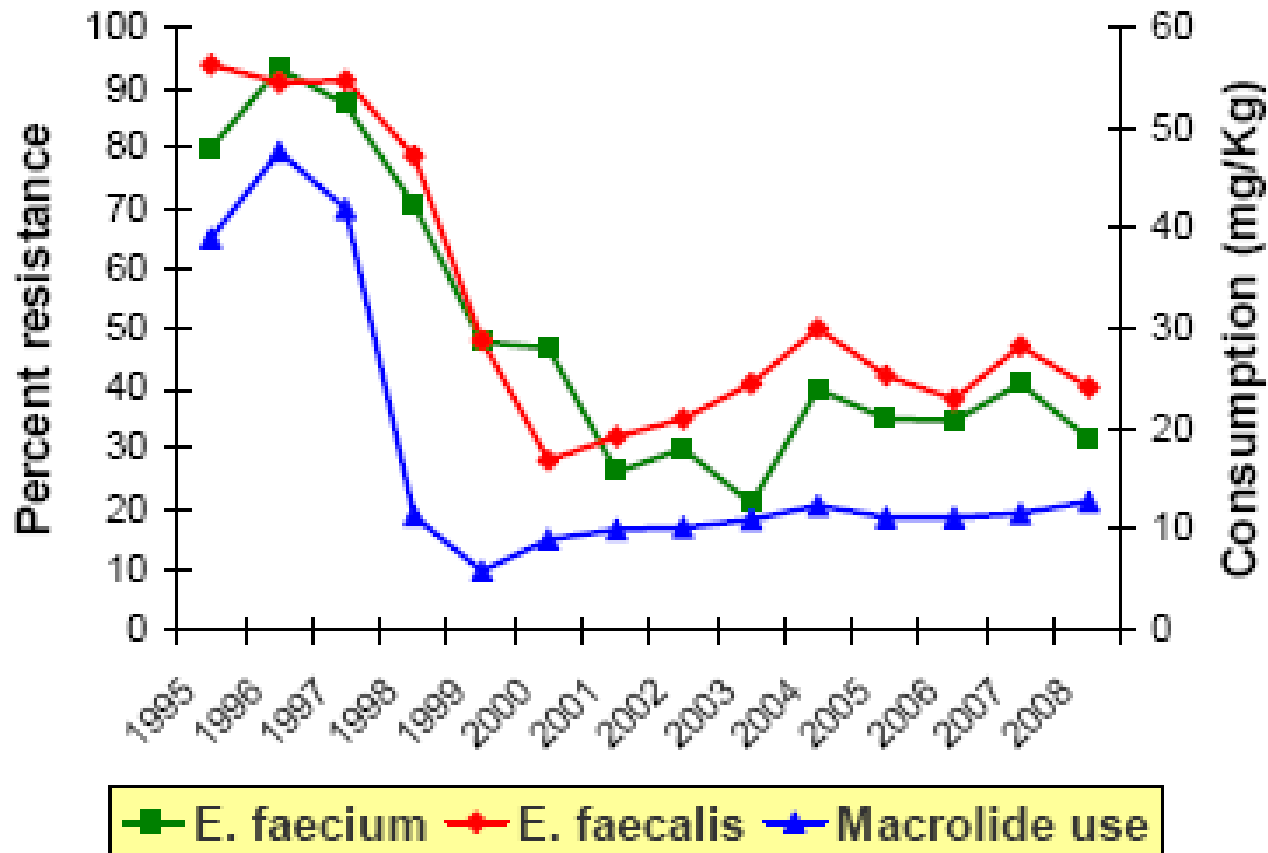
Occurrence of avilamycin resistance among broilers



