Short CV for emeritus Professor Nick Dimitri Costa

Professor Nick Dimitri Costa retired from Murdoch University in 2011 and was honoured with the lifetime title of emeritus Professor by the university. Prior to this he was appointed to the inaugural Chair in Sustainable Agriculture and Dean of the School of Environmental Science at Murdoch University in 2005. During his last year on academic staff, Professor Costa served for substantial periods as acting Dean of the Faculties of Minerals and Energy and Sustainability Environmental and Life Sciences. Professor Costa's research background is in companion animal nutrition, mineral nutrition of livestock, rumen ecology, and sustainable grazing systems for cattle. His current research aims to reduce the environmental footprint of livestock production in Australia through more sustainable production systems. Other projects include 1) the evaluation of gene markers for maternal efficiency traits in sustainable beef production systems that are funded by the Beef Genetic Technologies CRC, and 2) mineral supplementation of livestock in the Tibetan Autonomous Region of China, a project funded by ACIAR. In addition Professor emeritus Nick Dimitri Costa has consulted on canine and feline nutrition since 1985 to a number of pet food companies, most prominently Mars Group, IAMA Corporation through Hunts Pet Foods, Advanced Pet Care of Australia Pty Ltd, Prime Foods Exports Pty Ltd and NB Petfoods Pty Ltd (T/as Natural Balance (WA)). During his consultancies he has formulated foods for dogs, cats, aquaculture and zoo animals, as well as providing technical advice to these companies.

Professor Costa graduated with first class Honours in Agricultural Science at The University of Adelaide in 1973, and was awarded his PhD in Agricultural Biochemistry from The University of Adelaide in 1977. Professor Costa has held appointments in biochemistry and nutrition at Murdoch University's School of Veterinary and Biomedical Science from 1977 – 2005. He was also Honorary Editor of the Nutrition Society of Australia (NSA) from 1989 – 1993 and Vice-President of the NSA from 1997-1999. He was the Australian representative on the International Parent Committee for Trace Elements in Man and Animals from 1992 – 2002. Since 2007, Professor Costa has been the Chair of Meat & Livestock Australia's National Environment Advisory Panel. He is the author or co-author of more than 130 scientific publications including 2 books on mineral metabolism in animals. In his current research area of sustainable agriculture, he has been invited to present plenary talks on agriculture, particularly livestock production, and climate change to national meetings of the Dieticians Association of Australia, the Australian Industry of Food Science and Technology, the Australian Poultry Science Society, and the Nutrition Society of Australia, and international forums sponsored by BioMIn in northern and southern Asia.

Curriculum Vitae

Nick Dimitri COSTA

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Qualifications

BAgSc University of Adelaide (1972) BAgSc (Hons 1) University of Adelaide (1973) PhD University of Adelaide (1977)

Appointments

1977	Lecturer in Veterinary Biochemistry and Nutrition
	School of Veterinary Studies, Murdoch University, WA
1988 –	Head of Biochemistry and Nutrition, in School of Veterinary Biology and
2000	Biomedical of the Division of Veterinary Science
2000 –	Head of the School of Veterinary Biology and Biomedical Sciences during
2005	accreditation of the Division of Veterinary Science at Murdoch University by the
	American Veterinary Medical Association
2005 -	Chair in Sustainable Agriculture
	School of Environmental Science, Murdoch University, WA
2005 -	Dean, School of Environmental Science
2005 -	Academic Coordinator and Project Team; Co-location Dept of Agriculture and
	Food WA (DAFWA) & Biosecurity Section of DAFWA
2007 -	Chair, National Environmental Advisory Panel; MLA
2010 -	acting Dean of the Faculties of Minerals and Energy and Sustainability
2011	Environmental and Life Sciences

Dean of the School of Environmental Science and Professor of Sustainable Agriculture since July 2005. Research leader who has obtained over \$4m in research grants from the Australian Research Council, Meat and Livestock Australia, Beef CRC I, II & III, The Australian Sheep Industry CRC, Elanco Animal Health and Live Corp. Honorary Editor of the Nutrition Society of Australia (NSA) from 1990-1994, Vice-President of the NSA in 1997-1999. Chair of the National Environmental Advisory Panel for Meat and Livestock Australia [MLA] since 2007. Tertiary institutions representative on Radiological Council, a Western Australian State statutory committee with oversight of the Radiation Safety Act for WA from 1984 - 2003.

Seminal Publications/Journal Editorial Board Memberships

More than 130 publications: including 55 refereed papers, 35 refereed conference papers, 4 book chapter, 33 non-refereed conference papers, three published reviews, 5 industry reports, and 5 volumes of edited proceedings. Below are some recent publications indicating areas of expertise and interest:

- 1. **Costa, N.D.** (2007) Reducing the meat and livestock industry's environmental footprint. *Nutrition and Dietetics* 64 (suppl. 4): S185-S191.
- 2. Amantana A., Vorachek W.R., Butler J.A., **Costa N.D.**, Whanger PD (2002). 'Effect of copper, zinc and cadmium on the promoter of selenoprotein W in glial and myoblast cells.' *J Inorg. Biochem.* 91 (2):356-362.
- 3. Bramley, E, Lean I.J., Fulkerson, W.J. and **Costa, N.D**. Case study: Clinical acidosis in a Gippsland dairy herd. (2005). *Australian Veterinary Journal* 83: 347-352.
- 4. **Costa, N.D.**, Accioly, J. and Cake, M. (2003). 'Determining critical atmospheric ammonia levels for cattle, sheep and goats.' ISBN 1 74036 296 9, Published by Meat & Livestock Australia Ltd, Brisbane, Qld, Australia.
- Suter, R.J. and Costa, N.D. (2004). 'Nutritional Requirements of Growing Lambs: Mineral supplementation of sheep in feedlots.' *In* Feed Grain for Sheep Meat Production pp25-32, ISBN 0-9752198-0-4 Western Australian Department of Agriculture Bentley WA Australia.
- 6. **Costa, N.D.** and Adams, G. (1996) Nutrition of the Dog and Cat *Murdoch University Foundation for Continuing Veterinary Education*, ISBN 0-86905-476-7, Murdoch, Western Australia, Australia.
- 7. **Costa, N.D.** and Labuc, R.H. (1994) Case Report: Efficacy of Oral Carnitine Therapy for Dilated Cardiomyopathy in Boxer Dogs *J. Nutr.* **124**, 2687S-2692S.

Undergraduate Teaching and Postgraduate Supervision

Awarded Vice Chancellor's Teaching Excellence Prize for undergraduate teaching (1995). In addition, graduated 12 PhD and 2 Masters, and currently supervising a further 2.

International Scientific Recognition

Australian representative on International Parent Committee for Trace Element Metabolism in Man and Animals (TEMA) from 1990 to 2002.

Consultancies

Advanced Pet Care of Australia Pty Ltd / Prime Foods Exports Pty Ltd : Director and Nutritionist responsible for formulation, product development and trouble shooting. 1998 – present.

NB Petfoods Pty Ltd T/as Natural Balance (WA): Nutritionist responsible for formulation, product development and trouble shooting. 1998 – present.

Mars Group: Workshops in Companion Animal Nutrition for Mars for New Sales Staff: Albury Wadonga 1988 – 1994

Mars Group: Workshops in Companion Animal Nutrition for new Sales Staff in North and

Eastern Asia: Hong Kong Jan 2004

Patent Challenges on behalf of Mars Group and Goold Group