Clean investments can pay off on-farm

PPRA supports Canadian pork competitiveness

Tariffs weaken pork industry integration

CANADIAN HOG JOURNAL

Canada's national hog magazine • SPRING 2025

Canadian red meat industry shows strength in unity

Publications Mail Agreement No. 40062769

CANADIAN HOG JOURNAL

Canada's national hog magazine

Canada's top producer-focused swine industry publication since 1972. Covering news, commentary, events, and research in four editions annually.

Spring 2025

Date of Issue: May 2025

Published by Alberta Pork with cooperation from producers and partners across Canada.

Publisher
Darcy Fitzgerald

Editor
Andrew Heck

Advertising
For all inquiries
Email: info@albertapork.com
Phone: 780-474-8288

Subscriptions
For any new, updated or cancelled subscriptions
Email: rawya.selby@albertapork.com
Phone: 780-474-8288

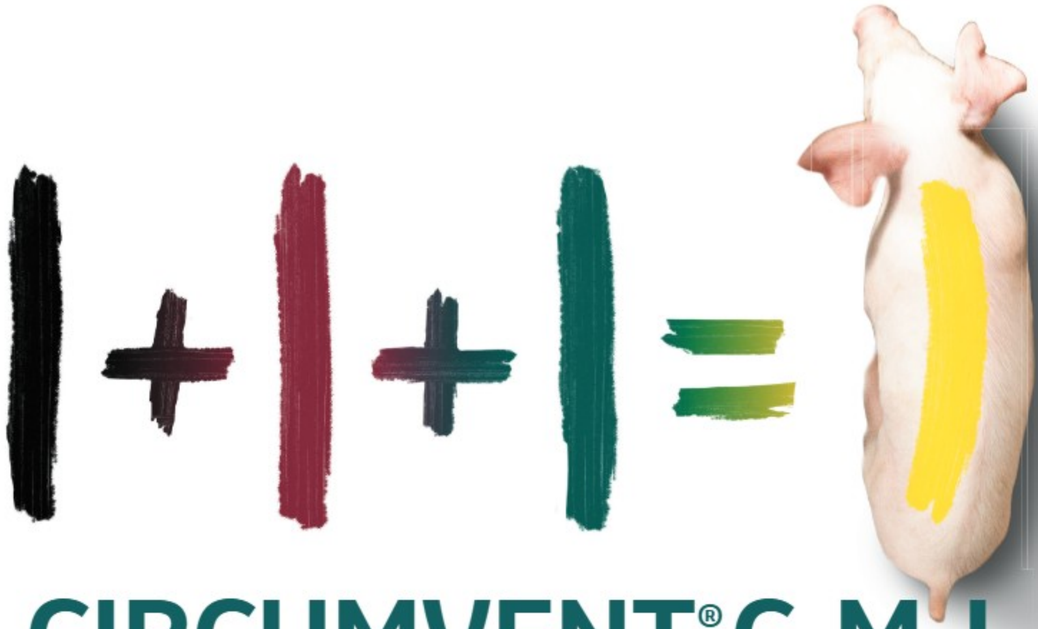
Publications Mail Agreement No. 40062769

Return undeliverable addresses to:
Alberta Pork
4828 - 89 Street NW
Edmonton, AB, Canada T6E 5K1

Cover photo: Verified Canadian Pork sirloin chops with corn and onion.

Spring 2025

FEATURES



CIRCUMVENT® C-M-L

A Revolutionary 3-in-1 Vaccine

Circumvent® C-M-L

Help protect your herd from porcine circovirus type 2, *Mycoplasma hyopneumoniae* and *Lawsonia intracellularis* with CIRCUMVENT® C-M-L – the first and only vaccine that covers these three diseases with just one injection.

- + FEWER INJECTIONS
- + FEWER BOTTLES TO MANAGE
- + MORE COMFORT
- + MORE CONVENIENCE

For a singularly easier experience for your staff and your animals,
SWITCH TO CIRCUMVENT® C-M-L.

Need more information?
Producers: Talk to your veterinarian to determine whether Circumvent® C-M-L is suitable for your herd
Veterinarians: Please contact your Merck Animal Health representative, call 1-866-683-7838, or go to www.merck-animal-health.ca

MERCK Animal Health

Hybrid Rye

High Yield.
High Digestibility.
High Performance.

SEEDING THE FUTURE
SINCE 1856

KWS

Talk to Your Nutritionist or Contact Us Today!
www.kws.com/ca

Canadian red meat industry shows strength in unity

Jennica Klassen

Editor's note: Jennica Klassen is Communications Manager, Canadian Meat Council (CMC). She can be contacted at 'jennica@cmc-cvc.com.'

Representatives from the Canadian Meat Council (CMC) and Canadian Pork Council (CPC) have ramped up advocacy efforts in light of tariffs and trade complications.

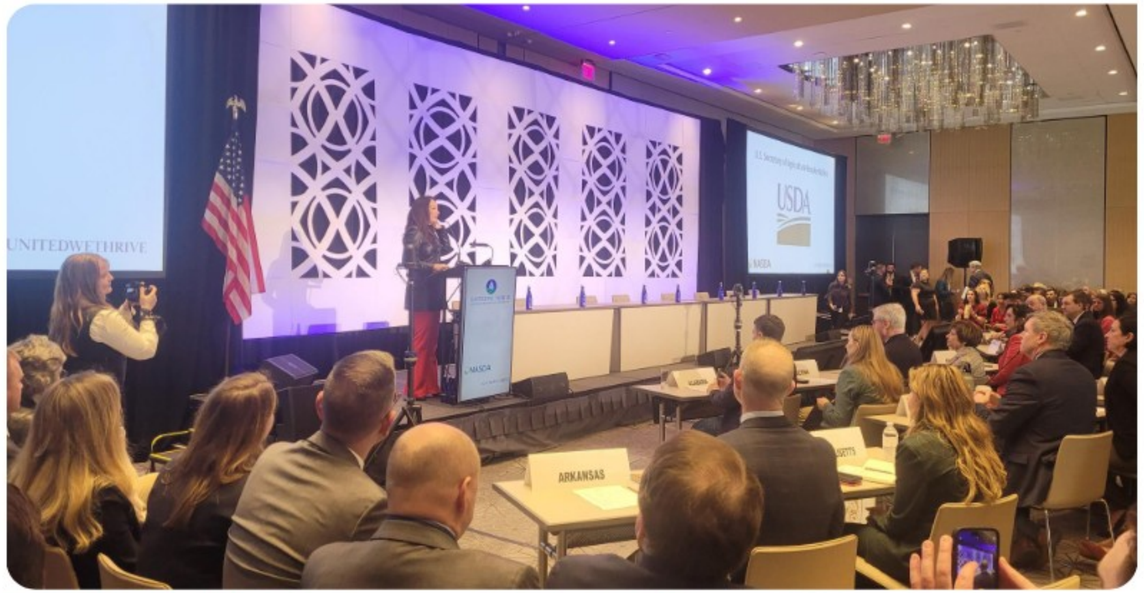
FROM COAST TO COAST TO COAST, THE CANADIAN RED MEAT SECTOR SUPPORTS RURAL COMMUNITIES, sustains hundreds of thousands of jobs, and contributes billions of dollars in economic activity. Whether it's raising livestock, processing meat or transporting and selling Canadian products around the world, the supply chain is vast and vital. But this success isn't without its challenges, especially in the face of mounting trade pressures from the U.S.