Source: Technical University of Denmark

# Decline of Macrolide Use and Related Antibiotic Resistance in Swine

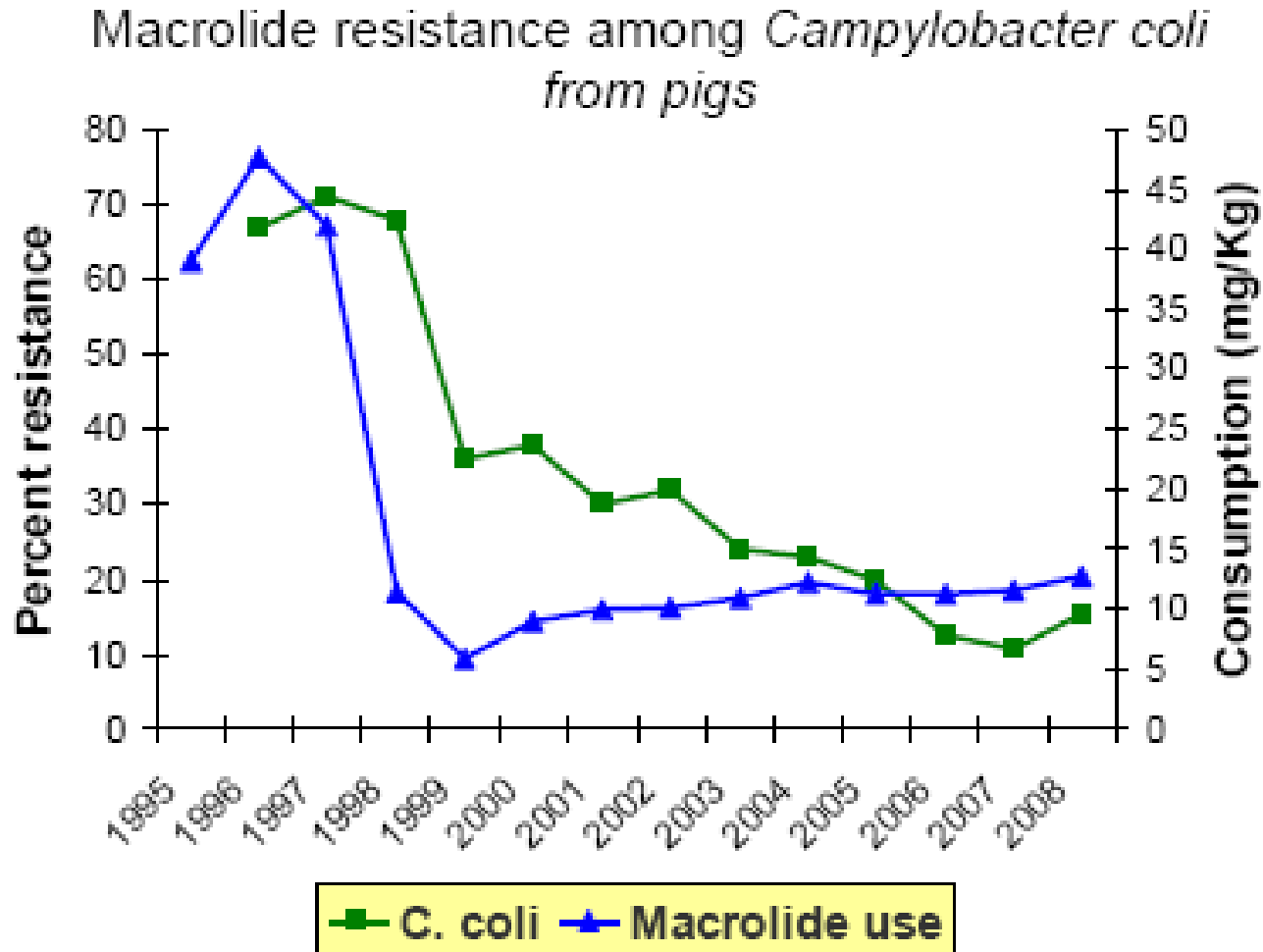
Occurrence of macrolide resistance among pigs



