

ELLIS HORWOOD SERIES IN FOOD SCIENCE AND TECHNOLOGY

DETERMINATION OF VETERINARY RESIDUES IN FOOD

Neil T. Crosby



DETERMINATION OF VETERINARY RESIDUES IN FOOD

NEIL T. CROSBY B.Sc., Ph.D., FIFST

Head of Fertilizer and Feeding Stuffs

Laboratory of the Government Chemist, Teddington



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Preface

Food 'scares' have become almost commonplace in recent years, fuelled by 'media' speculation. Thus expressions such as salmonella, 'mad cow disease' and listeriosis are becoming familiar to the general public as well as to specialists in microbiology and agricultural science. Despite the media 'hype', there is no doubt that food poisoning cases are rising and becoming a cause for concern. The blame for many of these problems has been laid, probably unjustifiably, at the door of the animal feed trade and the farming industry. Questions have been raised as to the ethics of feeding processed animal protein to natural herbivores and to the use of antibiotics and other chemicals for prophylaxis and as growth promotants.

Answers to such problems can only be obtained if reliable data are available to make a judgement. This book seeks to discuss current problems in the industry concerning the presence and use of chemicals in animal feeding stuffs, and their residues which may pass into the human food chain. The scope of UK, European and world agriculture is discussed in Chapter 1, along with current practices in the feeding stuffs industry. The general analytical techniques available for the determination of chemical residues in foods and feeds are described in Chapter 2. The remainder of the book deals with specific classes of chemicals such as anthelmintics, antibiotics, coccidiostats, growth promoters, hormones, pesticides, mycotoxins, trace elements and microbiological substances. A final chapter summarizes the legal system in the UK, the EC and the USA covering the use of medicinal additives in feeds and residues in foods.

Information on the products on the market, their properties, chemical structures and methods for their determination in feeding stuffs and for the determination of residues in foods, is scattered widely throughout the commercial and scientific literature. This book attempts to bring together such information into one compact volume. With so extensive a literature it has been necessary to be selective. Preference has been given to readily available texts as opposed to those in obscure journals, symposia proceedings, etc. For those who wish to delve deeper into the subject some suggestions for further reading are provided at the end of the book.

I would like to thank Dr Peter Baker (Laboratory of the Government Chemist) and Dr David Watson (MAFF) for kindly reading the manuscript and making many useful suggestions for improvement.

May 1991

N. T. Crosby

