







Contents

- Trouw Nutrition fact sheet
- <u>Trouw Nutrition General press release</u>
- Trouw Nutrition Sustainability press release
- Swine press release
- Meet our speakers Expert stages swine

For any further inquiries or exclusive content, please visit our booth, 22B09, and contact Marcelle Wiegand Bruss: marcelle.wiegand.bruss@trouwnutrition.com







Trouw Nutrition Fact Sheet

About Trouw Nutrition

Trouw Nutrition is Nutreco's livestock feed business line and a global leader in the feed, farm and health aspects of producing quality meat, eggs and milk. We've spent nearly a century developing innovative feed products and more sustainable ways of raising healthy farm animals and companion animals. We believe that animal nutrition and good farm management have the power to transform our industry and even our planet. Through our dedicated team of 8,300 experts and our global network, we work together with our customers to solve the challenges facing our feed-to-food chain and achieve our purpose of Feeding the Future.

With 71 manufacturing plants and a presence in 105 countries, Trouw Nutrition is everywhere our customers need us to be. We provide a one-stop-shop for feed specialities, feed additives, premixes, nutritional models and customised, integrated services. Our global brands include NutriOpt™, Milkiwean™, Erliva™, Maxcare™, Sprayfo™ and Selko™.

Purpose statement

Feeding the Future

Year founded

1899

Headquarters location

Amersfoort, the Netherlands

Number of employees

>8,300

Core business segments

Premix, compound feeds, feed additives, milk replacers, farm minerals, pet food, meat processing

Research centers

Swine research center – the Netherlands, Poultry research center – Spain, Dairy research center – the Netherlands, Calf & Beef research center – the Netherlands, Ingredients research center – the Netherlands

University partners

35 universities/research institutes and 3 demo farms

Senior leadership team

Eduardo Lopes, Chief Executive Officer Claudio Cervellati, Chief Supply Chain Officer Geke Naaktgeboren, Global Quality Director Remco van Reenen, Managing Director Global Marketing Gerjan van Alst, Global Procurement Director







Press release

FOR IMMEDIATE RELEASE

Trouw Nutrition Premiers Solutions at EuroTier to Advance Sustainable Feed and Farming

Species-specific solutions boost production efficiency and reduce the footprint of farming

Amersfoort, the Netherlands – 23 October, 2024 – Trouw Nutrition, Nutreco's livestock feed business line, is launching a new generation of precision nutrition tools, technologies, and programs developed to elevate the sustainability of livestock farming. Innovations for ruminants, poultry, swine, and feed will be unveiled at EuroTier, 12–15 November in Hanover, Germany. Visitors to Trouw Nutrition stand 22B09, Hall 22, can check out science-based nutritional tools, explore a portfolio of digital technologies, and learn about programs designed to optimise sustainability across the value chain. Highlights of Trouw Nutrition's presence at EuroTier are shared below.

Sustainable Ruminant Innovation: Introducing Sprayfo Ultimo

Launching at EuroTier, Sprayfo Ultimo represents a mind shift in early calf nutrition. Scientists developing this calf milk leveraged a breakthrough discovery that showed how the fatty acid profile in cow's milk acts as a signaling agent to activate gastrointestinal development. The result is earlier development of the rumen and a nutrient profile that supports body composition, improving the calf's metabolism throughout its life. Sprayfo Ultimo delivers nutrition that helps animals enter the milking herd earlier and produce over more lactations. To further support sustainability, Sprayfo Ultimo reduces the concentration of trace minerals in the calf milk, leading to less mineral excretion into the environment. Ultimately, Sprayfo Ultimo helps achieve a resilient dairy herd with better utilization of farm resources, reduced carbon footprint per liter of milk, and less mineral excretion.

Sustainable Trace Minerals: Upgrading Feeding Recommendations

Selko® IntelliBond® is continuing its legacy of leading the industry in trace mineral nutrition. Trouw Nutrition experts will be available to explain new feeding recommendations when implementing the right source of trace minerals. Selko IntelliBond is the first source of trace mineral nutrition to provide an independent verification (life cycle analysis) for the total CO2eq values of its products. Multiple research studies have shown that dairy producers can lower their carbon footprint while increasing their herd's productivity and health when using Selko IntelliBond.

Sustainable Poultry Innovation: My EggPrint, Layer Longevity and Phytogenic Science

The first generation of MyEggPrint, the newest NutriOpt life cycle assessment tool, will debut at EuroTier. MyEggPrint helps businesses in egg production to measure, monitor, and share the environmental footprint of their eggs. The tool is based on a certified methodology. Combining the carbon footprint data with Trouw Nutrition's nutrient expertise, MyEggPrint will allow users to deploy strategies to reduce their carbon footprint while staying competitive. MyEggPrint is part of the Layer Longevity Program and will be demonstrated at Trouw Nutrition's EuroTier stand.