Source: Technical University of Denmark



# Decline of Macrolide Use and Related Antibiotic Resistance in Swine



Source: Technical University of Denmark

# Decline of Virginiamycin Use and Related Antibiotic Resistance in Broilers, Meat and Humans

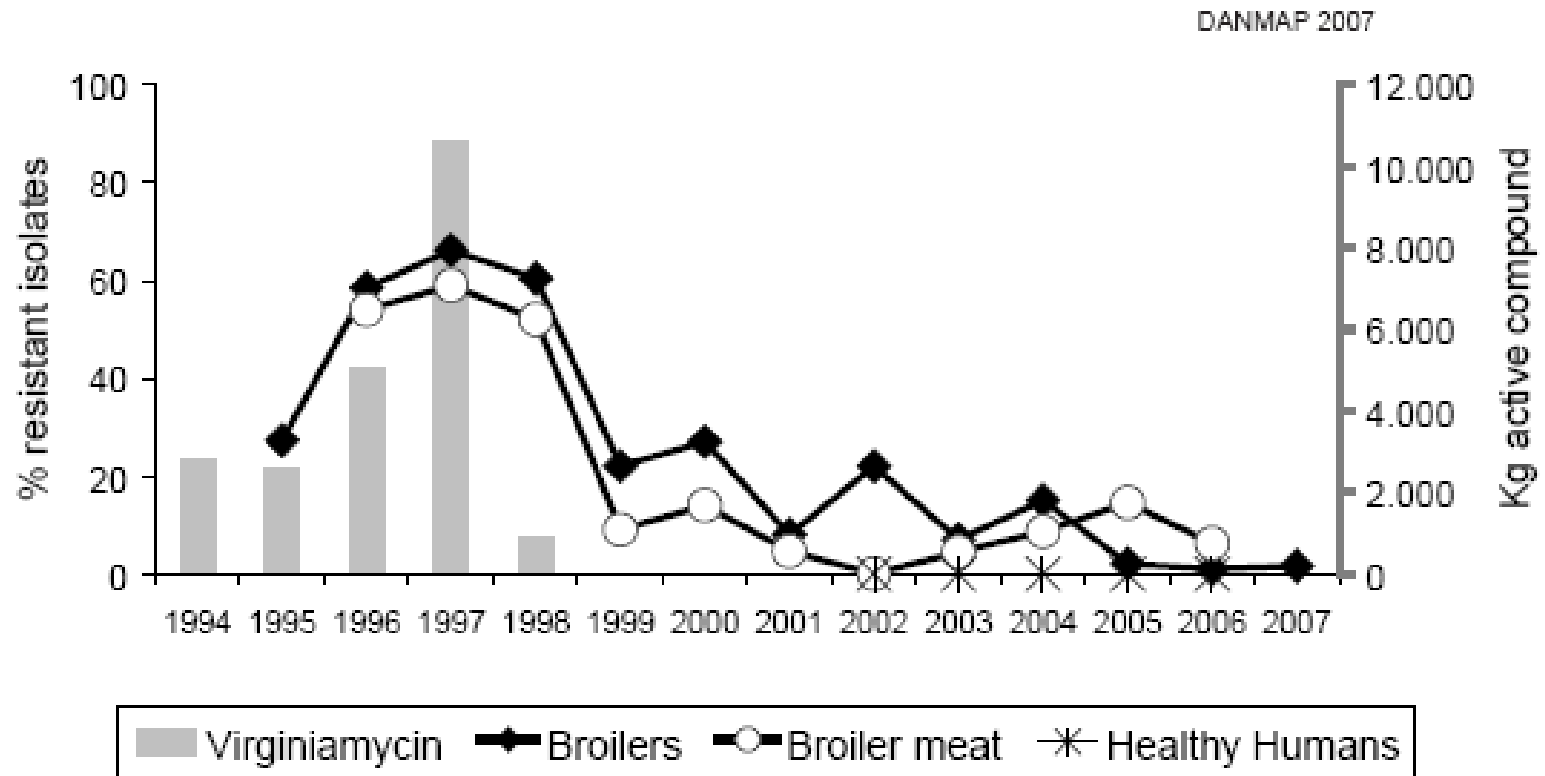


Figure 43. Trends in streptogramin resistance among *Enterococcus faecium* from broilers, broiler meat and healthy humans in the community and the consumption of the growth promoter virginiamycin in animals, Denmark

Source: Danish Integrated Antimicrobial Resistance Monitoring and Research Program

