

RESPONSE TO: Analysis of Progress toward Achieving the 2030 Dairy and Livestock Sector Methane Emissions Target

Peter Williams. 3rd July 2021.

Enteric Methane Mitigation Strategies - Effectiveness and Availability

In Finding 1-4 you mention Agolin as being not commercially available and without sufficient *in vivo* trials. Agolin[®] Ruminant has been commercially available for several years and is fed to about 1.5 million animals - mostly dairy. About 250,000 in North America. There are 9 *in vivo* trials demonstrating about a 10% reduction in enteric methane. See attached meta-analysis published paper together with the Dr. Frank Mitloehner, UC Davis published paper referenced in your document which was released after the meta-analysis was published. One of the *in vivo* trials (also published) was over five months long with approximately a 20% reduction in methane per unit of milk.

Agolin is used by dairies predominantly to increase feed efficiency and productivity (just over 4% increase in both). Therefore, it is an excellent 'plug and play' product giving benefits to dairies and the environment at very low cost and a high return. There is no capital cost.

Agolin is cleared for use by the FDA due to the components being GRAS (generally recognized as safe) and/or cleared as flavors for feeds and foods. It does not need FDA Approval as this is predominantly for new chemicals that must be found to be safe before release. The efficacy trials for the FDA would be the same as those carried out for Agolin. We do however need to avoid direct claims from the manufacturer or distributor. But reference to trial results is OK. This is the status of many widely used products in the USA.

Due to the methane reductions, excellent consumer image, efficiency and productivity benefits, a number of major consumer companies have partnered with Agolin in order to source more milk from Agolin fed cows (Nestle, Barry Callebaut).

With support from CARB Agolin Ruminant could almost overnight achieve an additional 10% reduction in the CO₂e enteric emissions on California dairies.

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