

# Project Summary



## Electrolyte supplementation to alleviate the adverse effects of severe heat stress

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### Summary

Meat chickens are highly susceptible to heat stress, particularly during periods of prolonged hot weather events in shed conditions and also during transport. Heatwaves in Australia are expected to become a regular occurrence, so there is a need to identify and implement strategies that complement current strategies to reduce heat stress in meat chickens, such as the use of electrolytes.

This project is a continuation of PRJ-009120, which identified that the adverse effects of hot weather are observed when the outside temperature is  $>36^{\circ}\text{C}$ , which relates to an inside shed temperature of  $26\text{--}28^{\circ}\text{C}$ , and found that electrolytes in the water supply can alleviate this stress.

This current project aims to determine the effect of electrolytes in the drinking water of meat chickens exposed to shed temperatures of  $32^{\circ}\text{C}$ , which is equivalent to an outside temperature of  $40^{\circ}\text{C}$  that some of the major chicken growing regions experience. The project will include controlled studies, as well as application on a commercial farm.

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### Related research

This project is a continuation of **PRJ-009120: Electrolyte supplementation of broilers prior to transport**, which assessed the impacts of electrolyte supplementation in water supplied to meat chickens prior to transport, to determine its effect on dehydration and carcass weight loss.



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