

Episode

1.1

INNOVATION

SHOWCASE

1.1 Smart Poultry Nutrition

Featuring Dr. Martin Zuidhof, Professor, University of Alberta



CONTROLLING NUTRIENT INTAKE

Over the last decade, we have developed a new system to feed the right bird the right amount of the right feed at the right time. The precision feeding system was developed to grow perfectly uniform poultry flocks. The system is unique – for poultry, nothing like it exists anywhere else in the world.

Other systems can monitor body weight and feed intake of individual group-housed birds, but no one else can automatically control the nutrient intake of the birds.

HOW IT WORKS

- Free-run birds are tagged with a radio frequency identifier that allows researchers to track information for each bird.
- When a bird enters a feeding station it perches on a platform that weighs it, and, using the radio frequency tag, identifies when the bird was last fed, how much it currently weighs and its target weight based on the bird's age and stage of development.
- If the bird's current weight is less than its target weight, feed is dispensed. If the bird is at target weight, the bird is gently removed from the station.

ALBERTA
MADE

'The stations provide a wealth of information. From a research standpoint it's amazing!'

POULTRY INNOVATION PARTNERSHIP

visionary change collaboration opportunity

“*The right feed at the right time .*”

DECREASING ENVIRONMENTAL IMPACT

We've gained new insights into broiler, layer, and heritage birds, metabolism, feed efficiency, and reproductive efficiency. Our 2nd generation feeding stations are able to provide different diets that can most closely match each animal's nutrient intake with its nutrient requirements. This will increase efficiency and minimize losses of carbon dioxide, nitrogen, and phosphorus to the environment.



METABOLISM

Feeding many meals per day versus one meal every day has a profound impact on broiler breeder metabolism, body composition, and reproductive success.



LIGHTING

We have been able to show just how important it is to provide the right lighting at the right time.



HUNGER

By analyzing how birds use the feeding stations, we have gained insights into hunger in broiler breeders.

The Innovation Showcase is presented monthly by the Poultry Innovation Partnership and hosted by Brenda Reimer & Valerie Carney. Learn more at: poultryinnovationpartnership.ca/innovation-showcase



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