

(direct impacts) and knowledge and skills and herd health monitoring (indirect impacts). Factors strongly influenced by production diseases were milk performance, financial resources and labour capacity (directly and indirectly).

The ranking of variables at farm level revealed considerable differences between farms in terms of their most influential and influenced farm factors. As a consequence, very different strategies may be required to reduce production diseases on these farms.

Environmental mastitis

Environmental mastitis is caused by a wide variety of bacteria. Bovine faeces, indoor environment

and used pasture are major sources of these bacteria. A faeco-oral route may perpetuate and amplify some of these bacteria, such as *Klebsiella pneumoniae* and *Streptococcus agalactiae*.

Because of pressures on the use of antibiotics their use will reduce and the management of environmental mastitis is going to be increasingly based on prevention.

This will require a reduction in environmental exposure through bedding, pasture and pre-milking management and enhancement of the host's response to bacterial challenge by vaccines.

Efficacious vaccines are available for coliform mastitis, but the same is not true for mastitis caused by Gram positive bacteria.

Book Review

Food safety assurance and veterinary public health

Volume 7: Chemical hazards in foods of animal origin

Chemical hazards regularly occur in livestock production, as has been seen in recent years with melamine in China and fipronil in Holland, and both of these are presented as case studies in this book.

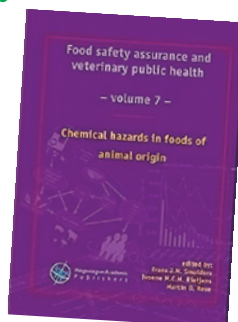
The book begins by considering the basics of the subject and addresses issues such as perceived and actual risks, risk analysis, assessing risk, key questions, toxicokinetics, analytical methods, detoxification and decontamination and management of chemical risks, before going on to consider residues of avoidable chemicals, such as veterinary drugs, pesticides and chemicals from food contact materials.

Unavoidable chemical contaminants are also addressed, including persistent organic pollutants (such as dioxins and PCBs), toxic metals, phytotoxins, marine biotoxins, mycotoxins, chemicals produced as a result of heating food, biogenic amines and polyamines.

Hazards associated with particular food types, such as meat, dairy products, fish, eggs and honey, are considered and the whole subject is put into context with seven case studies.

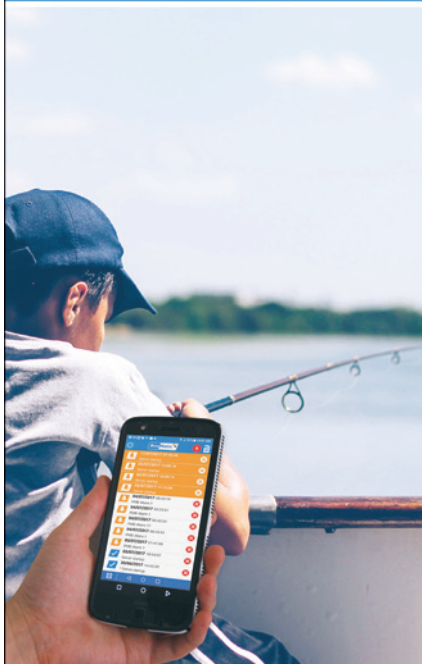
The text contains some gems of information, such as the role that dietary sources play in the daily intake of lead in European adults. For example, did you know that most of our daily intake comes from beverages (26%), fruit and vegetables (20%) and grains (16%)? In addition, the melamine problem was first noticed in 2002 in cases of atypical renal failure in household pets. The melamine-contaminated protein accounted for 6,000 pet deaths in Asia before the human problems of 2008.

This book is a fascinating read and a good addition to any veterinarian or nutritionist's personal library.



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