# Decline of Avoparcin Use and Related Antibiotic Resistance in Broilers, Meat and Humans

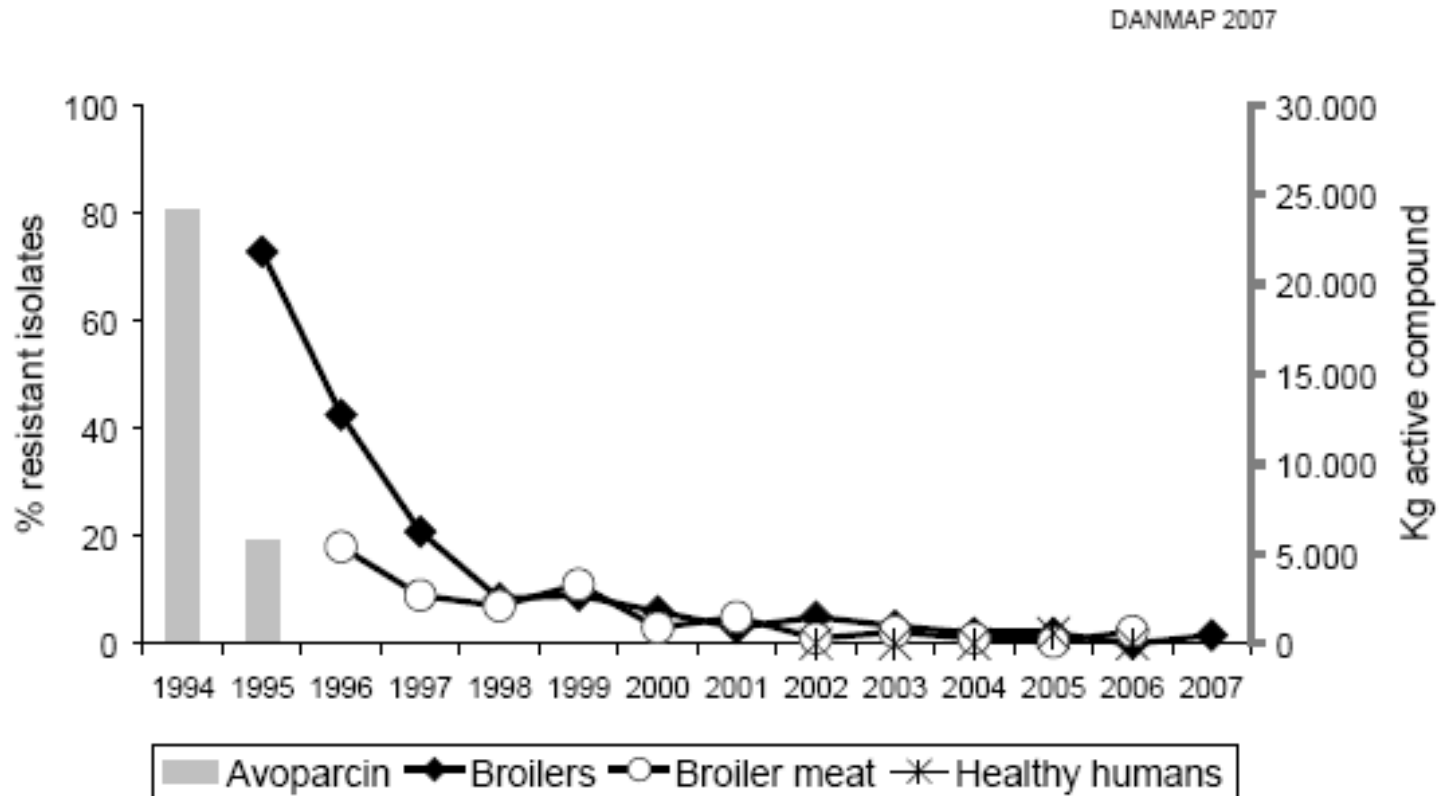


Figure 44. Trends in glycopeptide resistance among *Enterococcus faecium* from broilers, broiler meat and healthy humans in the community and consumption of the growth promoter avoparcin in animals, Denmark