Furthermore, the company will display Fytera Perform, a novel phyto-complex that harnesses the power of plants for poultry production. Research data shows the positive impact on feed conversion ratio and body weight gain. The impact of the complex power of plants will be further explained during one of the expert stage talks in the Poultry Hall on Tuesday, 12 November at 9.30am.







Sustainable Swine Innovation: The Watson swine model and Milkiwean

By creating a powerful digital twin model of the farm and its swine population, Watson generates a virtual model that mirrors animal responses to various farm conditions. This advanced tool can be applied across the swine operation, providing precise predictions on how feed, health, and management decisions will affect critical factors—from the farm's carbon footprint and carcass quality to farm profitability. Watson generates recommendations for factors including genetics, feeding strategies, transport, manure management, and more. The technology is complemented by Trouw Nutrition's in-house experts. Along with CO2 emissions, Watson can monitor sustainability metrics relevant to the production environment, including water scarcity, acidification, nutrification, soil depletion, and ingredient origin, among others.

Addressing the latest developments in piglet nutrition and health management, Trouw Nutrition has upgraded the Milkiwean programs to include technologies such as its patented Kinetio technology, enhanced NIR programs, particle size and specialty ingredient package with an optimised acid binding capacity (ABC-4) help support the enteric heath of weaning piglets, even in challenged conditions.

Sustainable Decisions: NutriOpt Demonstrations

Precision farming can contribute to improved efficiency, profitability, and sustainability. Visitors to Trouw Nutrition's EuroTier stand can check out digital tools in the NutriOpt demonstration zone that make precision farming easy, quick, and insightful. The zone features a digital suite of six tools including MyEggPrint, MyMilkPrint, and MyFeedPrint. These tools enable farm advisors to calculate the environmental impact of egg, milk, and animal feed production and identify opportunities to reduce the footprint. Other precision farming technologies on display include the Watson swine model, the NutriOpt On-site Adviser, providing remote analysis of raw ingredients and finished feed in just five minutes, and NutriXpert, (desktop, app), a ration calculation tool that connects all important animal and feed data and helps organize the operation efficiently through clear overviews of feeding management.

Speaking Sustainability: Expert Stage Talks

Trouw Nutrition experts will share their insights on science-based strategies to support more sustainable feed production, precision farming, and livestock production in 11 expert stage presentations. Speakers, times, and details are available <u>here</u>.

About Trouw Nutrition

Trouw Nutrition is Nutreco's livestock feed business line and a global leader in the feed, farm, and health aspects of producing quality meat, eggs and milk. We've spent nearly a century developing innovative feed products and more sustainable ways of raising healthy farm animals and companion animals.

We believe that animal nutrition and good farm management have the power to transform our industry and even our planet. Through our dedicated team of 8,300 experts and our global network, we work together with our customers to solve the challenges facing our feed-to-food chain and achieve our purpose of Feeding the Future.

With 71 manufacturing plants and a presence in 105 countries, Trouw Nutrition is everywhere our customers need us to be. We provide a one-stop-shop for feed specialities, feed additives, premixes, nutritional models and customised, integrated services. Our global brands include NutriOpt™, Milkiwean™, Erliva™, Maxcare™, Sprayfo™ and Selko™.

For more information, please go to <u>trouwnutrition.com</u> or follow us on <u>LinkedIn</u>.

Media contact EuroTier: Marcelle Wiegand Bruss, <u>marcelle.wiegand.bruss@trouwnutrition.com</u>







Press release - Sustainability

FOR IMMEDIATE RELEASE

Trouw Nutrition: Feeding the Future Sustainably

Accelerating our purpose of Feeding the Future, Trouw Nutrition is bringing science-based innovations to EuroTier that make food production more efficient and sustainable. Sustainability is a red thread woven throughout our presence at EuroTier 2024. Producers, farm managers, nutritionists, feed millers, and sustainability managers visiting stand 22B09, Hall 22, can learn about precision nutrition tools for poultry, swine, and ruminants. Visitors can also explore a suite of digital tools including models, programs, and solutions that provide users with data and insights to help reduce the environmental footprint of swine, egg, milk, and animal feed production. Expert stage presentations will share scientific insights that support sustainable animal feed production and environmentally responsible solutions for swine, poultry, and ruminant species.