Recent developments in U.S. trade policy, including new tariffs and regulatory shifts, have created significant headwinds for the industry. These changes risk restricting access to our largest export market, creating uncertainty for producers and processors alike. For industries as interconnected as pork and beef, the ripple effects of disrupted trade can be felt all the way from farms to grocery store shelves.

That's why now, more than ever, Canada's red meat sector must present a unified front. The Canadian Pork Council (CPC) and the Canadian Meat Council (CMC) have taken this challenge head-on, working closely together to ensure Canada's interests are clearly and consistently represented on the global stage. These two national organizations have led coordinated advocacy efforts aimed at protecting and strengthening trade relationships, particularly with the U.S.

Chris White, CEO, CMC and Canada Pork, reiterates the importance of collaboration. His message is clear: our industry is stronger when we speak as one.

"When leaders from across the industry come together with a shared purpose and vision, our message is stronger, our advocacy efforts are more effective and our impact is greater," said White. "Through close engagement with the federal government, CMC and CPC will continue advocating for reduced restrictions and trade barriers for Canada's red meat industry."



The U.S. National Association of State Departments of Agriculture (NASDA) enhances American food and agricultural communities through policy, partnerships and public engagement. The Canadian and U.S. red meat industries are highly interdependent.

This unity is more than symbolic; it's strategic. Representatives from both CMC and CPC, including staff and board members, have traveled extensively in recent months to meet with key trade partners in the U.S. In Washington, D.C., we've engaged in multiple discussions with the offices of Brooke Rollins, U.S. Secretary of Agriculture; Amy J. Klobuchar, Senator of Minnesota; Tim Sheeny, Senator of Montana; Kevin Cramer, Senator of North Dakota; Randy Feenstra, Congressman of Iowa; and other important partners.

> ***"When leaders from across the industry come together with a shared purpose and vision, our message is stronger, our advocacy efforts are more effective and our impact is greater,"*** — Chris White

In addition to engaging with key political offices, CMC and CPC have maintained continuous contact with agricultural groups and counterparts. They also hosted an event at the Embassy of Canada to the U.S., in collaboration with the U.S. National Pork Producers Council (NPPC).

These missions aren't just about protecting trade access but about forging new opportunities and demonstrating the competitiveness and sustainability of Canadian red meat.

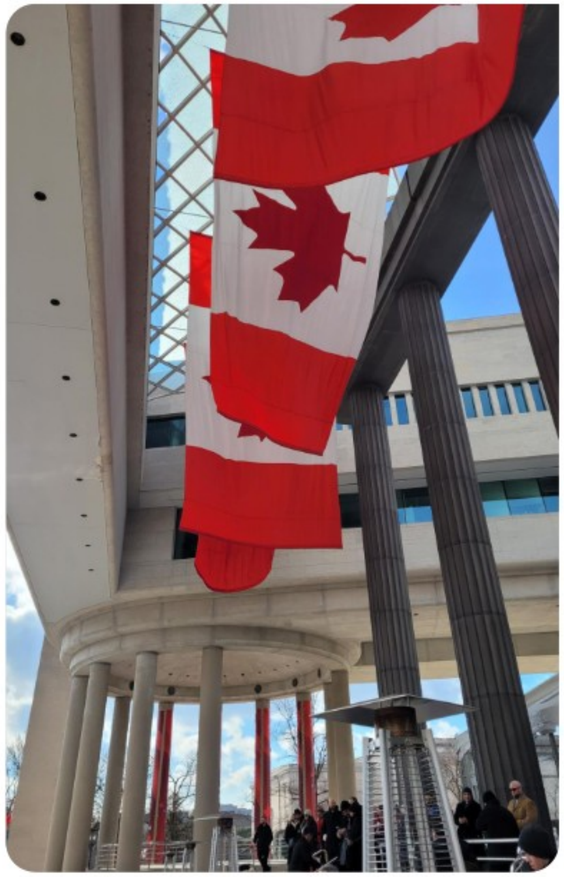
In China, similar efforts have been made to re-establish and grow market access. To better highlight the importance of maintaining Canada's presence in global markets, and in light of the ongoing tariffs on pork and other agricultural products, a new Canadian Meat Advocacy Office will be opening in Beijing. The need for a strong, dedicated presence in China has never been more critical.

René Roy, Chair, CPC believes in the power of this partnership.

"By working collaboratively with CMC, we present a united front to advocate for the priorities of the Canadian pork sector," said Roy. "Our discussions underscore the urgent need to address challenges like ASF, expand trade opportunities and support labour needs. These are priorities that are crucial for sustaining and growing our industry."

Labour remains one of the most pressing concerns across the red meat supply chain. Processing facilities across the country are struggling to recruit and retain enough skilled workers to meet production demands. Without consistent access to labour, even the best export opportunities are difficult to seize. Both CMC and CPC have emphasized this point in conversations with decision-makers, calling for immigration and workforce solutions that reflect the realities of the sector.

Trade access, labour and regulatory cooperation are deeply interconnected. Through collective action, the industry can work towards ensuring that Canadian pork and beef remain competitive on the global stage. Whether it's lobbying on Parliament Hill, participating in multilateral trade dialogues or engaging with U.S. regulators, CMC and CPC are working in tandem to ensure the sector's voice is heard and is impactful in its messaging.



When met with adversity, the Canadian red meat industry rises to the challenge. Groups including CMC and CPC will continue to stand up for producers, processors and all value chain partners.

A collaborative approach also sends a powerful signal to decision-makers. Collaboration between organizations demonstrates a united industry with clear priorities and a strong commitment to finding solutions.

"Our constant joint advocacy efforts showcase the power of collaboration, allowing us to effectively address issues impacting both producers and processors with a unified industry vision," said White.

At a time when global competition is fierce and international markets are anything but guaranteed, Canada must maintain a cohesive voice and clear message. The industry must stay united across commodities, across regions and across the supply chain. Because when Canadian red meat industry stands together, the entire country benefits.

Clean investments can pay off on-farm

Jonathan Giret

Editor's note: Jonathan Giret is President & CEO, Elite Agri Solutions. He can be contacted at 'jonathan@eliteagrisolutions.ca.'

THE STRUGGLE TO BALANCE COST-CUTTING WITH IMPROVED ON-FARM EFFICIENCY IS TAKING ON ADDED URGENCY THESE DAYS. Commodity prices, cost of production concerns – both with crops and livestock – capital expenses for equipment inside the barn and food safety protocols are enough to keep any producer hopping.

But now there are questions surrounding green energy systems and determining the best approach for on-farm efficiency. For me, these conditions apply whether you're a crop or livestock producer.

A quick overview of my farm: I purchased my first farm in 2014, entered the broiler industry in 2016, and now own 250 acres. I attempt to operate as if I was advising another farmer on how to get started in the industry and have focused my efforts from the early years to expanding my acreage. Now, with land prices, I have shifted investments towards my poultry production. The two things I identified as a fit for my operation were solar panels for net metering and heat exchangers.

Solar makes cents

One of the reasons I like solar net metering is the theory that it shouldn't create any additional work for me as a farmer once the panels are up. The current net metering offer in Ontario is to create your own electricity, push it back to the grid, and if you create more than you use, your bill will be minimized to the portions of the bill not eligible for the offset. My last bill was less than $100 and would have been more than $600 without net metering. Without grants or tax credits, there is still a payback for pursuing solar, which is better than most of the investments in the farming community.

Solar's come a long way. Given a barn's existing footprint, installing panels can be a space-efficient way to be energy-efficient.

