Nomination of Tom Lonsdale for the College Prize of the Australian College of Veterinary Scientists for 2004

The College Prize is awarded to veterinarians, in practice, who have made a significant contribution to knowledge and understanding, but generally without the benefit of institutional or academic support. I cannot think of a more deserving recipient for this prestigious award than Dr Tom Lonsdale. It is important to emphasise that the contribution is largely in the realm of preventative medicine, a much neglected area of research in small animal medicine.

Dr Lonsdale graduated from the Royal Veterinary College in 1972. After several years of mixed and small animal experience in the UK Tom emigrated to Australia and soon thereafter set up Riverstone Veterinary Hospital. He built-up this practice over a number of years, from a small clinic to a busy three man practice. I do not believe Dr Lonsdale had any claims on being a brilliantly incisive diagnostician, or an opinion leader; rather he saw himself as a mainstream veterinary surgeon in suburban/semi-rural practice, and as a part of the local community. In the course of his routine work, Dr Lonsdale recognised that a subset of his patients appeared to have severe periodontal disease that appeared to compromise their overall health status. He initially treated these patients in a conventional manner, by multiple extractions, scaling, polishing and antimicrobial therapy. Somewhere along the line he started additionally treating these cases by providing a "natural diet" in place of the commercial kibble and canned food that most of these patients had been fed. Tom was by no means the first person to suggest the feeding of "natural diets", and others in Australia, notably Ian Billinghurst, had advocated and popularised these diets some years previously. His contribution has been to take the concept much further, providing clearer guidelines, conducting clinical research in a practice setting and drawing attention to his findings through traditional veterinary avenues, the media and the internet.

As is often the case in practice, the marked improvement in the clinical status of a small number of these patients had a great impact on Tom's thinking and overall conceptual approach. Not only did the oral hygiene and periodontium of these patients improve following dental therapy and a change in diet, but so too did their overall health, vigour and level of activity. The marked improvement of a number of these "index cases" made Tom rethink the way he routinely recommended feeding cats and dogs during vaccination examinations and annual check-ups. Accordingly, he started advocating a natural diet consisting predominantly of fresh, raw, meaty bones for all his patients with periodontal disease, and subsequently for *all* of his patients. His rationale was essentially that this is how animals eat in the wild, and that regular consumption of natural food provided the teeth 'cleaning and flossing' necessary to prevent plaque formation, tartar accumulation and the other clinical stigmata of periodontal disease.

Through careful record keeping, Dr Lonsdale convinced himself, and his associates Allan Bennet and Jason Pollard, that there were many health benefits that could be attributed to the feeding of a natural diet rather than the synthetic diets widely recommended by the veterinary establishment at that time. Colleagues such as Breck Muir had independently come to similar conclusions, and provided moral and intellectual support for his clinical theories. Dr Lonsdale became progressively preoccupied with what he thought to be a most important clinical finding. As well as an improvement in overall health and vigour, he experimented with treating a variety of disease conditions by dental/periodontal therapy and a change to a natural diet. Interestingly, a small number of examples of a variety of poorly understood syndromes appeared to improve markedly with this approach including lymphocytic/plasmacytic pododermatitis, allergic dermatitis, white-dog shaker syndrome, feline lower urinary tract disease to name just a few. Other diseases, eg gastric dilatation torsion appeared to decrease markedly in prevalence in patients consuming a natural diet. Dr Lonsdale started to talk to other veterinarians outside his practice about his findings, commenced writing contributions to Veterinary Newsletters, such as the Control and Therapy Series of the Post Graduate Foundation of Veterinary Science and presented his findings to veterinarians at a well attended Sydney Metropolitan Practitioners Branch meeting. These articles and talks were illustrated by his experiences in practice, and information he had gleaned from the veterinary and wider literature. Subsequently, he conducted a small clinical study which demonstrated that some dogs with severe periodontal disease have a reversible leucopaenia, which resolves following appropriate dental treatment and a change of diet — this study was published in the prestigious Journal of Small Animal Practice. His experiences and some hypotheses were published eventually in a provocative but thoughtprovoking article in the Journal of Veterinary Dentistry. Dr Lonsdale sought the support of opinion leaders in the profession, and in response Tom Hungerford wrote a long piece on his lifetime habit of feeding dogs a natural diet consisting almost exclusively of raw meaty bones, with attendant health benefits.

Dr Lonsdale felt passionate about what he believed was an important clinical insight he had uncovered while working as a small animal practitioner. He was not content to merely implement his findings in his own practice — he felt the strong need to research and investigate feeding of pets generally, and

employed additional veterinary personnel in his practice to free up his own time to this end. He made a study of periodontal disease, biofilms as they related to plaque and oral anaerobic bacteria, nutrient qualities of natural and commercial diets, feeding practices for wild Canidae and Felidae, both in the wild and in zoological collections. This work was synthetised over the years into his monograph **"Raw Meaty Bones Promote Health"**, with additional and supportive information on his web site www.rawmeatybones.com, in Power Point presentations, video and audio clips.

