

Red meat blood products

Research and development project

P.PSH.1517 – Food-safe Collection and Preservation of Bovine blood for use as an Ingredient in Nutraceuticals and Functional Foods – PoC

Summary

Blood represents a sizable and underutilised co-product of red meat processing, typically comprising 6% of the live carcase weight. The 2009 MLA co-product compendium illustrated that there is a yield of 28 recoverable litres (18L whole blood and 11L edible blood) of blood extracted from a 465kg liveweight head of cattle.

Bovine blood is rich in protein and essential vitamins and minerals, making it a highly regarded potential functional food ingredient and bioactive valued in the food and related industries. However, across Australia less than 5% of abattoir blood is collected for value adding with most going to rendering with a net value of only around 2¢/L. This is due to the challenges of sanitary collection and processing.

MLA is investigating additional value-adding opportunities that could arise from the introduction of a new business model in which blood is collected through a viable collection method and processed into a suitable fortifiable ingredient.

Outcomes

MLA is continuing to invest in research to understand the opportunity for a bovine blood product which can range from a very high-value product for the pharmaceutical industry, such as bovine serum albumin (BSA), pet and animal feed, or functional food ingredients.

Current investment projects have been designed to understand and assess the technical feasibility and preliminary commercial viability for producing a bovine blood product that can be incorporated as a functional ingredient.

Preliminary observations for any potential uptake within Halal blood collection approved procedures will be noted but should not limit initial discovery phases of research.

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