13 February 2009

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Dear Chad,

Options for the Traceability of Cloned Animals – views of the Meat Industry Association and Deer Industry New Zealand

Thank you for providing the opportunity to comment on your paper 'Options for the traceability of cloned animals'. We appreciate that NZFSA has listened to the concerns from our sector and has taken action to set out the policy options described in your paper.

This letter sets out the shared views of the Meat Industry Association and Deer Industry New Zealand (MIA and DINZ) in relation to the options that you have described.

Summary

The issue of cloned animals and their potential to enter the human food chain is of very serious concern to the MIA, DINZ and our members. It is an issue that, at this time, could potentially have a very serious negative impact on our sector. Our concerns relate to the acceptability of cloned food products in our key markets. Market risks can be categorised in terms of; regulated market access barriers, commercial trade barriers, consumer unwillingness to buy and negative publicity campaigns against New Zealand food products. Each of these categories is fed by negative consumer sentiment against novel biotechnology in food production and not necessarily influenced by any rationale assessment of food safety.

MIA and DINZ strongly favour a regulated approach to traceability of cloned animals and further recommend that such an approach be extended to the offspring of cloned animals. We support a regulated approach because we do not believe that voluntary, commercial assurances that animals or products are clone free would be sufficiently robust or accepted by markets. We recommend the inclusion of the offspring of

clones because the information available suggests that consumer sentiment makes little or no differentiation between clones and their offspring.

It seems possible that consumer sentiment against cloning may soften over time perhaps as producers adopt the technology around the world and it becomes more familiar to consumers. In our view, however:

- New Zealand as a small and relatively powerless trade nation should not attempt to 'blaze the trail' of modifying consumer perceptions to cloning, and;
- New Zealand (or some New Zealand firms) should preserve the ability to market products as 100% Pure, natural and clone-free.

Serious market risks

The market risks associated with cloned animals entering the food chain are significant. MIA and DINZ do not have any basis to dispute the consistent conclusions of food safety agencies in NZ, USA and Europe that clones present no food safety issue.[1] As we are all aware, however, consumer perceptions and the consequent actions of regulators, retailers and the media are not necessarily driven by the rational and scientific approach taken by those food safety agencies.

Recent Korean consumer responses to the importation of beef from the USA, and its purported risk of BSE transmission to humans, provide an example of how the science of the matter can often be rendered irrelevant to the public debate and resultant regulation. It is notable that in the Korean example, even the political and trade clout of the USA could not prevent the implementation of seemingly irrational import requirements related to the age of beef cattle at slaughter.

Seemingly irrational consumer perceptions and preferences relating to food derived from cloned animals could manifest themselves as risks to New Zealand's trade in four ways:

1. If consumers have a perception that New Zealand production systems include cloned animals, they may simply choose not to buy New Zealand products. (Such 'tarnishing' of brand New Zealand would likely have a wider effect than just on animal products.)
2. Retailers may choose to either:
    a. Not stock New Zealand animal products or;
    b. Require that suppliers give robust assurances that their products are clone-free. If assurances cannot be given or are not considered sufficiently robust, retailers will revert to (a).

    Several large international food companies (including McDonald's, Kraft, Dean Foods, Whole Foods Market) already have public policies stating that they will not use products derived from cloned animals[2].
3. Overseas regulators may choose to ban the importation of food (or other) products that are derived from cloned animals or their offspring. As per

[1] However it should be noted that the European Food Safety Authority stated that its conclusion was based on limited data, and further study needs to be done before a more definitive conclusion can be reached.

