Record Nr. UNINA9910337948403321 Nutraceuticals in Veterinary Medicine [[electronic resource] /] / edited **Titolo** by Ramesh C. Gupta, Ajay Srivastava, Rajiv Lall Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-04624-9 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (852 pages) Disciplina 613.2 Soggetti **Biochemistry** Veterinary medicine **Nutrition** Pharmacology Pharmacy **Animal Biochemistry** Veterinary Medicine/Veterinary Science Nutrition Pharmacology/Toxicology Drug Safety and Pharmacovigilance Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Part I. Common Nutraceuticals -- Standardized Turmeric and Curcumin Nota di contenuto -- Fenugreek in Health and Disease -- Neem Extract -- Nutraceutical Potential of Ginger -- Berberine -- Sea Buckthorn and Apricot Based Nutraceuticals -- Nigella Sativa -- Babool (Acacia nilotica) --Glucosinolates and Organosulfur Compounds -- Cannabis in Veterinary Medicine: Cannabinoid Therapies for Animals -- Essential Oils --Omega Fatty Acids -- Polyphenols and Flavonoids -- Antioxidants in Prevention and Treatment of Diseases and Toxicity -- Resveratrol: Biological Activities and Potential Use in Health and Disease -- Egg Shell Membranes for Veterinary Uses -- Egg derived Ovotransferrins and Lactoferrins -- Colostrum Antibodies, Egg Antibodies and Monoclonal Antibodies Providing Passive Immunity for Animals -- Part

II. Prebiotics, Probiotics, Synbiotics, and Antimicrobials -- Prebiotics

and Probiotics in Feed and Animal Health -- Synbiotics in Animal Health and Production -- Enzymes in Feed and Animal Health --Nutraceuticals Used as Antibacterial Alternatives in Animal Health and Disease -- Feed Additives in Animal Health -- Part III. Nutraceuticals in Organ- and System-Disorders -- Nutraceuticals in Arthritis --Nutraceuticals for Antiaging -- Nutraceuticals for Cognitive Dysfunction -- Nutraceuticals for Calming and Stress -- Nutraceuticals in Cardiovascular Diseases -- Nutraceuticals in Hepatic and Pancreatic Diseases -- Nutraceuticals in Periodontal Health and Diseases in Dogs and Cats -- Nutraceuticals in Gastrointestinal Conditions --Nutraceuticals in Reproductive Disorders -- Nutraceuticals in Genitourinary Maladies -- Nutraceuticals in Obesity and Metabolic Disorders -- Nutraceuticals for Diabetes in Dogs and Cats --Nutraceuticals in Wound Healing: A Special Focus on Chromolaena Odorata as Guardian of Health with Broad Spectrum of Biological Activities -- Nutraceuticals in Dermatological Disorders --Nutraceuticals in Mastitis -- Nutraceuticals in Immune Disorders --Plant and Food Derived Immunomodulators as Nutraceuticals for Performance Enhancing Activities -- Nutraceuticals for the Prevention and Cure of Cancer -- Expanding Metabolic Targets in Cancer by Select Combinations of Vitamin C and EGCG with Different Natural Compounds -- Nutraceuticals for Control of Ticks, fleas and other Ectoparasites -- Part IV. Nutraceuticals in Specific Animal Species --Nutraceuticals in Cattle Health and Diseases -- Nutraceuticals in Equine Medicine -- Nutraceuticals for Camelids -- Nutraceuticals in Poultry Health and Diseases -- Part V -- Safety and Toxicity Evaluation of Nutroceuticals and Functional Foods -- Safety and Toxicity Evaluation of Nutraceuticals in Animal Models -- Evaluation of Safety and Efficacy of Nutraceuticals using Drosophila as an in vivo Tool -- Biomarkers of Foods and Nutraceuticals: Applications in Efficacy, Safety and Therapy -- Toxicology and Drug Interactions of Nutraceuticals -- Part VI. Newer Trends in Nutraceutical Research and Product Development --Proteomics in the Evaluation of Nutraceuticals and Functional Foods --Nanoparticles and Molecular Delivery System for Nutraceuticals Bioavailability -- Nanosupplements and Animal Health -- Veterinary Nutraceuticals Stability Testing -- Part VII. Regulatory Aspects and Country-Specific Requirements for Nutraceuticals -- Basic Regulatory Guidelines for Veterinary Nutraceuticals -- Regulatory Aspects of Veterinary Nutraceuticals in the USA and Canada -- Regulatory Guidelines for Nutraceuticals in the European Union -- Regulatory Guidelines for Nutraceuticals and Food Supplements in India -- Uses and Regulatory Guidelines for Nutraceuticals in China -- Regulation of Nutraceuticals in Australia and New Zealand -- Regulatory Guidelines for Nutraceuticals and Dietary Supplements for Animals in Turkey --Uses and Regulation of Nutraceuticals for Animals in the Philippines --Regulatory Guidelines for Nutraceuticals in South Africa.

Sommario/riassunto

This unique work compiles the latest knowledge around veterinary nutraceuticals, commonly referred to as dietary supplements, from ingredients to final products in a single source. More than sixty chapters organized in seven sections collate all related aspects of nutraceutical research in animal health and disease, among them many novel topics: common nutraceutical ingredients (Section-I), prebiotics, probiotics, synbiotics, enzymes and antibacterial alternatives (Section-II), applications of nutraceuticals in prevention and treatment of various diseases such as arthritis, periodontitis, diabetes, cognitive dysfunctions, mastitis, wounds, immune disorders, and cancer (Section-III), utilization of nutraceuticals in specific animal species (Section-IV), safety and toxicity evaluation of nutraceuticals and

functional foods (Section-V), recent trends in nutraceutical research and product development (Section-VI), as well as regulatory aspects for nutraceuticals (Section-VII). The future of nutraceuticals and functional foods in veterinary medicine seems bright, as novel nutraceuticals will emerge and new uses of old agents will be discovered. International contributors to this book cover a variety of specialties in veterinary medicine, pharmacology, pharmacognosy, toxicology, chemistry, medicinal chemistry, biochemistry, physiology, nutrition, drug development, regulatory frameworks, and the nutraceutical industry. This is a highly informative and carefully presented book, providing scientific insight for academia, veterinarians, governmental and regulatory agencies with an interest in animal nutrition, complementary veterinary medicine, nutraceutical product development and research.