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The Newsletter of Prairie Swine Centre Inc.



In This Edition

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The Effects of Crowding on the Performance of Grower and Finisher Pigs on Fully and Partially Slatted Floors 2

News from the Pork Interpretive Gallery ... 3

Net Returns Per Hog More Important than Pushing Improved Production 4

Finding Value in Alternative Feed Ingredients 6

Dr. Mike Sheridan Named the 2005 Swine Practitioner of the Year

Lee Whittington, B.Sc., MBA

Each year since 1977 the American Association of Swine Veterinarians (AASV) has recognized outstanding swine practitioners who demonstrate exceptional service to their veterinary clients. The Award is the Association's highest honour. Dr. Sheridan is a partner and owner of Sheridan, Heuser, Provis Swine Health Services with offices in Steinbach and Winnipeg, Manitoba. Mike, along with his three veterinarian partners, five associate veterinarians, and eight support staff provide veterinary care and management advice to a large portion of the swine farms throughout Manitoba.

Dr. Sheridan started his career in Selkirk, Manitoba in 1977 after graduating from the Ontario Veterinary College that same year. Mike worked in a mixed, large animal practice until 1988 when he and Dr. Walter Heuser formed a partnership focused on swine disease and management. A new concept at the time, the specialized swine practice grew involving clients throughout western Canada and internationally.

Throughout his career, Dr. Sheridan recognized the value of being involved in providing leadership to his profession and the industry. As early as 1982, Mike was preparing home study courses on herd health for the Manitoba Department of Agriculture. Finding like minds in innovative swine management lead Mike to be one of the founding members of the

VIDO Swine Technical Group. Mike has served on the Manitoba Pork Council Welfare Committee, the American Association of Swine Veterinarians (AASV) Welfare Committee, as a member of the Board of Directors for AASV for 6 years, and most recently Dr. Sheridan serves on the Canadian Veterinary Medical Association executive.

We asked Mike what was his secret to success

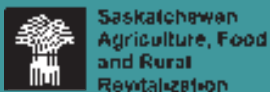


Dr. Mike Sheridan

Continued on page 7



Program funding provided by





The Effects of Crowding on the Performance of Grower and Finisher Pigs on Fully and Partially Slatted Floors.

S.M. Hayne, Ph.D., H.W. Gonyou, Ph.D., and T.M. Done, BSA

Floor space allowance remains one of the more contentious issues in the debate on modern farm practices and animal welfare. It is generally believed that space requirements for maximum growth will vary with housing conditions. The Code of Practice recommends that pigs on partially slatted floors

allowance coefficients, where $k = \text{area (m}^2\text{)} / \text{BW (kg)}$,⁶⁶⁷ were approximately 0.025, 0.036, and 0.052 for the grower phase (to 58 kg), and 0.026 and 0.037 for the remaining treatments in the finisher phase (to 95 kg). Pigs were fed ad-libitum a series of mash diets from wet / dry feeders. Pigs were housed in groups of 18 per pen and were balanced for gender. Pigs were weighed and feed disappearance summarized on a weekly basis.

Average daily feed intake was not affected by floor type or floor space allowance in either the

allowance treatments (1.013 vs. 1.067 and 1.083 ± 0.010 kg/d, for 0.38, 0.54, and 0.78 m²/pig, respectively) during the grower phase (Figure 1). Average daily gain tended to be reduced by crowding during the finisher phase (0.953 vs. 1.001 ± 0.013 kg/d, for 0.54, and 0.78 m²/pig, respectively) (Figure 2). There were no significant interactions between floor type and space allowance.

“Pigs on the lowest floor space allowance grew slower than pigs on the other two space allowance treatments.”

be provided with more total floor area than those on fully slatted floors. However, some research has suggested that there are no differences in the effect of crowding on these two floor types. This study was conducted to gain a better understanding of space required for pigs housed on either fully or partially slatted floors.


A total of 216 grower pigs (average initial weight 37 kg) were assigned to two floor types (full or partial slats) and three levels of floor space allowance (0.38, 0.54, or 0.78 m²/pig or 3.9, 5.5 or 8 sq.ft./pig). The lowest space allowance was discontinued after the grower phase. The space

grower or finisher phases. Average daily gain tended to be less on partially than on fully slatted floors during the grower phase (1.036 vs. 1.072 ± 0.010 kg/d), but did not differ in the finisher phase. Pigs on the lowest floor space allowance grew slower than pigs on the other two space

The Bottom Line

Although crowding to a space allowance coefficient of 0.026 resulted in a reduction in average daily gain, there was no evidence that this effect differed depending on whether the floor was fully or partially slatted.