Research to drive sustainable nutrition

Strategic pillars supporting Trouw Nutrition's sustainability initiatives include in-house and collaborative research with university partners, a suite of advanced modelling technologies, and a vast legacy of nutrient expertise advancing precision nutrition. Trouw Nutrition's global research teams continue to explore the interrelationship of nutrients in feed, physiological and metabolic processes in animals, and the nuances of varied production environments.

Research done by our in-house team of specialists including agronomists, phyto-pharmacists, and phyto-chemists at Nutreco's Garden of the Future is advancing understanding of how phytogenic ingredients in the diet function to improve broilers' gut health and boost the efficiency of poultry production. Similarly, new discoveries into how the fatty acid profile in cow's milk activates calves' gastrointestinal development is transforming approaches to young animal nutrition and helping animals enter the herd earlier and remain productive longer.

Ongoing research into how the type of trace mineral affects its availability in the animal and mineral excretion into the environment is leading to new feeding recommendations. Selko IntelliBond, the first trace mineral equipped with a life cycle assessment, will announce new trace mineral feeding recommendations during EuroTier.

Predictive modeling to assess the farm's footprint

Reliable models are important tools for simulating how changes in diet formulations and management decisions may affect a farm's environmental footprint. Data becomes even more powerful when supported with expert insights. During EuroTier, Trouw Nutrition will demonstrate NutriOpt's portfolio of digital models for poultry, swine, ruminants, and feed ingredients that can help farms and feed mills assess and, most importantly, reduce the environmental footprint of their operations.

Supporting sustainability on purpose

Trouw Nutrition's purpose of Feeding the Future is inspired by the challenge of meeting growing demand for food with limited environmental resources. According to the World Resource Institute, by 2050, nearly 10 billion people will inhabit our planet, and we will need to produce 60% more food.* At Trouw Nutrition, we believe that science can help transform milk, egg, and meat production - helping feed the growing population and protecting our planet. Discover sustainability insights at EuroTier stand 22B09, Hall 22.







About Trouw Nutrition

Trouw Nutrition is Nutreco's livestock feed business line and a global leader in the feed, farm, and health aspects of producing quality meat, eggs and milk. We've spent nearly a century developing innovative feed products and more sustainable ways of raising healthy farm animals and companion animals.

We believe that animal nutrition and good farm management have the power to transform our industry and even our planet. Through our dedicated team of 8,300 experts and our global network, we work together with our customers to solve the challenges facing our feed-to-food chain and achieve our purpose of Feeding the Future.

With 71 manufacturing plants and a presence in 105 countries, Trouw Nutrition is everywhere our customers need us to be. We provide a one-stop-shop for feed specialities, feed additives, premixes, nutritional models and customised, integrated services. Our global brands include NutriOpt™, Milkiwean™, Erliva™, Maxcare™, Sprayfo™ and Selko™.

For more information, please go to <u>trouwnutrition.com</u> or follow us on <u>LinkedIn</u>.

Media contact EuroTier: Marcelle Wiegand Bruss, <u>marcelle.wiegand.bruss@trouwnutrition.com</u>







Press release - Swine

FOR IMMEDIATE RELEASE

Trouw Nutrition shares enhanced modelling tools and precision nutrition strategies to enhance the sustainability of pig farming

Amersfoort, the Netherlands – 12 November, 2024 –Trouw Nutrition, Nutreco's livestock feed business, is continuing its mission of feeding the future, as it unveils enhanced technologies and feeding programs designed to elevate sustainability and reduce the environmental footprint of swine production. During EuroTier, visitors to Trouw Nutrition stand 22B09, Hall 22 can explore the newly enhanced Watson digital twin modeling system equipped with life cycle assessment (LCA) capabilities, and upgraded nutrient packages for the Milkiwean piglet feeding programmes.

Watson brings a holistic, integrated approach to pig performance and sustainability on the swine farm

Calculating a digital twin of the swine farm, Watson enables pig producers to create a virtual reality simulation of their operation and assess the effects of different decisions. Flexible and highly accurate, Watson shows how a given change may affect production efficiency, operational economics, and the farm's environmental footprint. Integrating data from raw materials, feed additives, genetic potential, health, economics, environment, and management practices, Watson evaluates different options and suggests optimal solutions based on performance and economics.

The recent addition of an LCA provides greater transparency of a farm's CO2 emissions and other sustainability metrics associated with pig production including nutrification, soil depletion, ingredient sourcing, and water scarcity. Users can utilize LCA insights to understand which areas contribute most to the farm's footprint. Watson can be used to highlight areas where easy or cost-effective changes could be made to lower emissions and protect farm profitability while enhancing transparency for consumers and regulatory agencies. "At EuroTier, we really want to show the advanced modelling and 360-degree approach that Watson offers to drive efficiency across the value chain with a whole market approach," said Johan Kroon, Sustainability Manager Swine ECA at Trouw Nutrition.