[2] The Center for Food Safety has also published a list of approximately 20 major US food producers and retailers who have stated that they will not use products cloned animals in their food: http://www.centerforfoodsafety.org/CloningPR9_3_08.cfm

hormone treated beef to the EU, regulators would likely require a New Zealand Government assurance that imports were clone-free. If such official assurances were to be provided, New Zealand would require a mandated system for traceability of clones and their offspring. Unlike hormone treated beef, tagging and traceability would need to record the entire lineage of any clone-derived animal because their is no means of identifying and tagging offspring of clones other than recording the fact that one of their ancestors was a clone. As with retailers, if regulators were not satisfied that assurances were robust, they would likely ban New Zealand animal products from their market. We believe that a ban is a very real prospect in all of New Zealand's key markets, including the EU (where you have noted that the European Parliament has called for a ban and regulation is currently being debated by the European Commission), the USA (where regulators would not be expected to permit imports produced in a manner that is not permitted[3] locally) and North Asia (where food regulators have always taken an extremely cautious approach and public sentiment is very influential).

4. Local interest groups in major markets may launch negative publicity campaigns against New Zealand products on the basis that consumers are likely to be exposed to cloned foods if they eat product from New Zealand. As per the UK 'Food Miles' issue, such a campaign need not be rational or based on sound science, but can gain a life of its own in the local media and be almost impossible to combat, even with strong rational rebuttals. Any such campaign would likely exacerbate the risks outlined in (1), (2) and (3) above.

As categorised above, the market risks currently associated with New Zealand producing food products derived from cloned animals are very serious – perhaps on a par with a major biosecurity incursion as they include the potential closure of multiple markets.

Traceability should be mandated and extend to offspring

MIA and DINZ support the preference reached in your paper that clones should be mandatorily registered and tagged and further recommends that this mandatory identification be extended to the offspring of clones.

MIA and DINZ support a regulated option because we do not believe that a voluntary system of identifying clones and their offspring would provide a sufficiently robust basis to give either commercial or official 'clone-free' assurances. Cloning technology providers in the USA have already established a voluntary register of cloned animals, but it makes no attempt to register the offspring of clones and its robustness has already been widely discredited in the media[4,5,6]. We suspect that a voluntary registration and tagging system would be weak because farmers, who are a key participant in the product value chain, tend to lack the information systems and

[3] The USA currently has a 'Voluntary' moratorium on the use of cloned animals for food production.
[4] System to Track Cloned Animals Is Planned -New York Times, 19 Dec 2007 - http://www.nytimes.com/2007/12/19/business/19clone.html
[5] Consumers may not be able to avoid cloned food - San Francisco Chronicle, 18 Feb 2008 - http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2008/02/18/MN2EUSFR0.DTL
[6] Clone tracking system designed for 'accurate' food labelling - Food Navigator, 19 Dec 2007 - http://www.foodnavigator-usa.com/Financial-Industry/Clone-tracking-system-designed-for-acurate-food-labeling

commercial clout to demand and verify that their suppliers are correctly tagging and registering either animals or germplasm.

MIA and DINZ believe that a mandated system of identification would be required in order to give commercial assurances that were acceptable to major retailers. For official assurances, we suspect that a mandated register would be essential. MIA and DINZ have no clear view on which of the three possible regulatory routes you have described is preferable and would seek further guidance from you on any strengths and weaknesses of each.

Our strong view is that mandated registering and tagging should extend to offspring of clones. This view is driven by the evidence that consumers do not differentiate significantly in their negative attitudes toward clones and the offspring of clones. Any market risks, therefore, are not lessened by dealing with clones and not their offspring. The (limited) data that we are aware is available regarding consumer attitudes to clones and offspring of clones is summarised below in tables 1 and 2.

Table 1: Eurobarometer: Europeans attitudes towards animal cloning[7]

Question:	Q8. If a source, that you trust, did state that meat and milk from cloned animals were safe to eat, how likely would you be to buy such products?		Q9. And, if a source, that you trust, did state that meat and milk from animals where one of the parents was a clone (offspring), were safe to eat, how likely would you be to buy them?	
Results:	Very likely	11%	Very likely	11%
	Somewhat likely	24%	Somewhat likely	24%
	Somewhat unlikely	20%	Somewhat unlikely	21%
	Not likely at all	43%	Not likely at all	41%
	DK/NA	3%	DK/NA	4%

Table 1 (Cont.)