One thing to note would be the connection delays. My electricity provider took six months after my solar was fully installed to allow us to start sending energy back to the grid. So, the lesson here is to plan, be patient and talk through the timelines before installing the panels.

Insurance liabilities need to be considered, as well. My insurance company had no issues with putting solar on the roof, but if it is a concern with your insurer, consider ground-mount options. For any producer looking at building a barn, I would suggest making sure trusses are rated for a solar load. It's an inexpensive addition when you're building a barn. I talked to many farmers who have solar and found it was split half-and-half between those who preferred solar on the roof and those who were concerned about structural impacts of the solar panels on the roof. For me, the deciding factor was placement: I didn't have any area on the farm that a ground mount would fit, not be in the middle of a field, and not have the potential to be in the way for future development in the next 50 years.

On my farm – with one barn and one house – the pay back without incentives was roughly 11 years, as the initial price was $130,000. I needed a 55-kilowatt system but built the infrastructure for a 75-kilowatt system that will allow expansion up to 150 kilowatts in the future. The Government of Ontario currently has an Input Tax Credit (ITC) for 30 per cent, which incorporated farms are eligible to pursue. Unfortunately for me, due to some accounting communication errors, I missed taking advantage of that opportunity for my farm. The good news is that by leveraging grants, I was still able to get the pay back down to about six years.

If you're researching solar, be conscious to listen only to those who have experience in this realm. Many farmers without solar panels have relayed concerns on longevity and significant costs for maintenance. I made the effort to engage with multiple farmers who participated in the early micro-fit programs and have had their systems for more than 10 years. The response was consistent: maintenance was minimal, the systems operated well, and degradation of the panels was not a concern.

Warming up to heat exchangers

On a personal note, the reason I love this system is that, as I expand into the future, the question has shifted from, 'What I can do to reduce energy use?' to, 'What can I invest in that will show a return, and leverage extra energy capacity?' It's enabled me to look at energy usage in a different way and is an intriguing prospect that holds many opportunities for future development.

Heat exchangers also seemed like a great investment. Since my barn is a single cross, it has bothered me since construction that I'm bringing air in, heating it and then 60 feet across the barn, exhausting it out the side. A heat exchanger makes sense, and if I can heat the barn more efficiently, I can ventilate more to ensure carbon dioxide, ammonia and humidity are always well within best management practice targets. When I built the barn, I was pitched on a large Vencomatic unit, and given the cost compared to the barn, it seemed like an investment a second-generation might make. The heat exchanger unit I chose to go with was the ESA-3000. The ESA units cost me roughly $50,000 for three, and that seemed a reasonable investment with a manageable return.

Heat exchangers can reduce costs considerably if chosen specifically for the barn, and assuming the barn has no underlying insulation issues.

I have an 18,000-square-foot barn, and the dealer suggested I have five units installed. I went with three as a test, with the thought that, for the first four weeks of winter ventilation, I should be fine with three. Typically, the last week to 10 days, I am adding another fan, but this is also when I'm least concerned about supplementing heat in the barn.

My intent was to do a fairly in-depth review of the return on investment (ROI) on my barn to validate the numbers from the company literature. Unfortunately, I recently learned that my insulation has settled to about r20 in the ceiling and will need to be topped up before next winter. On an eight-year-old barn, that's a painful pill to swallow! But such is life, and my ROI calculations will be limited to one winter of accurate numbers.

On a particular day in January, when it was minus-six degrees-Celsius in West Lorne, Ontario, my barn was set to 28.6 degrees-Celsius, and the heat exchanger brought in fresh air at 15.3 degrees-Celsius, for 62 per cent efficiency – not far off ESA's claim of reducing heating costs by up to 70 per cent. One thing worth noting is that it takes about an hour to wash the heat exchanger cores between flocks, even though the units come equipped with an auto flush system.

Be it solar panels or heat exchangers, livestock producers should consider their options – and what financial support might be available – when it comes to make energy efficiency upgrades in barns.

PPRA supports Canadian pork competitiveness

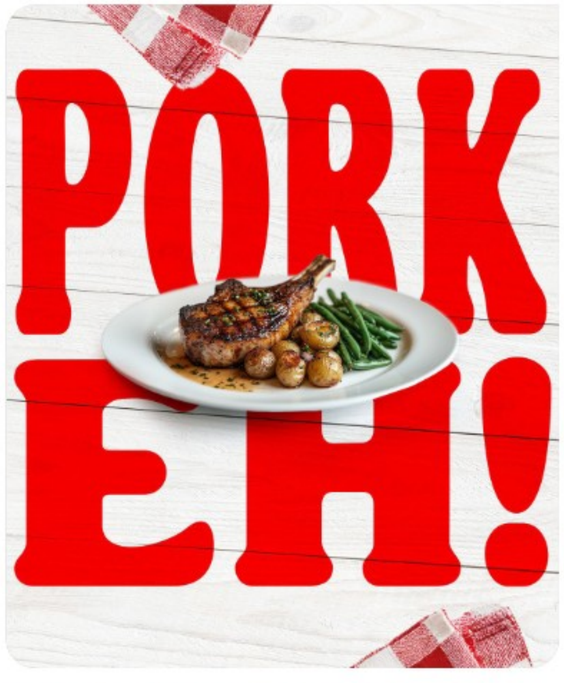
Zhiqi Zhou

Editor's note: Zhiqi Zhou is a communications and journalism intern with the Canadian Pork Council (CPC). For more information, contact Chloe Belchamber, Manager, Operations and PPRA, CPC at 'belchamber@cpc-ccp.com.'

THE CANADIAN PORK INDUSTRY IS A VITAL PART OF THE NATIONAL ECONOMY and a global leader in producing safe, high-quality and sustainable food. At the heart of many of the sector's advancements is the Pork Promotion and Research Agency (PPRA): a federally legislated body that plays a behind-the-scenes yet crucial role in supporting the industry's growth.

Chloe Belchamber, Manager of Operations and PPRA, Canadian Pork Council (CPC) spoke about the agency's work, highlighting how it fuels innovation, supports marketing efforts, collaborates across sectors and faces evolving challenges with a forward-looking approach.

"Rather than focusing on branded campaigns, the agency supports generic pork research and promotional efforts that benefit the entire sector," said Belchamber. "The PPRA is intended to fuel innovation, support marketing efforts, and lead to collaboration across sectors while facing evolving challenges with a forward-looking approach."



Promoting 'generic' (non-branded) pork for consumers is a primary goal of the PPRA. Social media is playing an increasingly important role.

The PPRA was established under the *Farm Products Agencies Act*, with a mandate to promote the production and marketing of hogs and pork products across interprovincial, export and import trade. The PPRA's activities are funded through an import levy system. This levy – equal to the domestic check-off amount – is applied to all imported hogs, pork and pork products. The information used to calculate the levy comes from Agriculture and Agri-Food Canada (AAFC) and the Canada Border Services Agency (CBSA), and invoicing is handled on the PPRA's behalf by the Canadian Beef Check-Off Agency, which brings more than 15 years of experience in levy collection. Levy funds are re-invested into strategic initiatives aimed at making the Canadian pork industry more competitive and sustainable.

> ***The PPRA…plays an active role in consumer education and marketing. Through its partnership with Canada Pork, the agency runs broad-reaching marketing campaigns to promote pork's value without highlighting any specific brand.***

"By complying with World Trade Organization regulations and principles of national treatment, the agency's model ensures fairness between imported and domestic products," said Belchamber. "A unique aspect of the PPRA's work is that its promotional and research materials are made available to all industry players – producers, importers and processors alike."