Milkiwean: Secure high performance through early life piglet nutrition

With the support of a dedicated piglet research and development (R&D) team and the resources of the Swine Research Centre in the Netherlands, Trouw Nutrition is continuously designing new solutions and approaches to drive piglets' health and performance in the context of antimicrobial reduction. New enhancements to Trouw Nutrition's Milkiwean piglet feeding programs make use of the latest scientific findings in swine nutrition.

Milkiwean diets are formulated to address health challenges, improve growth rate and support production efficiency. Kinetio technology, an optimal and balanced nutrient profile, and other nutritional technologies help Milkiwean diets support the piglet's physiology around weaning. The application of scientific knowledge and advanced technologies help feed formulators create diets with components that nurture piglets' enteric health and support a gut environment that optimises use of nutrients and digestibility. Milkiwean feeding programs help piglets through the weaning transition by targeting specific issues such as disease pressure on the farm.

During EuroTier, Trouw Nutrition experts will share findings from Nutreco Exploration (NutEx) research. Studies and ongoing feeding trials conducted around the globe show that a full matrix of ingredients working together supports piglets' gut health and maturation.







Micronutrition to sustain health and fattening swine performances

Micro- and precision nutrition is at the heart of the swine nutritional strategy at Trouw Nutrition. As fattening swine are becoming more efficient, with higher levels of protein and lean deposition, growth potential is increased. In parallel, preventive health and vaccination programs are supporting the immune competency of pigs. If additive nutrition is required, micronutritional supports – including vitamins and select IntelliBond trace minerals – help to target the metabolic pathways that sustain performance and support immune competency and health. To provide further support, Trouw Nutrition also recently invested in additional NutriOpt NIR lines.

From methods to improve transparency and boost on-farm sustainability practices to better support for pigs through every growing stage, Trouw Nutrition has multiple exciting developments to discuss at this year's EuroTier. Stop by stand 22B09 in Hall 22 to hear more about what these technologies could mean for your farm.

About Trouw Nutrition

Trouw Nutrition is Nutreco's livestock feed business line and a global leader in the feed, farm, and health aspects of producing quality meat, eggs and milk. We've spent nearly a century developing innovative feed products and more sustainable ways of raising healthy farm animals and companion animals.

We believe that animal nutrition and good farm management have the power to transform our industry and even our planet. Through our dedicated team of 8,300 experts and our global network, we work together with our customers to solve the challenges facing our feed-to-food chain and achieve our purpose of Feeding the Future.

With 71 manufacturing plants and a presence in 105 countries, Trouw Nutrition is everywhere our customers need us to be. We provide a one-stop-shop for feed specialities, feed additives, premixes, nutritional models and customised, integrated services. Our global brands include NutriOpt™, Milkiwean™, Erliva™, Maxcare™, Sprayfo™ and Selko™.

For more information, please go to <u>trouwnutrition.com</u> or follow us on <u>LinkedIn</u>.

Media contact EuroTier: Marcelle Wiegand Bruss, <u>marcelle.wiegand.bruss@trouwnutrition.com</u>







Expert Stage presentations

Meet our speakers









Johan Kroon

Topic: Feeding the Future Together: reducing the footprint of swine

About Johan

Johan Kroon has been a part of Trouw Nutrition since 2007. Over the years, he has gained extensive experience working within MasterLab and specializing in trace metal analysis and (mobile) Near-Infrared Spectroscopy (NIR). His expertise extends to technical sales, where he was responsible for service sales in the Benelux region.

As of February this year, Johan has taken on a new role, leading the sustainability agenda for swine in the Europe and Central Asia (ECA) region. In this position, he plays a key role in advancing sustainable practices within the sector, ensuring that Trouw Nutrition's strategies align with both industry needs and evolving environmental standards.

Presentation summary

In this presentation, Johan Kroon will explore how optimizing swine performance can be achieved by integrating sustainability with an advanced modelling technique called a "digital twin". He will discuss innovative approaches to improving productivity while reducing environmental impact, showcasing how data-driven models can support more efficient and sustainable swine farming. The talk will highlight the use of this digital twin for aligning performance goals with the growing demands for sustainability in the livestock industry.

Timing and location

Tuesday 12 November, 17.00 - 17.20 pm, Hall 15









Andrea Lopez

Topic: Managing sugar availability and microbial proliferation in liquid feed

About Andrea

Andrea Lopez Karolys is the Global Product Manager for Yeast Inhibition and alternative feed ingredients at Selko, the Feed Additive brand of Trouw Nutrition. She holds a BSc in Biotechnology Engineering and an MSc in Environmental Sciences from Ghent University. Early in her career, she worked on environmental projects for the Ecuadorian Government. Before joining Nutreco, she managed byproducts of ABInBev breweries in Latin America, focusing on alternative raw materials for animal feed.