Acknowledgements

Strategic funding provided by Sask Pork, Alberta Pork, Manitoba Pork, and the Saskatchewan Agriculture and Food Development Fund. Project funding was provided by NSERC and AAFC. 

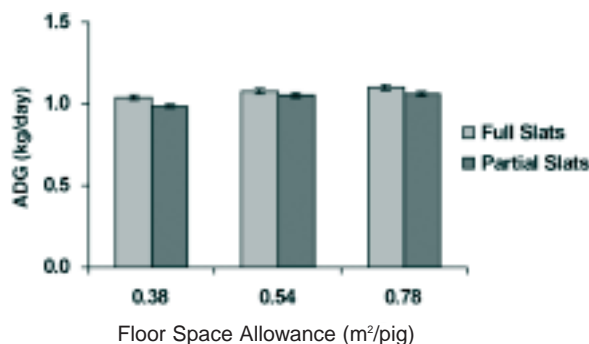


Figure 1. Effect of floor space allowance and floor type on average daily gain (ADG) of pigs during the grower phase.

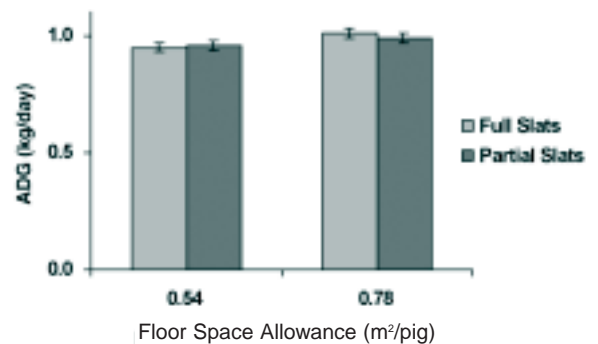


Figure 2. Effect of floor space allowance and floor type on average daily gain (ADG) of pigs during the finisher phase.

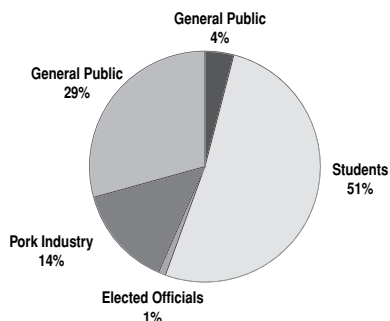


News from the Pork Interpretive Gallery

Deb Ehmann

The Pork Interpretive Gallery continues to educate a diverse group of people about the production of pork. The interest steadily grows with respect to the operation of modern pork producing farms and the science-based facts that confirm the importance of pork in the food industry.

Visitors to the Pork Interpretive Gallery



The above graph provides an overview of the diversity of people that have visited the gallery since its inception. The tour experience provided by the Interpretive Centre has proved to fit nicely with the Grade 5 curriculum guide and has been considered a valuable and educational event by many Saskatchewan teachers. Grade 7/8 teachers also take advantage of the guided tour to compliment the Social Studies program. The educational displays in the Interpretive Centre

have been designed for students grade 4-10 and many of the visitors are within this age category. Other organizations that participate are 4-H clubs, Ecoquest classes, science clubs, Cubs and Scouts and church youth groups.

A break down of the 29% of visitors categorized as the general public reflects the diversity of those that view the gallery. This category consists of industry sales representatives, food processing companies, church groups, international and national visitors, veterinarians, scientists, researchers and the list goes on. International visitors from around the world, including Spain, China and the United States have recently visited the gallery. The guided tours are pre arranged and often geared specifically to the group attending.

Additional Information

The final phase of construction on the newly constructed facility has been completed with the installation of floor covering.

The bright tiles and strategically located coloured squares are a true asset to the gallery and enhance the experience of the visit.

The Interpretive Gallery continues to add new information to its portfolio. Three new displays will be added to the exhibition in the near future. A

Farm Safety display supported by the Canadian Agricultural Safety Association will be created to increase awareness by youth in the area of safety in pork production in Canada. The second project will expand the existing careers display at the Interpretive Gallery to include the nutritionist, feed truck driver, geneticist, sales representative, lab



technician and veterinarian. It is a shared venture with the Canadian Adaptation and Rural Development program. The third exhibit will reflect the current research on Greenhouse gas emissions.

