

Research Update: Heat Stress Solutions for Poultry Producers



Each year in the early days of spring we start to prepare ourselves for the many exciting days of summer. For poultry producers this preparation is also important for them to consider for their barns and birds. One way that Trouw Nutrition Canada supports poultry producers is by bringing them new innovations that have both research and local commercial results.

What is heat stress?

During times of elevated temperatures and humidity livestock species can experience stress conditions. Poultry species do not however have the ability to sweat and therefore have other physical ways to dissipate heat like panting and lying with their wings outstretched. Typically heat stress can occur in poultry at environmental temperatures above 25°C.

Innovations to mitigate heat stress

Producers can start to mitigate heat stress by changing management practices through the summer months, and work with their nutritionist to utilize feed additives and feeding strategies. All with the goals of maintaining performance and supporting animal productivity.

Several commercial research studies were conducted across Canada to investigate the use of an osmolarity regulator (Betaine), a flavouring agent containing polyphenols (POMix®).

Studies were conducted in multiple geographical locations including Quebec and British Columbia. In a commercial setting where birds were observed to experience heat stress conditions birds fed an osmolarity regulator or a flavouring agent had higher d35 body weight than the control diets, and it was observed they improved grower/finisher FCR.

When data from these two studies were combined, we observed that compared to a control diet, using two innovations (Betaine and POMix) led to:

- ↑ +110g higher BW at d 35 (5.7%)
- ↑ +3.6g/d higher ADG (6.3%)
- ↑ Tendency for higher FI (+2.4 g/d; +3.0%)

Economic impacts

When birds experience heat stress we can see reduced feed intakes, which leads to lower performance. With those performance losses producers experience reduced economic returns. In the commercial studies conducted we evaluated the financial returns of birds fed innovative solutions and we observed that compared to a control diet birds fed Betaine and POMix had:

- ↑ 5.8% higher revenue/bird (+\$0.25/bird)
- ↑ 7.8% higher profit/bird (+\$0.10/bird)

If you want to find out more about how you can mitigate the impacts of heat stress and explore nutritional solutions please contact your Trouw Nutrition Poultry Feeding Specialist.



For more information, contact us:
www.trouwnutrition.ca

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