# Decline of Avilamycin Use and Related Antibiotic Resistance in Broilers, Meat and Humans

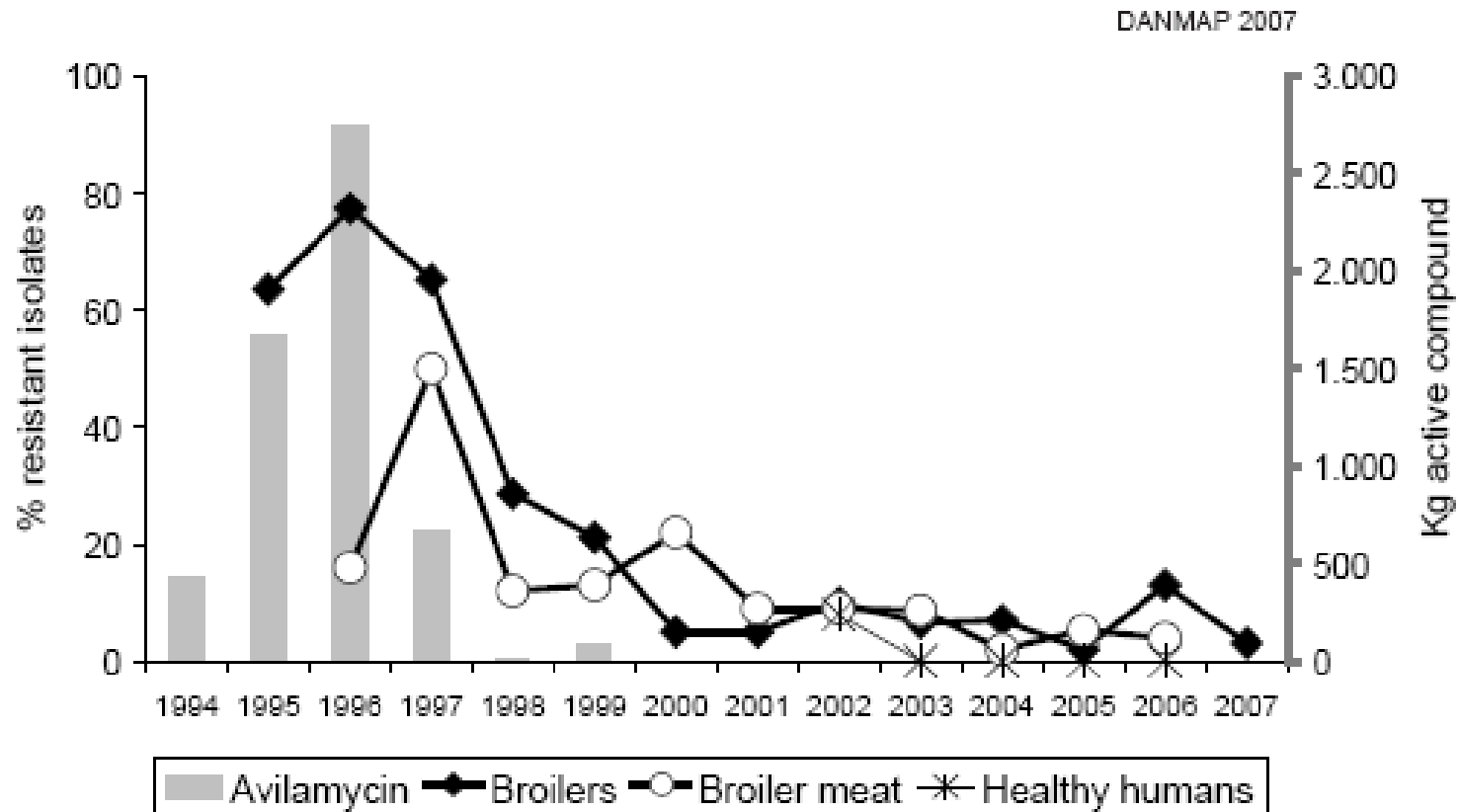


Figure 45. Trends in avilamycin resistance among *Enterococcus faecium* from broilers, broiler meat and healthy humans in the community and consumption of the growth promoter avilamycin in animals, Denmark

Source: Danish Integrated Antimicrobial Resistance Monitoring and Research Program