Outreach is a critical component of the

Continued on page 5

Net Returns Per Hog More Important than Pushing Improved Production

John Patience, Ph.D and
Lee Whittington, B.Sc., MBA

This article is a summary of an Alberta Pork publication, Industry Report Volume 2, Issue 2 which asks the question of Dr. Patience "What is more important, productivity or profitability?" The article provides a review of the key areas affecting productivity and profitability that should be on everyone's management review list. A complete version of the original article is available at Albertapork.com (see News & Reports/ Special Industry Reports or URL <http://www.albertapork.com/news.aspx?NavigationID=1869>)

What would an extra \$5 to \$10 per market hog mean to Alberta pork producers? It's a huge

likely isn't one change that will generate an extra \$5 per hog sold, but rather a series of adjustments that are worth \$0.50, \$1 or even \$3 to \$5 per hog that collectively add up to significant dollars.

Most critically, these changes are all possible on most farms. These are not expensive or technically difficult actions. Indeed, some farms are already acting on one or more of these items.

Different thinking

"Maximizing productivity won't automatically maximize net income". Producers need to look at their returns over feed costs, rather than just growth rate or feed conversion. They can use growth rate and feed conversion as tools to improve income, but the ultimate objective has to be to maximize return over feed costs.

pig. Over 5,000 market hogs, that can be a return of as much as \$15,000, for an assay that costs about \$25."

Profit from poor feed quality

One option is to grind grain finer, which makes it more digestible and the other is to add feed enzymes to improve feed digestibility. However, neither is a perfect solution. Specific enzymes are helpful in specific situations. Enzymes have dropped in price over the years, but they still represent an expense that must be managed properly. "These options are there, but they should be discussed with your nutritionist to see if it makes sense for your operation," says Patience.

Finding the energy

Does the highest energy ration make the most sense in the grower/finisher barn? Not necessarily. The high energy ration may not significantly increase average daily gain and might only marginally improve feed conversion, yet it can considerably increase feed costs. Research at the Prairie Swine Centre showed the only difference between a lower energy ration and a high energy ration was nearly \$12 per head. Looking at a 5,000 head finisher operation, that's a \$60,000 saving in feed costs. The research compared five rations with DE ranging from 3.09 Mcal/kg to 3.57 Mcal/kg. The lowest energy ration cost was \$37.76 per pig, while the highest energy ration cost was \$49.52 per head (2004 prices). That's a difference of \$11.76 per head. "This research shows the low energy ration did as much for productivity as the highest energy ration and it was nearly \$12 per head cheaper," says Patience. "These numbers are specific to this research project, but producers should re-evaluate their own feeding costs to see how they stand. The Prairie Swine Centre is currently

"Minor changes in management can result in additional returns up to \$10 per hog marketed"

amount of money that farmers can potentially capture by fine-tuning their feeding and operational management, says Dr. Patience. Although you cannot guarantee those exact extra earnings will be realized for every market animal shipped from every farm, it is the kind of money that gets left on the table far too often.

"As an industry, there has been too much emphasis on improving productivity as a way to increase profitability. The goal should be to maximize net income and to do that, producers need to pay attention to both revenues and expenses." Increased productivity is a means to an end, not an end unto itself. Patience says there

Forget bushel weight

Bushel weight is an unreliable indicator of feed grain quality, says Patience. The long-standing belief that the heavier the grain, the better the quality, just doesn't pan out in the final feed analysis. The feed quality of the 48 pound and 52 pound barleys, for example in our research, is all over the map," he says. The amount of DE ranges from about 2,700 kcal/kg up to nearly 3,200 kcal/kg. "This tells us there is no logic in paying a premium for 52 pound barley and there is no logic in accepting a discount for 45 pound barley."

A five percent error in energy in one of the cereal grains in a diet can easily cost \$2 to \$3 per

repeating this experiment on a commercial farm near Saskatoon."

Consider Net Energy yardstick

Developing a feed ration based on Net Energy (NE) is another technique to fine-tune feeding costs. NE is a relatively new tool for measuring feed value in North America. Many producers are familiar with DE and Metabolizable Energy (ME), but NE is more precise. In Europe, NE is more common. "All three systems evaluate the quantity of energy available to the animal differently," says Patience. "NE more accurately estimates the amount of energy available to the pig for maintenance and growth. Research shows potential to save a

significant amount of money by switching from the digestible energy system to the NE system."

Using long-term or more traditional averages for feed ingredient prices, the Prairie Swine Centre research showed a "conservative" \$2 increase in net income for each market hog sold, using the NE system.