This inclusive approach encourages everyone to contribute to strengthening pork's position in the marketplace and ensures Canadian pork continues to be trusted, innovative and efficient on both the domestic and global stages.

Marketing and research benefit

A major pillar of the PPRA's mission is supporting research that drives improvements in production practices, environmental sustainability and animal welfare. Research activities are carried out through a service provider agreement with Swine Innovation Porc (SIP).

SIP's investments in science are already producing tangible results. For instance, current projects include strategies to optimize phosphorus and nitrogen utilization and studies on replacing antimicrobials in weaned piglets. SIP also supports research into animal welfare, including transitional funding for a dedicated Animal Welfare Chair. All these projects fall under a newly launched framework that facilitates knowledge transfer and ensures that research findings are shared directly with producers.

The PPRA, meanwhile, plays an active role in consumer education and marketing. Through its partnership with Canada Pork, the agency runs broad-reaching marketing campaigns to promote pork's value without highlighting any specific brand. One such campaign, 'Pork, Eh!' uses multiple social media platforms to showcase pork's nutritional benefits, versatility and cooking ideas for consumers.

In a sector as interconnected as agriculture, collaboration is essential, and the PPRA is no exception. The agency works directly with producers and processors to disseminate research findings and marketing tools that can be adapted to suit individual needs. It also partners with key government agencies, including AAFC and CBSA, to facilitate levy collection and ensure regulatory compliance. Oversight is provided by the Farm Products Council of Canada.

Collaborative research projects directed by Swine Innovation Porc (SIP) are another important use of PPRA funds.

"Close relationships with organizations such as Canada Pork and SIP ensure that marketing and research programs remain aligned with industry needs and priorities," said Belchamber. "These partnerships allow the PPRA to deliver meaningful results while avoiding duplicating efforts."

Despite planning and preparedness, potential foreign animal disease outbreaks pose a significant risk to the Canadian pork industry. In an outbreak, closures of export markets would result in domestic backlogs of pigs and pork.

Challenges remain despite advantages

Despite its many successes, the PPRA and the Canadian pork industry face significant challenges. Chief among them is maintaining competitiveness in both domestic and international markets. This requires constant innovation, high production standards and the ability to respond to changing consumer demands. Increasingly, Canadian consumers are prioritizing health, sustainability and ethical practices, which are driving their choices. This shift places pressure on the Canadian pork industry to remain transparent at all stages of the value chain, while continuing to deliver high-quality products.

At the same time, regulatory changes – whether they involve trade agreements, environmental policies or animal health standards – can significantly impact the industry. Adapting to these changes requires agility, cooperation and often new investments in compliance and innovation.

Potential foreign animal disease outbreaks are another challenge that should not be underestimated. If African Swine Fever (ASF) or Foot-and-Mouth Disease (FMD) were to be discovered in Canada, it could devastate pork production and processing by shutting down access to export markets, triggering major backlogs of domestic pigs and pork that would ultimately need to be absorbed by the Canadian consumer market. For the PPRA, this would mean a dramatic loss of revenue, since the agency relies on imports to generate funding. Without those imports, its ability to support vital research and promotional work could be severely limited. Still, Belchamber remains optimistic.

"Through careful planning, strong partnerships and a focus on shared benefits, the PPRA continues to provide crucial support to one of Canada's most important agricultural sectors," said Belchamber. "By investing in generic, science-based promotion and research, the agency is helping producers not just adapt to change, but lead the way in shaping a resilient, innovative future for Canadian pork."

Tariffs weaken pork industry integration

Cam Dahl

Editor's note: Cam Dahl is General Manager, Manitoba Pork. He can be contacted at 'cdahl@manitobapork.com.'

The strength of the Canada-U.S. integrated pig and pork supply chain relies on free trade to benefit partners in both countries.

'THIS TOO SHALL PASS' is a Persian proverb used to encourage hope when times are difficult. Does this saying apply to the current U.S. President's confrontational approach to allies and friends? Does it apply to the U.S. Administration's isolationist trade policies and tariffs? It probably does apply in the long-term, but today, hope is in short supply for many Manitoba farmers.

Manitoba exports about $9.3 billion worth of agriculture and food products every year. This represents 13 per cent of the province's annual gross domestic product. Almost half, 46 per cent in 2024, of these exports were shipped into the U.S.

In early March, President Trump carried through on his threats to put tariffs of 25 per cent on almost all Canadian exports (outside of oil and gas). This means that half of our agriculture and food exports became 25 per cent more expensive with no return to farmers or processors. The negative impact of this will reverberate throughout every community in Manitoba, large and small.

Tariffs do not come as a surprise. The President talked about tariffs throughout his election campaign. The current U.S. Administration views trade surpluses as a foreign subsidy provided by U.S. taxpayers. The President's closest economic advisors are advocates for tariffs for both revenue generation as well as a tool to drive manufacturing to the U.S. Given these views, it is likely that these tariffs will be with us for some time.

Many are predicting that a recession is coming. Looking at the pork sector as an example, it is not hard to see why these predictions are being made. The sector supports 22,000 jobs in Manitoba, in almost every part of the province. The industry

contributes $2.3 billion to the provincial GDP. Our largest export market is now significantly disrupted, putting those jobs and economic contribution at risk. Pork is not alone. A recent survey by the Winnipeg Chamber of Commerce found that over 60 per cent of businesses will be negatively impacted, with many seeing impacts already.

Governments need to act decisively and rapidly. We have seen positive action from the Government of Manitoba, with the Premier, together with his provincial counterparts, engaging with decision-makers in the U.S. Cabinet ministers, like the Minister of Agriculture, Ron Kostyshyn, have been reaching out to strategic partners in state capitals. The establishment of the Premier's U.S. Trade Council was a positive step. But more can, and must, be done.

At least in agriculture, we have common objectives with our neighbours in Saskatchewan and Alberta. The three governments should come together with a strategic outreach plan for Prairie agriculture and food trade stakeholders in the U.S. Through work done by the Keystone Agricultural Producers, agriculture and food value chains in Manitoba have identified 18 key states with whom we should be engaged. It would be difficult for Manitoba to effectively launch an advocacy campaign in all 18 states, but together with the other Prairie provinces we have the necessary resources.

The province should consider leveraging their 'Buy Local' campaign to partner with the other two prairie provinces to further boost consumer demand here at home. Longer term, both the federal and provincial governments should be looking at incentives for investments that would help support export diversification and increase trade between provinces. For example, providing incentives to both farmers and processors who, considering U.S. trade actions, might want to adjust their operations to meet European regulations.

We also need to have a strategic plan going into the renegotiation of the Canada-U.S.-Mexico (CUSMA) agreement. The aggressive shift in U.S. foreign and trade policies clearly shows us that the renegotiation of our most important trade agreement will be difficult. We must be more prepared than we are today.

Canada has responded to the U.S. tariffs with our own duties. We really had no option. But a protracted trade war with the U.S. will weaken our province and our country for years to come. There is hard work to be done by both exporting industries, like agriculture, and governments to prevent that from happening and to recharge that hope for the future.

News & Views

Heath MacDonald (left) with Stephen Heckbert, Executive Director, Canadian Pork Council (CPC).

New federal ag minister appointed

Heath MacDonald (Liberal), Member of Parliament (MP), Malpeque (Prince Edward Island) was appointed Minister of Agriculture and Agri-Food Canada (AAFC) in mid-May, following the latest Canadian federal election.

MacDonald was first elected in 2015, and since 2023, has belonged to the House of Commons Standing Committee on Agriculture and Agri-Food, a public forum where specific issues affecting the sector can be addressed. The committee has debated topics like the Sustainable Canadian Agriculture Partnership (SCAP), supply management and food price inflation.

With his re-election, John Barlow (Conservative), MP, Foothills (Alberta) remains as Opposition critic for AAFC. Barlow was previously Vice-Chair of the Standing Committee on Agriculture and Agri-Food.

The five-year-old Agri-Food pilot program was welcomed with open arms by the Canadian pork value chain, which has been suffering from significant labour shortages.

Agri-Food pilot program ends

The federal Agri-Food Pilot program closed to new applications in early May, after reaching the 1,010-maximum permanent resident threshold as defined by the federal government's 2025–2027 Immigration Levels Plan.

"The program has proven to be effective," said Arnold Drung, President and CEO, Conestoga Meats. "This has positively impacted not only our temporary foreign workers, but also local employees, our business, farmers and the local economy."

Since 2020, the Agri-Food Pilot has helped fill labour gaps by offering a pathway to permanent residence to Temporary Foreign Workers (TFWs) in agri-food. To date, the program has supported more than 4,500 agri-food workers and family members.

"Our plants are unionized," said Lauren Martin, Senior Director, Public Affairs & Corporate Counsel, Canadian Meat Council (CMC). "Our employers aren't looking for cyclical individuals that are going to come and go. They're looking for permanent employees because we have permanent jobs that we need to fill on a year-round permanent basis."

Feds commit funds to ASF producer recovery

Lawrence MacAulay, former Minister, Agriculture and Agri-Food Canada (AAFC) announced in early March $567 million to support hog producers should there be a closure of key export markets for Canadian pork and live pigs due to an African Swine Fever (ASF) outbreak in Canada or the U.S.

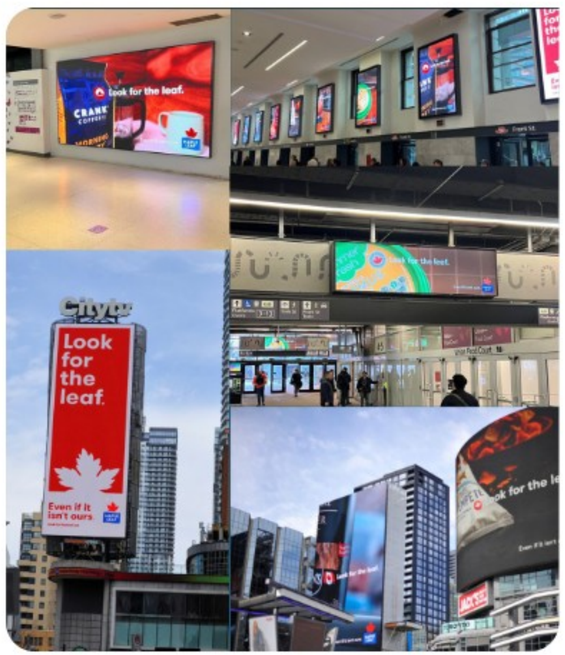
"We appreciate the support and the partnership of the Government of Canada, and of our provincial government partners, as we all work together to prepare for a potential ASF event," said René Roy, Chair, Canadian Pork Council (CPC). "This is an important step in that preparation, and we look forward to continuing to find solutions to prevent this disease from reaching our shores. With this announcement, we know that if the disease hit our country, governments will be with pork producers from coast to coast to face the challenges of business continuity – this support significantly reduces the stress of our producers."

In 2024, Canada exported more than 6.8 million pigs and about 1.4 million tonnes of pork products, representing more than 60 per cent of all pigs and pork produced. This set-aside funding lasts until March 2029. Funding will be available to producers for one year following a hypothetical ASF outbreak.

Maple Leaf launches cross-product patriotic campaign

In early March, Maple Leaf Foods launched its 'Look for the Leaf' campaign, bring together 16 major Canadian food brands in a show of solidarity, in the face of the current global economic uncertainty. The campaign kicked off with a paid media blitz in major Canadian cities and continues on social media.

From dairy products to frozen fish, and from beverages to snack foods, the goal for Maple Leaf is to rally together with other Canadian companies to demonstrate a united front. While this campaign comes in direct response to the trade wars with China and the U.S., it has the potential to create long-term benefits through collaboration and partnership.



Maple Leaf's latest marketing campaign links arms with other major Canadian brands in other food categories.

RESEARCH & INNOVATION

Lowering carbon footprint through feed strategies

Swine Innovation Porc

Editor's note: This article is a summary prepared for Swine Innovation Porc. For more information, contact 'cchristensen@swineinnovationporc.ca.'

Precision feeding ensures that pigs receive not too much, not too little feed to support growth in a way that lowers emissions and cost but continues to support performance.

THEY MAY NOT ATTEND CLIMATE RALLIES, but pigs do their part for the planet, and so do producers. While scientists tackle a range of industry issues, from feed to disease to animal care, the environment often plays a role in research plans. As part of its funding for Swine Cluster 4, Swine Innovation Porc (SIP) supports a number of Canadian studies with shades of green.

Matching feed to need

With feed comprising the bulk of a producer's budget, providing more than a pig requires just inflates that cost further. It stands to reason, then, that by matching pig diets precisely to their requirements, feed expenses can be cut while limiting impact on the environment. That was the challenge faced by scientists in the project, "Strategies to optimize phosphorus and nitrogen utilization to reduce the environmental footprint and greenhouse gas emissions (GHG) of Canadian pig production."

"Precision feeding involves altering diets daily to meet the changing needs of each pig," said Marie-Pierre Létourneau-Montminy, Professor, Agriculture and Food Sciences, Laval University.

The concept is a step above traditional phase feeding, where multiple diets are fed to a group of pigs based on feed budgets or weight ranges to closely meet the pigs' nutrient requirements.

"Many farms still use phase feeding during the grow-finish period," said Létourneau-Montminy. "As a result, pigs at some stages receive an excess of feed for optimal growth, while others face a deficiency."

> ***This project is a prime example of the tightrope walked by pig science as it aims to green the planet while still keeping producers in the black.***

As human parents learn the hard way, diet requirements rise with body weight. It's the same for pigs, so if an animal is 25 kilograms at the beginning of a phase, yet receives a diet aimed at the most demanding pigs, there is bound to be wastage.

"In order to tweak pig diets on a regular basis, we must know their daily needs, so we've been working hard on that," said Létourneau-Montminy. "Using mathematical modelling and experiments, I explore phosphorus, while others look at nitrogen."

Continuing their greening efforts in Swine Cluster 4, researchers are developing their own feeder that mixes feed and recognizes individual pigs by their RFID tags. This allows for close monitoring and control of each animal's consumption.

The team will then test this feeder in the field, trying different algorithms to predict a pig's needs from day-to-day.

"It seems the most effective approach may be using the previous three days of consumption to anticipate intake and gain on a given day," said Létourneau-Montminy.

While including body weight in the calculations would enhance accuracy, producers are unlikely to weigh their pigs for this purpose. Scientists aim to maximize precision through the use of cameras, 3D images and other technology once it's available.

"In two or three years, we hope that AI and machine learning will predict body weight based on images," said Létourneau-Montminy. "The cameras needed will be cheap and have a long life, so that should make them practical for producers."