# Decline of Virginiamycin Use and Related Antibiotic Resistance in Swine, Meat and Humans

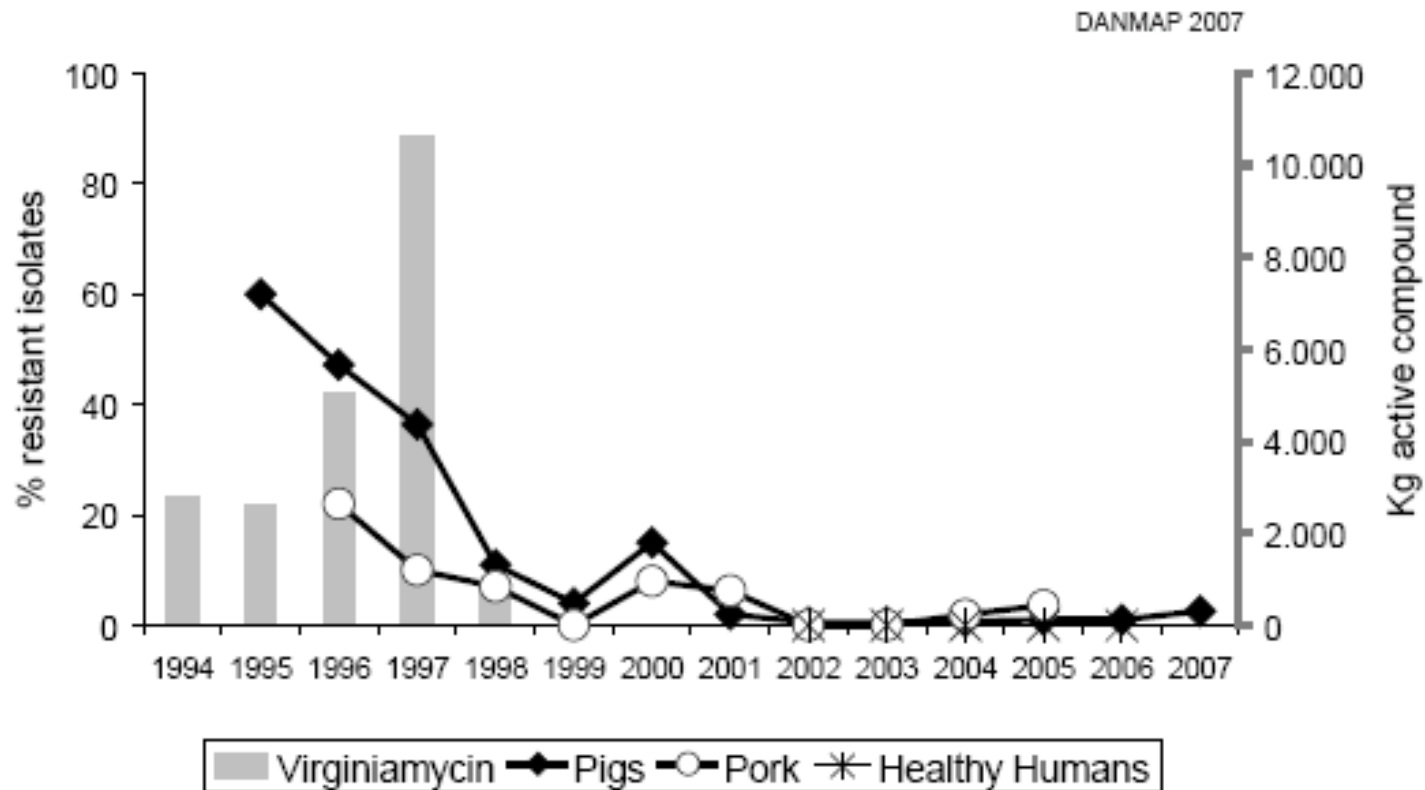


Figure 46. Trends in streptogramin resistance among *Enterococcus faecium* from pigs, pork and healthy humans in the community and the consumption of the growth promoter virginiamycin in animals, Denmark

Source: Danish Integrated Antimicrobial Resistance Monitoring and Research Program

