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## Czech J. Food Sci.

Kročko M., Čanigová M., Ducková V.,

# J., Poston J.:

## Antibiotic resistance of *Enterococcus* species isolated from raw foods of animal origin in South West part of Slovakia

Czech J. Food Sci., 29 (2011): 654-659

We determined the prevalence and antibiotic resistance of enterococci isolated from raw foods of animal origin. All samples were positive for enterococci. The lowest count of enterococci was found in pork (2.00 log CFU/cm2), while bryndza cheese contained the highest count (4.99 log CFU/g). Among the 349 Enterococcus isolates, 49% were E. faecalis, 29% E. faecium, and 13% *Enterococcus* spp. Tetracycline and gentamicin resistance was the most common. We found the highest tetracycline resistance levels (91%) in isolates from poultry samples. The

isolates from the poultry samples also displayed multidrug resistance to all antibiotics tested. The most common vancomycin-resistant species in poultry and milk was *E. faecalis*. In contrast, the pork samples contained vancomycinresistant *E. faecium* isolates. It is interesting to note that vancomycin resistance in the pork and poultry samples was found only in combination with either four (28%) or all five (14%) of the tested antibiotics. Our results suggest that raw products of animal origin are possible reservoirs of multi-antibiotic resistant enterococci in the food chain.

### Keywords:

pathogenic species; probiotic culture; fermentation; microbiological analyse; milk; meat

[fulltext]

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