In addition to reducing feed waste and cost for producers, this project looks to lower the environmental footprint of hog production – an area where feed has the greatest impact. The raw materials, amino acids and proteins excreted by pigs all play a role in affecting the environment.

"If we can lower the amount of feed needed to give pigs the protein they require, we can reduce excretions in the process; this is a major benefit of precision feeding," said Létourneau-Montminy. "To that end, we are trying to quantify the environmental impact of feedstuffs with reliable data. Can we replace carbohydrates, for example, with other ingredients that are less detrimental?"

This project is a prime example of the tightrope walked by pig science as it aims to green the planet while still keeping producers in the black.

"It's a matter of finding low impact ingredients that don't inhibit growth performance," said Létourneau-Montminy. "We will also be gauging the effect of precision feeding versus phase feeding on the environment and the result of reducing nitrogen and phosphorus excretions."

Although excretions of nitrogen and phosporus are the leading sources of GHG emissions in agriculture, inorganic fertilizers are also a culprit. In response, scientists seek to optimize the use of slurry: a natural fertilizer composed of manure, urine, leftover fodder and water used for the elimination of droppings.

GHGs may get all the press, but there are bigger offenders in the pork sector. One is eutrophication from the leaking of nutrients into the ecosystem. Eutrophication is the gradual increase in the concentration of phosphorus, nitrogen and other plant nutrients in an aging aquatic ecosystem, such as a lake.

The second is acidification resulting from acidic gases such as ammonia reacting with water in the atmosphere.

Ultimately, helping the pork industry reduce feed waste while protecting the environment means scientists must devise a precision feeder at a cost acceptable to producers.

"This project involves fundamental research and application," said Létourneau-Montminy. "There is much to be done, and the stakes are high for our planet. By 2028, we hope to have a prototype of the feeder up and running on commercial farms."

Footprints, feedstuffs, and forward thinking

One of the best things about research that greens the Earth is that it often comes packaged with other benefits for the pork sector. In fact, the title of another SIP-funded project says it all: "Reducing environmental footprint, feed cost, and enhancing global competitiveness of Canadian pork production by increased utilization of energy, nutrients and feedstuffs fed to growing-finishing pigs." Where it was once thought that the impact of going green on their business may be hard to swallow, producers can now have their cake and eat it too.

While pigs' digestion plays the most important role in nutrient usage, crops like faba bean also support nutrient fixing in soil.
Image © Historic Canada & I.I. Nonnecke

Given the ambitious nature of this study, it's no surprise that the research team comprises experts from across the country. Their primary goal is to make better use of feedstuffs during the grow-finish phase through processing or feed additives. In doing so, they can lower feed costs per unit of gain.

In the process, since nutrients that are consumed, but not used, by pigs wind up in manure, the environment will also be enhanced by the project.

"We are running a range of trials at different institutions," said Ruurd Zijlstra, Professor, Faculty of Agricultural, Life and Environmental Sciences, University of Alberta.

Zijlstra is a co-lead of the study with Martin Nyachoti, Professor, Faculty of Agricultural and Food Sciences, University of Manitoba.

"My trials are focused on nutrient digestibility," said Zijlstra. "How can we make nutrients more digestible and accessible to support gain? Others are exploring aspects such as new feedstuffs, processing and enzymes."

While climate change is a global phenomenon, this study shows the power of thinking locally in addressing green issues.

"On the Prairies, we focus more on local. That includes ingredients like small grains, co-products like canola meal and pulse grains unique to this region, such as faba beans," said Zijlstra. "Pulses have an interesting twist that is relevant for the carbon footprint of pork production, as they can use their roots to bind more atmospheric nitrogen into usable nitrogen for plants in the soil. This means that less fertilizer needs to be applied to subsequent crops."

Since fertilizer in crop production is a key factor in expanding the carbon footprint, this localized approach may help reduce the environmental impact of feed. The more hog producers rely on local feedstuffs, the less of this material they will need to ship in from afar, thereby reducing transport fuel use and its effects on the planet.

As Zijlstra, Nyachoti and their colleagues continue their efforts at shrinking footprints and feed cost, one aspect stands as a prime opportunity.

"We should continue to strive to make the best use of the pigs' ability to convert feedstuffs that are non-edible by humans into high quality animal protein for human consumption," said Zijlstra.

The specific category of feedstuffs includes co-products such as canola meal. These co-products or by-products from industries beyond canola contain valuable nutrients and can replace portion of the grains or soybean meal in pig diets.

"We have an abundance of nutrients relative to our small population in Canada," said Zijlstra. "There is much that can be done both here and abroad to better use nutrients included in co-products for the sake of the planet."

Organic acids help combat UTIs in sows

Olufemi Babatunde

Editor's note: Olufemi Babatunde is Swine/Poultry Nutritionist, Jefo Nutrition. For more information, contact 'communication@jefo.ca.'

As antibiotics face growing restrictions, innovative strategies are needed to address these challenges. The use of products like Jefo's protected organic acids – Jefo P(OA) – offers a science-backed, practical solution to promote urogenital health in sows while improving productivity and profitability.

Understanding UTIs in sows

UTIs and similar diseases that show up after farrowing are often caused by opportunistic pathogens, including *E. Coli* and others. These bacteria typically originate in the lower urinary tract or gastrointestinal tract and ascend into sterile regions like the bladder or uterus, leading to infections.

Predisposing factors for UTIs include poor hygiene, insufficient water intake, prolonged lying positions and calcium stone formation in the urinary tract. These stones irritate the soft tissue lining the bladder, which can allow bacteria to enter *(Figure 1)*. Older and lactating sows are particularly susceptible, due to their physiological and behavioral characteristics, such as reduced urination frequency during lactation. Infections of the reproductive tract often stem from bacterial contamination during farrowing, estrus or breeding, when the vulva is exposed. The contamination is made worse by fecal matter contact, emphasizing the importance of sanitation in the barn.

Whether for prevention or treatment, organic acids defeat harmful bacteria to support sow health.

UROGENITAL TRACT INFECTIONS (UTIS) and other reproductive health challenges remain significant concerns for hog producers in Canada. These conditions, including cystitis, pyelonephritis and endometritis, lead to severe economic losses due to increased culling rates, reproductive inefficiencies and reduced piglet performance.

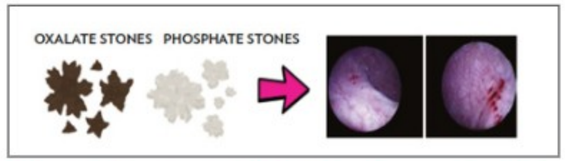


Figure 1: Calcium stones in the bladder make sows vulnerable to UTIs.

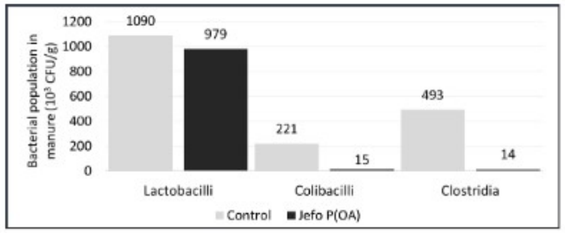
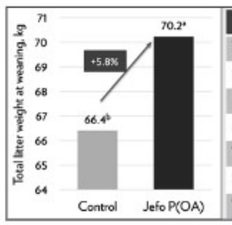


Figure 2: Changes in bacterial flora in sows receiving Jefo P(OA) from three weeks prior to farrowing until two weeks after farrowing.