Question:	Q10. If products from offspring of cloned animals would be available, would you consider it to be important to have special labelling indicating that the food was obtained from the offspring of a cloned animal?	
	Yes, certainly	83%
	Yes, probably	7%
	No, probably not	3%
	No, certainly not	5%
	DK/NA	2%

Table2: Food Biotechnology USA survey[8]

Question	Since the U.S. Food and Drug Administration (FDA) has determined that meat, milk, and eggs from cloned animals are safe, how likely are you to buy them? Would you say...?		Since the U.S. Food and Drug Administration (FDA) has determined that meat, milk, and eggs from the offspring of cloned animals are safe, how likely are you to buy them? Would you say...?	
Results:	Very likely	13%	Very likely	13%
	Somewhat likely	35%	Somewhat likely	35%
	Not too likely	26%	Not too likely	27%
	Not at all likely	26%	Not at all likely	24%

Tables 1 and 2 show that there is no significant difference between the attitude of consumers to clones and their attitudes to the offspring of clones. We believe that it is this sentiment that would drive commercial or regulatory market risk and therefore

[7] Flash Eurobarometer 238 – European's attitudes towards animal cloning, published Oct 2008.
[8] Food Biotechnology: A Study of U.S. Consumer Attitudinal Trends, 2008 - International Food Information Council Foundation, October 2008

that not including offspring of clones in the mandated registration and tagging system would do nothing to mitigate market risk. It is also notable that the European Parliament decision calls for a ban covering both clones and the offspring of clones.

MIA and DINZ understand that officials are concerned about the practicality and costs involved in tagging the offspring of clones. However, it is the view of MIA and DINZ that the market risks of not doing so currently outweigh the potential costs.

Market risks may be short-term

MIA and DINZ recognise that while the net productivity benefits of cloning are relatively small at present, they may be greater in the future. It also seems likely that consumer sentiment may shift sufficiently and that as a result, the productivity benefits of cloning begin to outweigh market risk or cost. This is likely to occur if cloned animal products become widely established (and recognised) in consumer markets and consumers learn first-hand that they are not harmful and are indistinguishable from non-cloned products.

If cloning does become widely used, and explicitly accepted in major markets, there is then the option of reviewing official policy and possibly moving registration and tagging from a mandated to a commercial system, as per organics for example.

Given the possible future change in the overall cost-benefit equation for cloning, MIA and DINZ are not opposed to continued research on cloning and its applications in agriculture in New Zealand. We encourage innovation and support any new technology that can improve the overall competitiveness of our sector, but would ask that the market risks associated with this technology be carefully managed.

We do not believe, however, that New Zealand is in a strong position to be the first country that introduces clones to its commercial food production systems and thereby becomes the canary in the mine of global consumer sentiment. Larger and more powerful animal producing countries are better placed to deflect negative market sentiment while consumer attitudes evolve.

We also consider that, if and when cloning becomes a widely accepted production practice, there will likely be a niche market available to producers who wish to market their products as clone-free. Such positioning would clearly align well with New Zealand's existing clean and natural positioning in many markets. To exploit such a niche, New Zealand needs a robust system for identifying clones and their progeny so that they may be excluded from products to be delivered to those niche markets.

Conclusion

In conclusion, MIA and DINZ are very concerned at the serious market risks associated with the use of cloned animals but has no basis to question NZFSA's food safety risk assessment. Market risks arise from consumer perceptions that are not always influenced by rational, scientific assessment.

Given that assurances to markets based on voluntary identification of clones are unlikely to be sufficiently robust, we support your preference for a mandated system. In our view, based on the limited evidence available, consumer perceptions toward clones and the offspring of clones are equally negative and a mandated identification system therefore needs to deal with both.

MIA is not opposed to continued research into cloning and its application but strongly recommends that the outputs of such research be carefully managed, including

reliable identification of all animals until such time as the market risks associated with those animals have disappeared.

Yours sincerely

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