# Decline of Avoparcin Use and Related Antibiotic Resistance in Pigs, Pork and Humans

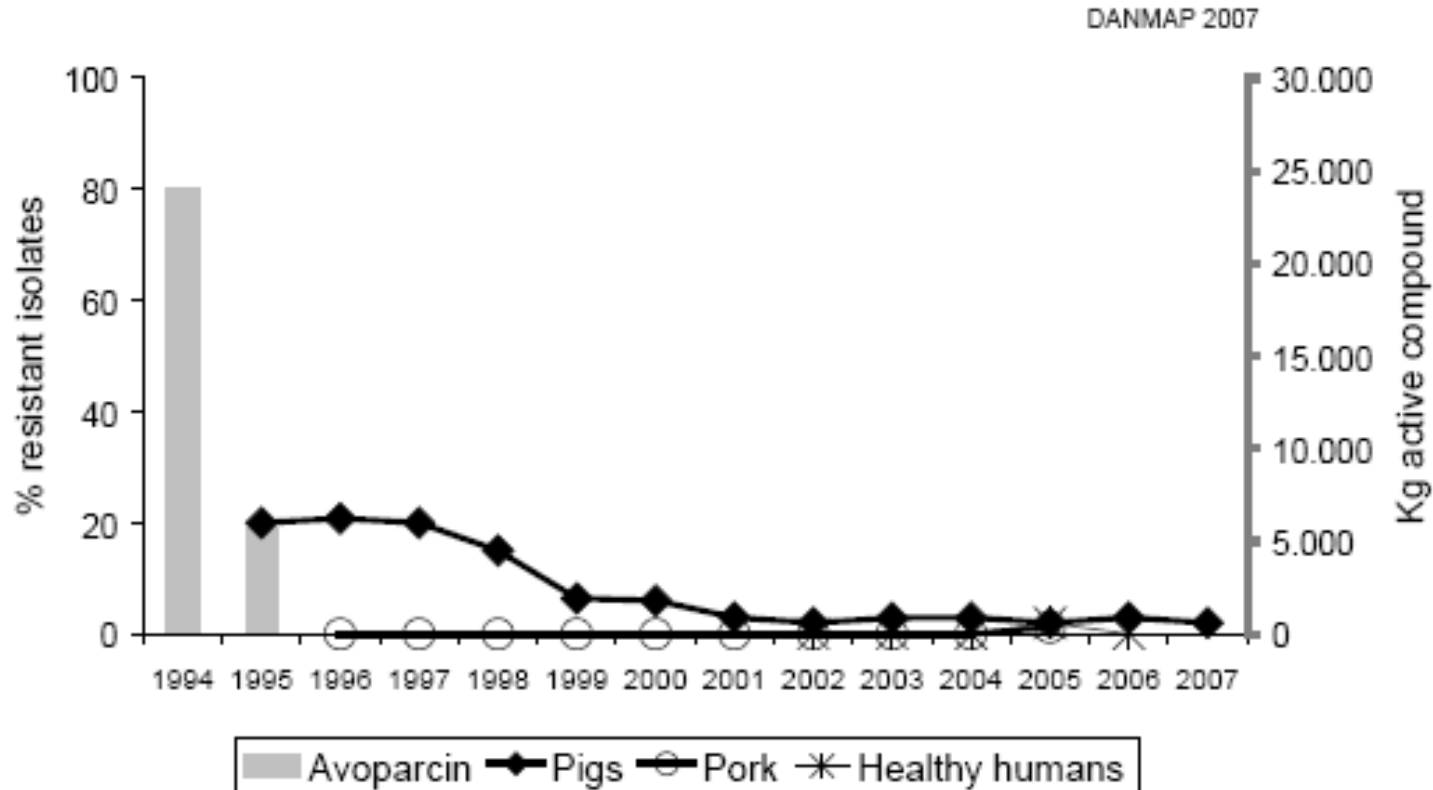


Figure 47. Trends in glycopeptide resistance among *Enterococcus faecium* from pigs, pork and healthy humans in the community and consumption of the growth promoter avoparcin in animals, Denmark