Andrea has extensive experience in treating and reusing byproducts as alternative sources of protein, fiber, and nutrients in animal feed. Her work with farmers and brewery customers helped her understand the need for cost-effective materials that meet the nutritional requirements of various animals. She also developed agricultural businesses with a circular economy approach, supporting sustainability in large food production companies. In June 2023, she joined Selko, to develop strategies for yeast mitigation in swine liquid feed and Total Mixed Ratio (TMR), aiming to prevent nutrient spoilage, extend raw material shelf life, and improve animal performance.

Presentation summary

Microbial growth in swine liquid feed, due to high moisture, affects feed quality and intake. Microbes like yeast consume sugars and nutrients, reducing dry matter, palatability, and nutritional value, which can decrease feed intake and impact pig growth and health. Ensuring feed stability is crucial, as microbial overgrowth reduces nutrient density and exposes animals to harmful byproducts and toxins.

Buffered and non-buffered organic acid blends, such as Selko BE+, Selko RSD, and Selko SVG, create a lower pH environment that inhibits microbial growth. Buffered acids provide stable pH reduction over time, suitable for feed storage, while non-buffered acids allow for a quicker pH drop, beneficial for immediate microbial suppression. Both types help maintain feed quality, enhancing intake and digestibility, supporting animal performance and immune health by reducing microbial competition and preserving nutrients.

Timing and location

Wednesday 13 November, 9.30 - 9.50 am, Hall 15









Nestor Gutierrez Cespedes

Topic: How more precise use of phosphorus and calcium improve the feed conversion ratio, sustainability and efficacy of phytase enzymes in swine diets

About Nestor

Nestor Gutierrez is a PhD swine nutritionist from Iowa state university and has worked for Trouw Nutrition for the past 9 years. He is originally from Colombia and is based in The Netherlands. He is an animal agriculture and pork ambassador. He uses science and reason to deliver added value and innovative solutions to pork producers to propel the industry to even more sustainably feed the world.

Presentation summary

In this presentation, Nestor Gutierrez, will discuss how the introduction of total tract digestible (STTD) Calcium and Phosphorus, prevent performance loss, improve feed conversion ratio through, enhance the use of phosphorus by allowing precise formulation, and increase the efficacy of phytase.

Timing and location

Friday 15 November, 11.00 - 11.20 am, Hall 15









Guanlin Wang

Topic: Mycotoxin mitigation strategies in sow production: new learnings from two recent scientific research projects

About Guanlin

Guanlin Wang is the global product manager for the mycotoxin risk management programme of Selko, the feed additive brand of Trouw Nutrition. A veterinarian by profession, he completed MVSC from China Agricultural University, Beijing, after which he grew in-depth knowledge of pharmacology and toxicology from National Centre for Veterinary Drug Safety Evaluation. Afterwards, he moved to Europe and completed another two master's degrees in Sustainable Animal Nutrition and Feeding from Wageningen University & Aarhus University, and Business Administration from University of Amsterdam. He joined Selko in 2017 to develop a portfolio across various animal species for mycotoxin mitigation. Year to date, animal producers from more than 80 countries continuously obtain the benefit from applying the portfolio.

He has a passion to understand the main challenges within the animal protein value chain and to develop science-based solutions accordingly. His extensive experience in working with Trouw Nutrition, has helped him gain the insights across geographies and evolve the solutions globally.

Presentation summary

Mycotoxins are toxic compounds from fungi that can grow on crops, affecting sow health and reproductive performance. Common mycotoxins in sow diets include deoxynivalenol, fumonisins, and zearalenone. Key effects include:

- **Weight and Body Condition**: Reduced feed intake and poor nutrition affect weight gain, milk production, and piglet health.
- Reproductive Issues: Irregular cycles, reduced conception rates, and increased embryonic losses.
- **Milk Production**: Lower yield and quality, impacting piglet growth and survival.
- Piglet Health and Growth: Weaker piglets with higher mortality rates.

Our mycotoxin mitigation product combines binding, gut health protection, immune modulation, and biotransformation. It uses natural and synthetic clays, yeast cell wall materials, and anti-inflammatory ingredients to protect tight junction proteins. It also enhances macrophage function to combat immune suppression and includes technology to degrade mycotoxins in the gut. Recent studies validate its efficacy.

Timing and location

Friday 15 November, 13.30 - 13.50 pm, Hall 15