Urinary components	23 hours post-feeding		4 hours post-feeding	
	P(OA)	C	P(OA)	C
pH	6.2	6.3	6.2	6.1
Ammonium (nmol/L)	15	14	13	14
Citrate (mol/L)	1212[a]	1085[b]	N.D.	N.D.
Calcium (nmol/L)	2.6[a]	1.7[a]	1.5[a]	1.0[b]
Phosphorus (mmol/L)	13.5	10.9	11.5	11.2
Potassium (mmol/L)	33	33	55	47
Sodium (mmol/L)[2]	29.8	27.5	N.D.	N.D.
Chlorine (mmol/L)[2]	32.8	28.9	N.D.	N.D.
Osmolality (mosm/kg)	196[a]	279[a]	98[b]	148[b]

Table 1: Urine chemical composition of sows receiving Jefo P(OA) for 12 days, compared to the control group.



	Control	Jefo P(OA)	Diff, %
Total born/litter, n	11.32	11.50	+1.6
Born alive/litter, n	11.05	11.16	+1.0
Mummified, %	2.83	0.69	-75.6
Mortality during lactation, %	7.59	6.27	-17.4
Weaned/litter, n	10.21	10.46	+2.5
Litter with diarrhea, %	67.9	54.0	-20.5
Weaning average weight, kg	6.57	6.68	+1.7

Figure 3: Reproductive performance of commercial sows supplemented with Jefo P(OA) after 90 days of gestation and during the lactation period, compared to the control group.

The domino effect: impact on productivity

UTIs create a domino effect, negatively influencing sow health, reproduction and piglet performance. Clinical signs to determine a UTI are often absent, delaying diagnosis and treatment. These signs include liquid discharge from the vulva, blood and pus in the urine and abnormal urine with a pH of less than 7.5. Infected sows are prone to reproductive failures, including prolonged weaning-to-estrus intervals, reduced conception and farrowing rates and smaller litter sizes. The impact extends to piglets, as infections can compromise colostrum and milk production, increasing pre-weaning mortality. Studies show piglet mortality rates of 24.2 per cent in herds with infected sows, compared to 10.4 per cent in healthy herds.

A proactive approach: protected organic acids

To combat urogenital health challenges, prevention is more effective than treatment. The use of protected organic acids such as Jefo P(OA) – a proprietary blend of microencapsulated organic acids – provides dual benefits by addressing infections of both the urinary and reproductive tracts. Its slow-release matrix technology ensures targeted action in the hindgut, where it promotes a favourable microbiota by suppressing harmful bacteria and supporting beneficial bacteria.

Jefo P(OA) reduces pathogen shedding in manure, limiting environmental contamination to prevent infections *(Figure 2)*. By maintaining a healthy gut microbiota, it indirectly supports a healthier reproductive environment, reducing the risk of bacterial colonization in the genital tract. This approach not only improves sow health but also enhances piglet survivability and performance.

Jefo P(OA) is particularly effective in preventing infections by increasing urinary citrate concentrations. Citrate acts as a potent inhibitor of calcium stone formation by binding to calcium ions, preventing their interaction with oxalate or phosphate. This reduces stone formation and facilitates bacterial clearance through increased urine flow. *Table 1* illustrates the significant increase in urinary citrate and calcium levels in sows fed Jefo P(OA), showcasing its efficacy. Additionally, Jefo P(OA) minimized bacterial proliferation in the urinary tract of treated sows.

Incorporating Jefo P(OA) into sow diets requires strategic dosing. For prevention, include one kilogram per tonne in lactation feed and 0.5 kilograms per tonne in gestation feed. For treatment, include two kilograms per tonne during lactation, starting three to five days before farrowing. Field studies demonstrate a significant reduction in abnormal vulvar discharge, improved reproductive performance and enhanced piglet health. Producers report fewer incidences of difficulty in labour, higher farrowing rates and reduced piglet mortality *(Figure 3)*.

Encouraging holistic management beyond prevention

While the use of protected organic acids is a powerful tool, they work best when integrated into a comprehensive management plan. Key practices include:

- Ensuring access to clean, fresh water to promote frequent urination.
- Minimizing fecal contamination through regular cleaning of breeding and farrowing areas.
- Encouraging standing positions to facilitate urination.

Maintaining optimal urogenital health in sows is crucial for improving reproductive performance and overall herd productivity. By addressing infections of both the urinary and reproductive tracts, protected organic acids offer an innovative solution to these persistent challenges. Their ability to prevent calcium stone formation, reduce pathogenic bacteria and support a healthy microbiota lays a solid foundation for healthier sows and better piglet outcomes.

When integrated into a comprehensive management plan, including proper hygiene practices and adequate water access, these organic acids can help hog producers achieve sustainable improvements in herd health and profitability. With the growing need for alternatives to antibiotics, such solutions provide a valuable tool in advancing the sow productivity and welfare.

Shaping the future of pigs with Hendrix Genetics

Hendrix Genetics

Editor's note: This article has been supplied by Hendrix Genetics. For more information, contact 'Brent.Devries@hendrix-genetics.com.'

AT HENDRIX GENETICS SWINE, OUR MISSION IS CLEAR: to provide a complete genetics portfolio backed by cutting-edge research, long-term partnerships, and customer-focused solutions. This is where we stand as a driving force. Established in 2025, our new company is the result of a strategic alliance between two industry leaders: Hypor and Danish Genetics. Each has contributed its unique legacy, strengths and ambitions to the foundation of what we have built today.

As part of the multi-species breeding company Hendrix Genetics, we bring together decades of expertise in swine breeding under one global umbrella.

Our vision is to empower the pork value chain to achieve sustainable performance through continuous improvement. In an industry facing growing challenges, from increasing production costs to environmental pressures, our value proposition stands strong. We deliver sustainable, high-quality genetics that drive profitability today while securing the future of swine production.

Hypor: more than a half century of innovation

Hypor was first introduced to the market in 1968 by Euribrid. It quickly rose through the ranks to become one of the world's leading pig genetics suppliers. In 2007, Hypor became part of Hendrix Genetics, marking a key milestone in its development. This move opened doors to broader multi-species expertise and stronger international reach.

Earlier this year, Hypor and Danish Genetics merged to form Hendrix Genetics Swine.

Danish Genetics has a reputation for performance and quality.

Over the years, Hypor expanded through multiple acquisitions and partnerships around the world. Those include the merger with Bovar and Parvak of the Netherlands in 1998, the acquisitions of Gratal Genética of Spain in 2003, France-Hybrides in 2008 and, more recently, KC Air Pork of the U.S. in 2024. Hypor has especially deep connections in Canada, as we merged with the Genex Swine Group of Saskatchewan in 2003, then acquired Shade Oak Durocs of Ontario in 2009 and Designed Genetics Inc. (DGI) of Manitoba in 2010. Hypor's breeding program is built on a strong foundation of top-tier Duroc, Piétrain, Large White and Landrace lines, offering a versatile portfolio of high-performing pigs. From implementing genomic selection and ultrasound technologies to creating its own genetic lab and biobank, Hypor continued to push the boundaries of swine breeding.

> ***Hendrix Genetics Swine delivers tailored solutions to meet diverse customer needs across global markets***

Driven by a passion for sustainability, Hypor transitioned its breeding goal in 2020 from balanced breeding to sustainable breeding. The focus shifted to delivering genetics that reduce feed consumption, improve piglet survivability and promote animal welfare – all without sacrificing performance.