# Decline of Tetracycline Use and Related Antibiotic Resistance in Pigs, Pork and Humans

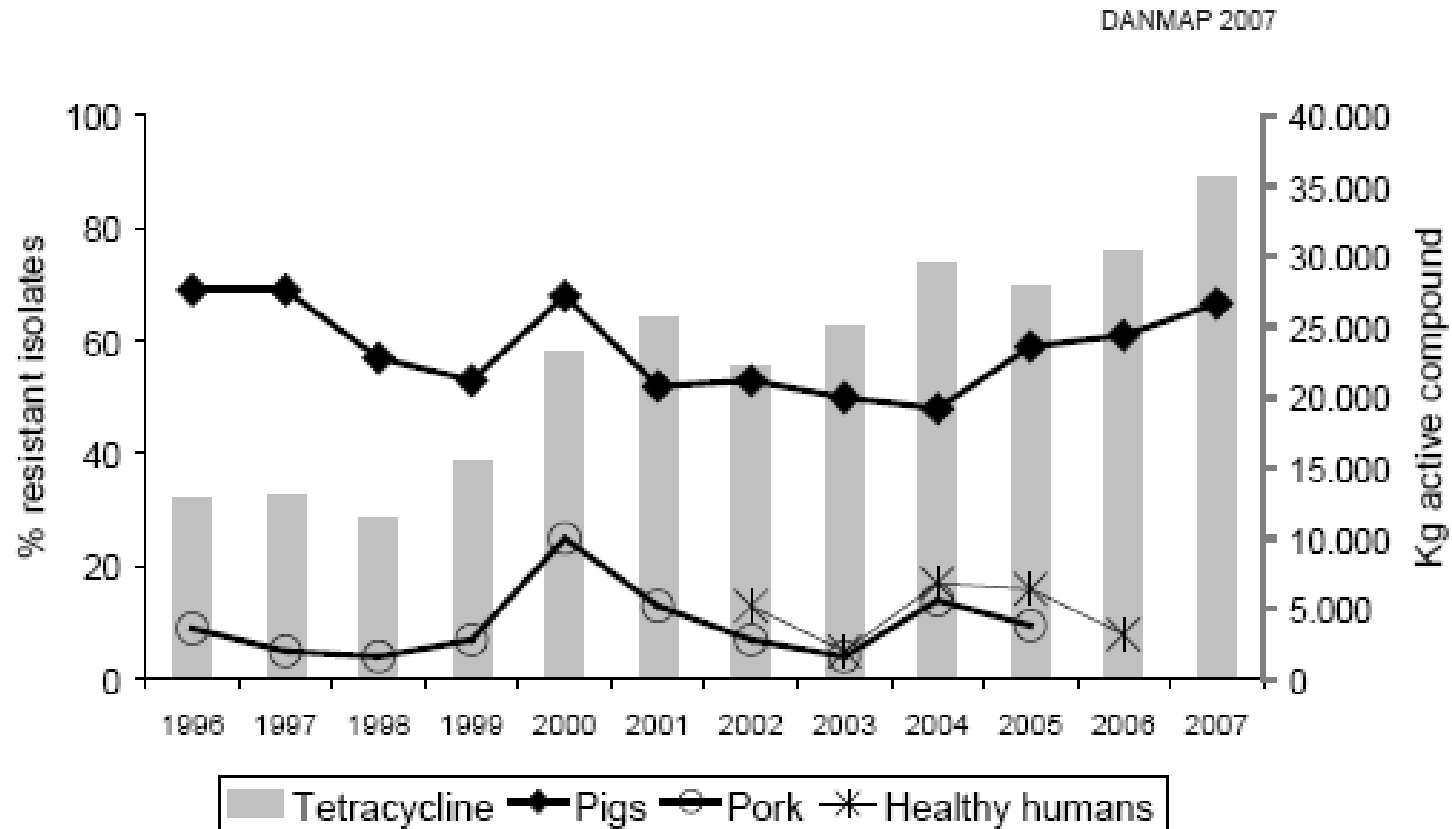


Figure 48. Trends in tetracycline resistance among *Enterococcus faecium* from pigs, pork and healthy humans and the consumption of tetracycline in pig production, Denmark

Source: Danish Integrated Antimicrobial resistance Monitoring and Research Program