



# A Producer's Perspective on the Lessons Learned from Raised Without Antibiotics

Alex Innes

**A**LEX INNES IS A SOUTHWESTERN ONTARIO BROILER PRODUCER WITH FAMILY-RUN INNES FARMS. LOCATED JUST OUTSIDE OF WOODSTOCK ONTARIO, HE AND HIS FAMILY WORK HARD TO GROW OUT AROUND 110,000 BIRDS PER CYCLE IN 3 BARNs. AS A LONG-TIME DAIRY FARMING FAMILY, THE INNES' GOT INTO POULTRY IN 2002, AND FOR THE LAST 7 YEARS, HAVE TRANSITIONED EXCLUSIVELY TO BROILER PRODUCTION, ALONG WITH SOME CASH CROPPING.

The Innes family operated a conventional flock for the first several years before transitioning to a Raised Without Antibiotics (RWA) program few years ago. Alex recalls being concerned about flock health during the transition, and while there was a lot to learn, production has been steady and they haven't had many hiccups.

Their motivation to transition was partly to take advantage of production premiums, but also to be proactive about antimicrobial use, ahead of the industry's Antimicrobial Use Reduction Strategy. He knew the strategy wouldn't require producers to forego the use of antimicrobials, rather, they would require producers to shift away from preventative use of them, while relying on diagnosis and therapeutic treatments to address sick birds when necessary. Yet, he was keen to look at RWA as a strategy for them as they scaled their business.

## What can conventional producers learn from Alex's RWA experiences?

Alex appreciates that many producers may prefer not to transition towards something like organic or RWA, and for them, that means adapting their management to work within the new antimicrobial use guidelines. As the transition wasn't so long ago, Alex understands the challenges that the reduction strategy will put on Canadian producers. So, in an effort to support his conventional colleagues, he reflected on some of the changes, alternatives, and experiences that he's had in RWA that might be applicable for producers who are looking to make changes to their conventional flocks to reduce use, while still using antimicrobials when needed for treatment.

## 1 We're not so different

Alex believes that much of his management is not fundamentally different from that of conventional production. Adequate water, feed, lighting, and maintaining a clean, dry environment with plenty of air flow are always going to be keys to success. From experience, Alex knows that the first step in reducing antimicrobial use is understanding the farm-specific risk factors contributing to the infections that have traditionally motivated the use of antibiotics. By taking steps to measure, understand, and address these factors, he believes producers can achieve consistent success, regardless of production type.

## 2 Reaction time

Alex has been quick to point out that their culture on flock health is rooted in prevention. But as with any operation, he knows things can happen; equipment will break or malfunction, birds will get sick, things may get missed. He and his family know that the best thing they can do in these instances is to react as quickly as possible. He's finding that he's spending more time in the barn than he used to, and really honing in on feed and water consumption as early indicators of potential issues. He looks at chick activity as a key performance indicator. He wants to see active, enthusiastic chicks that are socializing with one another, preening, and spreading their vaccine. More obvious signs of issues, like spikes in mortality, especially over the first 10 days, are key triggers for action. His view is you have to be in the barn to see, smell, and feel the birds' environment. Combining their senses in the barn with the data from their tools and equipment enables timely decision-making. They've improved their reaction time by working with their advisors, who are only a text away, and can offer perspective and be a conduit for new knowledge. Time is of the essence, the quicker the intervention the better your chances of success.

## 3 Pre-brooding - down time and sanitation

Part of Alex's success in getting consistent flocks with good health has been pre-brooding management to ensure optimal placement conditions. As with most facilities, cleanout commences immediately after a

flock is shipped in order to give each barn the most down time. Alex views a thorough cleanout as key, which includes scraping manure and using a gas-powered air blower to blow down walls and floors. They're setting rodent bait, spraying insecticide, and clearing weeds and vegetation around the barns to make the area undesirable for pests. Down time, cleanliness, and sanitation are key here.

## 4 Optimizing brooding

Early development is everything, and the first 10 days are Alex's focus. Just before placement, he's disinfecting water lines, checking and testing nipples, getting feed ready, and ensuring bright light so chicks can be placed on feed and get eating right away. He's also checking temperature, humidity, and CO<sub>2</sub> levels, as he knows short-term chilling of chicks can suppress their immune systems, delay gut development, and lower growth rates. He's putting up chick guards to keep chicks close to their heat source and to promote socialization and preening, which helps increase vaccine spread and flock immunity; his primary tool for prevention of coccidiosis and necrotic enteritis. He spends more time in the barn and does brooding checks to ensure chicks have good crop fill, waterers are working, and water consumption is increasing.

## 5 Water quantity and quality

Another of Alex's key performance indicators is daily water consumption. He knows water is going to be consumed twice as much as feed, and that it needs to increase day over day. He wants to see birds at each stage of the cycle drinking well from waterers that are at the right height, and with correct water pressure; not too low to make sure they can drink enough and not too high to prevent leaking and keep the area dry. If there's any indication that water consumption is dropping, whether it's because of health or equipment, it needs to be investigated.

When it comes to water quality, Alex wants to make sure they're on top of it. He feels more routine assessment is needed beyond the requirements and so goes above and beyond. Alex tests for pathogens more frequently throughout the year to understand if biofilms or source water contamination are becoming



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From left to right: Stephen, Max, Alex and David Innes on their farm in Woodstock, Ontario.

a problem, which helps him understand if his water sanitation protocols are working. He's also routinely testing each flock for things like pH and peroxide to make sure levels are consistent. He'll check the waterers by hand to make sure there isn't too much iron, and to check flow and pressure. His view is that the automated systems and protocols can provide a good framework for success, but you need to go in the barn to stay on top of things.

## 6 Reaching out

Alex commends his advisors for being proactive. His veterinarian has helped to facilitate testing when needed, conduct post mortems, blood tests at slaughter to understand pathogen exposure and how their vaccination program is working, and to investigate specific issues when needed. Alex is keen to get involved and see more collaboration and communication within the industry. His view is that by sharing information we can learn from one another.

Alex knows that navigating the industry changes around antimicrobial use will require a tailored approach for every farm, and that many will prefer not to take his approach towards RWA. After all, the reduction strategy isn't forcing conventional producers to adopt an RWA approach. But in the spirit of sharing and supporting one another, RWA or not, Alex is keen to share his lessons learned in the hopes that other producers may be able to use them to navigate with a production scheme that is moving away from antimicrobial use.