

Ottó Szenci • John F. Mee • Ulrich Bleul • Marcel A. M. Taverne

# **Bovine Prenatal, Perinatal and Neonatal Medicine**



Hungarian Association for Buiatrics, Budapest

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## Preface

**BOVINE PRENATAL, PERINATAL AND NEONATAL MEDICINE** is a comprehensive modern textbook providing the latest fundamental and practical information on the perinatal period in the cow and her calf/calves, with an emphasis on the dairy cow-calf dyad. It is a 'pracademic' book – using academic evidence to support clinical decision-making by veterinary practitioners and other field professionals. It has a global perspective with an international co-authorship of experts within the various subspecialisations of bovine perinatology.

### Perinatal period

Pregnancy and parturition are key stages within the reproductive cycle of the cow and the perinatal period is the most hazardous one in the life of the calf. Though delivery of a normal and healthy calf takes place in the majority of the cases, many complications may occur, especially shortly before, during and after birth of the foetus; the perinatal period. This perinatal period therefore deserves special attention within the field of bovine medicine. **BOVINE PRENATAL, PERINATAL AND NEONATAL MEDICINE** is the first veterinary textbook that specifically focuses on this period.

### Conception to weaning

Most of the normal and abnormal changes that occur in the dam and her conceptus in the perinatal period can only be understood with a basic knowledge of the development, physiology and pathophysiology of the relevant components, such as the pregnant uterus, the placenta, the foetus, and the newborn calf. In addition, the outcomes of the perinatal period are often predetermined by preceding developments since conception and the impacts of the perinatal period can influence the calf right up to weaning. Hence, **BOVINE PRENATAL, PERINATAL AND NEONATAL MEDICINE** covers both the entire length of gestation, commencing at conception and up to and including, weaning.

### Clinical content

Relevant clinical aspects that are addressed in **BOVINE PRENATAL, PERINATAL AND NEONATAL MEDICINE** include detection of pregnancy, monitoring of foetal wellbeing, detection and prevention of foetal mortality and abortion, pregnancy complications, induction of parturition, management of the normal and dystocic calving, the occurrence, investigation and prevention of perinatal mortality, birth asphyxia, care of the normal and abnormal perinate, feeding and housing of the dairy calf and some of the most important neonatal diseases.

### Dairy cow-calf dyad

**BOVINE PRENATAL, PERINATAL AND NEONATAL MEDICINE** focuses on the pregnant dairy cow and her calf, though reference is made to both beef animals and other species, where appropriate. This is because most of the scientific literature about the bovine perinatal period has been generated in dairy animals. However, many of the basic principles explained in this book can be extrapolated both within and across species.

### Readers

It is our goal that BOVINE PRENATAL, PERINATAL AND NEONATAL MEDICINE will provide a unique and comprehensive source of information for veterinary practitioners, veterinary laboratory diagnosticians, agricultural advisors, animal scientists, residents, veterinary and agricultural students, teachers and researchers on one of the most fascinating stages in the life of the domestic cow. It is our hope that in this way the information in this book will contribute to successful perinatal management thus improving the welfare of both the dam and her calf/calves.

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