Although much of his research and clinical findings have not been published in a traditional scientific format in peer-reviewed journals, there is no doubt that Tom Lonsdale has mounted a cogent argument that cats and dogs need regular access to a natural diet on an on-going basis for optimum periodontal and physical well being. He has provided very clear and practical recommendations on how to do this in a cost effective manner, and this information is freely available to veterinarians and the public on his website. Although some of his findings are somewhat speculative, there are a number of veterinarians, me included, who have come to accept that commercial food <u>alone</u> represents an unsatisfactory diet for many cats and dogs. This is reflected by a substantial proportion of the profession now recommending the regular, routine feeding of appropriately sized raw meaty bones as an important component of the diet for their normal patients. In my time as a small animal clinician, I cannot think of many individuals that have had such a significant impact on canine and feline preventative health.

Tom Lonsdale is an enthusiast. He is tenacious. He has turned this clinical research project into a crusade of sorts. This makes people uncomfortable. Like others, Tom sometimes makes me feel uncomfortable! I am not sure his tactics have always been beneficial to his cause, but on the other hand had he not been something of a 'stirrer', then nothing would have been achieved. But I admire his tenacity and courage in seeing through a theory that had its genesis in the clinical findings of a humble veterinarian in private practice. I also like the notion that a 'pommy immigrant' would adopt the Australian trait of questioning the status quo and through 'larrikin tactics' force a paradigm change in the way people approach feeding their animal companions. Notably, most of his arguments find basis not only through experience and data, but through common sense.

A further benefit of Tom's work has been the focus he has directed on the infrastructure and marketing that goes part and parcel with the pet-food industry. Lonsdale provides well documented information that confirms that some of these multinational organisations work through "front" organisations to collect data, lobby, or otherwise influence public opinion as a marketing ploy. Importantly, these organisations sometimes employ veterinarians as consultants. Ironically, useful information concerning the data collected by these organisations is frequently not made available for the public domain, where it might fruitfully contribute to clinical epidemiology. By drawing our attention to the existence of these practices, Lonsdale has made us more aware that for these companies, "business is war," and this too is a valuable lesson for the profession.

As the primary custodians of the human animal bond, it is our duty to make objective decisions about the nutrition and health of the patients under our care. Dr Lonsdale has focussed our attention on how as veterinary students, subliminal messages concerning 'normal' feeding practices, the value of prescription diets and the danger of feeding fresh meat or meat by-products can be influenced by companies providing free food for university teaching hospitals and positions for faculty staff. Although there may be nothing wrong with this in itself, the information, clinical data, and hypotheses promulgated by Lonsdale provide a very useful counterpoint to information provided by companies that cannot help having bias towards an ethos of commercial feeding.

Tom has opened-up a door for future research. Clearly, a well funded independent prospective study of the long term benefits of feeding commercial diets as opposed to raw meaty bones, and even hybrid diets, should be conducted. The recent study by Dick Kearney which proved beyond doubt that dogs fed calorie restricted diets lived significantly longer than dogs fed *ad libitum* could be a benchmark on how to conduct such a study. Veterinary microbiologists could determine quantitatively the effects of different diets on anaerobic bacterial species in the gingival cleft, and determine the dangers, if any, of the *Salmonella* and *Campylobacter* organisms that may become part of the normal faecal flora of dogs and cats fed these diets. Such studies would hopefully confirm and extend Tom's preliminary research, and provide people with a variety of cost effective options for feeding their pets. It is unlikely that such expensive research would be funded by the commercial pet food sector, as their research is generally directed to improving the performance of commercial processed rations, in general and for specific indications.

Finally, I would like to invoke the words of Doug Bryden, a veterinarian of many years experience in practice and a past president of the College, at the annual Australian Veterinary Association meeting in 1993:

"I have found him (TL) to be a very dedicated and thinking veterinarian. He is certainly a very intelligent veterinarian. I believe that his ideas are along the right track. I do disagree with some of the ways in which they have been presented and I have mentioned those to him personally.

I would urge all of you who are interested in animal disease and in animal care and who are concerned about this issue to visit Riverstone and to talk to him about what he is doing and what he is achieving. Soak up some of the feeling of the team at Riverstone and look critically at the comments and suggestions that are made and the cases which you will see. I'd urge you, talk to his clients and hear what they say about the therapies which he is instituting. It will be an enlightening experience for you to do that."

Tom has put a lot of this information and his ideas into his book "**Raw Meaty Bones Promote Health**". I think this book, plus the work published in the **Journal of Small Animal Practice**, **Journal of Veterinary Dentistry** and the **Control and Therapy Series** represent a significant body of work, and the acknowledgement of this contribution by the College would go a long way to healing the rift that has developed between Dr Lonsdale and the AVA, so we can move forward and embrace some of his ideas as a significant research accomplishment for Australia and extend them further by well designed prospective multidisciplinary studies. Perhaps we could then take the lead in small animal nutrition by developing cost-effective ways to deliver primary produce for Australian cats and dogs thereby contributing not only to animal health, but also to the balance of payments and Australian primary producers.

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