With major milestones like the opening of the Bon Accord maternal line nucleus farm in Saskatchewan and the sire line test facility in France – both of which incorporate group sow housing – Hypor has become synonymous with innovation, sustainability and measurable results.

Danish Genetics: experience meets progress

Danish Genetics, founded in 2018, emerged from a restructuring of Denmark's national pig breeding system. Established by 25 Danish breeders, multipliers and two vendors, the company was born out of a desire for independence, fair competition and progress. With access to elite populations of Landrace, Yorkshire and Duroc pigs, Danish Genetics combined tradition with innovation from day one.

What set Danish Genetics apart was its rapid adoption of 100 per cent genomic selection and its balanced breeding philosophy. Targeting improvements in growth, fertility, efficiency and meat quality simultaneously, the company achieved remarkable results in a short time. Strategic collaborations with research leaders like the Roslin Institute further amplified their capabilities.

From local roots, Danish Genetics quickly expanded internationally. Within just a few years, it was delivering top-tier genetics to over 40 countries. Known for large litters, rapid growth and robust health, its pigs gained a reputation for balancing productivity with resilience.

A new era begins

The recent merger of Hypor and Danish Genetics as Hendrix Genetics Swine has brought one of the most comprehensive and competitive swine genetics portfolios in the world under a single banner.

But this is more than a merger – it's a powerful synergy of knowledge, innovation and global presence. By combining Hypor's sustainability-focused breeding approach with Danish Genetics' genomic expertise and robustness, Hendrix Genetics Swine delivers tailored solutions to meet diverse customer needs across global markets.

Key advantages include:

- **Innovative research:** Leveraging Hendrix Genetics' multi-species capabilities to accelerate genetic progress.
- **Complete genetics portfolio:** From high-performance dam lines to efficient sire lines, we offer solutions that deliver economic return and sustainable performance.
- **Global reach with local support:** Headquartered in Denmark and supported by global operations, we provide local proximity with international expertise.

Together, we aim to raise the bar for the global swine industry. Hendrix Genetics Swine is committed to driving progress and delivering value across the pork value chain.

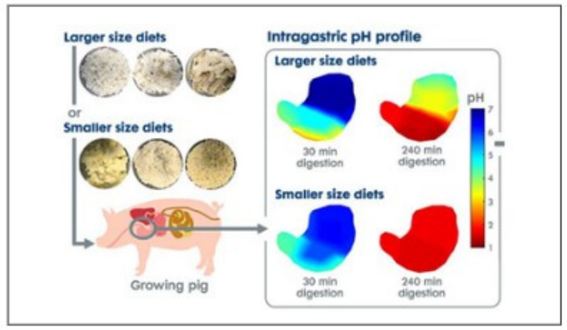
New company, same cutting-edge pigs.

Particle size distribution matters for weaners

Mohsen Abedin

Editor's note: Mohsen Abedin is Director of Strategic Marketing and Technology – Swine, Trouw Nutrition North America. For more information, contact 'lauren.dawson@trouwnutrition.com.'

THE POST-WEANING PHASE is one of the most critical periods in a piglet's life, marked by a sudden shift in nutrition, environment and social structure. During this time, optimizing gut health and feed intake patterns is essential for performance and survival. Among many nutritional strategies, particle size distribution in piglet diets stands out as a key yet often underappreciated factor influencing digestion and health.



Benefits of Coarser Feed Particles in Weaned Piglets

Coarse particles (> 800 µm) enhance stomach development, increase acid secretion, and support a healthy pH gradient, key for digestion and ulcer prevention. They slow digesta passage, improving nutrient absorption and reducing diarrhea risk. A coarser structure also minimizes stomach lining damage, promotes short-chain fatty acid production (e.g., butyric acid), supports mucosal health, and impairs pathogen adhesion, strengthening gut defenses overall. In contrast, very finely ground diets can create a uniformly low pH throughout the stomach, a condition that has been linked to the development of gastric ulcers.

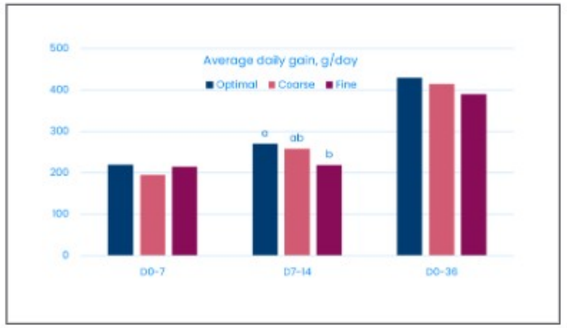
The balancing act: fine versus coarse

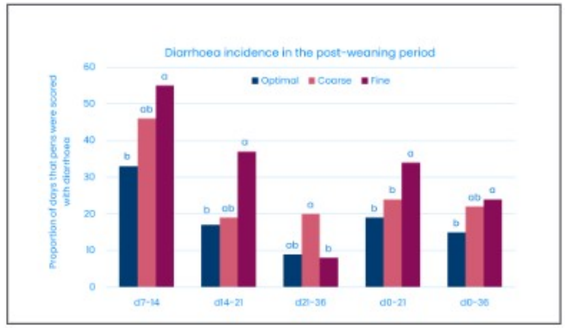
While coarse particles bring multiple benefits, piglets still require some fine particles (<500 µm) for palatability and to ensure adequate nutrient density and digestibility. A balanced particle size distribution, combining both fine and coarse components, is therefore essential to optimize both health and performance.

One of the challenges lies in determining the ideal ratio. A diet that is too coarse may reduce feed efficiency, while overly fine diets may compromise gut health and resilience. Emerging

evidence suggests that structured diets, with a deliberate blend of particle sizes and fibrous components, can improve feed intake behavior and better prepare the piglet's digestive system for solid feed.

In a piglet feeding trial conducted at the Trouw Nutrition Swine Research Center in the Netherlands, researchers evaluated three diets with different particle size distributions in pigs challenged with *E. coli* inoculum on day 7 post-weaning for three consecutive days. The treatment diets, formulated according to Milkiwean Vital Start recommendations, were provided during Phase 1 (days 0–21), followed by a common Phase 2 diet for all groups through the end of the nursery period.





Despite differences in grinding, all diets resulted in similar pellet hardness and durability. Following the *E. coli* challenge, by day 14 post-weaning, average daily gain (ADG) was significantly higher ($P < 0.05$) in piglets fed the coarse and optimal grind diets compared to those on the fine particle diet.

Fecal consistency was scored on a five-point scale, with scores of 2 and 3 indicating two levels of diarrhea severity. The number of days during each period that pens received a score of 2 or 3 was recorded and reported as diarrhea incidence. This incidence was consistently lowest in piglets fed the optimal particle size diet and generally highest in those fed the fine particle diet.

In summary, particle size distribution in weanling pig diets is more than just a feed processing detail. It plays a critical role in gut health, disease resistance, and nutrient utilization. By strategically balancing fine and coarse particles, nutritionists and producers can support improved performance during the nursery period. Producers, especially those grinding and manufacturing their own diets, are strongly encouraged to analyze and monitor their grinding profiles, comparing them against recommended particle size ranges to optimize piglet outcomes from the very start of life.

Early Phase Vitality

Early Phase Vitality provides pigs with a strong start. It is the foundation for a smooth transition into finishing. This ultimately contributes to increased profitability.

The **TN Duroc** terminal boar is well-known for producing offspring with outstanding **Early Phase Vitality.**

Discover the benefits.

topigsnorsvin.ca/earlyphasevitality

Topigs Norsvin