Market in "the core"

While the actual amount will vary depending on the packer grid and market prices, one Prairie Swine Centre project showed in a \$1.40/kg market, selling hogs that were even two kilograms below the core carcass weight range represented a minimum of \$10 per head less compared to hogs marketed within the core. In this project, the core covered a carcass weight range from 85 to 100 kg.

The Prairie Swine Centre research showed that on one farm, in a \$1.40 kg market, light hogs marketed in 80 to 85 kg carcass range generated a loss of \$10.21 per head. As carcass weights moved into the core range, the situation changed dramatically. Compared to pigs in the 85 to 90 kg weight range (minimum core weight), hogs in the 90 to 95 kg carcass range showed a positive return of \$3.74 per head, while hogs in the 95 to 100 kg carcass range had a positive return of \$6.36 per head. There was still a positive return of \$2.17 per head in the 100 to 105 kg carcass range. Carcasses over 105 kg showed a loss.

Since new grids are continually being introduced, and since results on individual farms will vary, the Prairie Swine Centre encourages

producers to take the results from their own farms and from their packers, and make decisions on optimum market weights. The interests of the packer must be addressed in this analysis, because they are the market - and producers must produce what they need.


Powerful profits

Even minor adjustments in barn temperature and ventilation rate can add another few, yet important dollars to the profit picture, says Patience. If the barn temperature and ventilation rate are set too high, for example, that can easily add \$1 to \$2 per hog in energy costs. Again, Prairie Swine Centre research showed an



example of where the set-point temperature was two degrees too high, 17°C versus 15°C, and the minimum (winter) ventilation rate was 20 percent higher than needed. The power used to run this situation was compared to proper settings. Research showed a difference of \$1.18 per head between the "optimum" settings and the incorrect settings. "Again, on its own it may not seem like a significant amount of money, but if you're marketing even 2,500 hogs per year, that's nearly a \$3,000 savings," says Patience.

The Bottom Line


Prairie Swine Centre research presents examples of where savings can be found, says Patience. Even in conservative terms, the work shows how a 2,500 head market hog operation can save \$10,000, \$20,000 and even as much as \$25,000 per year from a series of minor management changes. Producers, however, need to pencil out these options for their own operations to determine the actual savings for their farms. 

Continued from page 3

objectives of the Pork Interpretive Gallery, which is to provide a resource for the prairie pork industry in its communications strategy. Information has been delivered through a variety of ways. School group presentations, workshops, tradeshow, mail outs and information packages. An example of this is the Downy Lake Colony one-day workshop that was hosted for eight colony schools. This brought safety information to approximately 80 school age children living on colonies. A Biosecurity presentation was delivered to Grade 7/8 classes from Saskatoon and surrounding communities at the Aventis Science West conference. During this event an experiment was performed to help students understand how easy it is to carry disease on clothing without being aware.

The Students attending the Livestock Expo in Saskatoon received a "20 minute" message on the pork industry and its importance in the Canadian Food Guide to Healthy eating. The Pork Interpretive Gallery can play a very important role in assisting children in understanding the many essential nutrients needed to nourish the body and the nutritional value that pork provides as well as the life cycle of all living organisms and the realities of sustaining a healthy life style.

A Work Place Safety and Health Manual has been developed together with SaskPork and CASA. The document has been distributed to the Pork Producers in Saskatchewan. It is intended to be a tool for employers to use in their orientation packages as well as to remind workers of the hazards in the work place and ways to prevent accidents.

"The opportunities to communicate with people within the pork industry and the general public are endless", says Deb Ehmann, " It needs to be kept "top of mind" that the gallery depends on support from the stakeholders. The success in any business depends on good marketing techniques and sound business practices. Never underestimate the power of communication". The success of the campaign within the industry, to enhance the understanding of the pork industry, including its social and economic impact by the general public, relies on the strength of the communication network established among those in the industry and supporting stakeholders. 

Finding Value in Alternative Feed Ingredients

Ruurd Zigistra, PhD. and Ken Engele, BSA

Mustard Meal

Mustard meal might be a valuable ingredient for the swine industry domestically and internationally. In some export markets, concerns exist regarding the voluntary feed intake of pigs fed mustard instead of canola meal in their diets. This study will therefore compare two diets with either mustard meal or canola meal in the diet at a 15% inclusion rate, which is an inclusion rate that should allow us to assess if the feed intake concerns are indeed valid, or not and if growth performance differences exist.

A diet containing 15% canola meal was formulated based on 48% corn, 17% soybean meal and 15% wheat to provide 3.45 Mcal Digestive Energy (DE)/kg and 2.60 g apparent digestible lysine/Mcal DE. