

PRESS RELEASE

Major Advancement in Campylobacter Control

Campylobacter is one of the most common causes of food-poisoning diarrhoea in humans around the world. In industrialised nations, *Campylobacter* food poisoning occurs at an annual rate of between 20 and 150 cases per 100,000 people. In Australia about 200,000 people are infected each year and of these some 200 will die or have serious post infection problems. Most human infections involve *C. jejuni*, a commensal species in chickens that survives in raw and undercooked chicken. The control of this organism on poultry meats has seen little or no progress in most countries in the past decade. The English Poultry Industry reports show that there has been no measurable change for 10 years. The USA Poultry press reports only minor shifts in pathogen control and measured on-bird campylobacter readings.

BioAust Health has been working with natural bioactives to create a range of products applicable to arthropod, microbial and viral pathogen controls. During this period the company has supported post graduate studies in a variety of projects including broad-acre IPM and Varroa controls in bees. One of the projects has lead to a major breakthrough in control of Campylobacter, Salmonella and E.coli in live poultry.

The BioAust Health pathogen project has completed initial proof-of-concept university trials with the support of one of Australia's major supermarket chains. The results have been outstanding, recording levels far below levels previously recorded, including complete removal of campylobacter from the chicken gut. BioAust Director of Technology, Alan Twomey, said that the results of the proof-of-concept trials, conducted by Dr S.T. Nguyen and his team, will enable the industry to reduce campylobacter infection count significantly without changing the normal gut microflora. The biggest breakthrough has come from the ability to deliver the bioactives to all parts of the alimentary canal including the caeca using special carrier structures. The bioactives are delivered with a slow-release process that ensures the pathogens are attacked in all growth phases including bio-films. In addition to this bird-weight increased between 4% and 6% over consecutive trials.

The project has been discussed with one of the World industry's leading figures, Philip Wilkinson, from the UK who examined the data and responded by saying that the science being applied was ground-breaking, "I believe that what you may have is worthy of further examination which requires external funding". Mr Wilkinson said during his follow up to a meeting in Brisbane last August. He believes that there are a number of UK based producers who would be interested in such developments.

Category Manager for another of Australia's leading retailers said that the reduction in consumer complaint cost through low pathogen-count meat would be significant in both time and money. The flow-on through the supply chain is essential as all parts of the process are potential infection risks. Alan Twomey said that while the live bird was the initial focus, the process was effective across the supply chain including processing interventions. Accordingly he has developed a plan that will enable total programmed HACCP to be implemented through the supply chain, further reducing the campylobacter risk.

BioAust Health Pty Ltd is ready to move to the final trials and product registration but needs a grower/partner to complete this process. With the right arrangements the product could be commercial within 9 months. Poultry producers moving to the BioAust product would have a cost neutral process but with significant additional advantages. The product can be delivered through feed or water with equal efficacy. There is no transfer of the bioactives from the alimentary canal to the meat ensuring a safe wholesale/retail product.

BioAust can be contacted through enquiries@bioaust.com or keithq@bioaust.com or by telephone +61 (0) 4 18 888 683. Trial process and outcome reports are available to interested parties.

Keith Quigg, CEO-Director