

MEDIA RELEASE 18 May 2018

McCarthy Review Ignores Science of Heat Stress

Vets Against Live Export (VALE) has examined the report of Dr McCarthy's review into the conditions for export of sheep to the Middle East during the northern hemisphere summer. It appears that Dr McCarthy, an industry veterinarian who has done nearly 70 voyages, has either misunderstood or misrepresented the science of heat stress.

Dr Sue Foster, spokesperson for VALE, said:

"A crucial concept in heat stress is the 'heat stress threshold'. This is the point at which the sheep is unable to control its own body temperatures by available means such as panting. This definition is how the industry and government define heat stress threshold. It is also how the International Union of Physiological Sciences (IUPS) defines heat stress. The IUPS actually calls this level the 'upper temperature survival limit', clearly indicating that if body temperature increases out of control, the animal will die.

Dr McCarthy's suggests that a rise in core body temperature is indicative of normal physiology and that there is an issue of "what level of exposure to heat should be deemed acceptable". Inability to control core temperature is a fundamental example of not coping with an environment. Once an animal cannot cope with its environment, then it suffers adverse animal welfare. The answer is clearly defined in the heat stress threshold in all publications.

Dr McCarthy's report then states that an increase in space allocation 'will assure the health and welfare for sheep being transported to the Middle East during the northern hemisphere summer'. However, the calculation he refers to for necessary space allocation relates to the space necessary for a housed sheep to perform normal behaviours, such as lying down and getting up. It has nothing to do with decreasing heat stress. Allocating more space will allow animals to be more comfortable in housing. It will also help with the rise in temperature and humidity onboard relative to the external environment but it will do nothing to stop the heat stress that will inevitably occur during a northern summer live export voyage. When external ambient temperature and humidity exceeds an animal's heat stress threshold, the animals simply cannot cool down no matter what space is provided. One dog in a hot car can die of heat stress. One sheep on a ship can die of heat stress. Space is not the issue."

Dr Foster concluded: "The Australian Veterinary Association clearly analysed the science and provided that information to Dr McCarthy. That science is definitive and not debatable. It is telling that Dr McCarthy did not reference that submission, or the scientific principles set out in it, in his report. His report is therefore, in our opinion, misleading regarding the crucial issue of heat stress, and the Minister has made a serious error in basing his decisions on this report by an career live export veterinarian."

18 May 2018

ENDS

Contact: Dr Sue Foster (Spokesperson)

info@vale.org.au, 0423 783 689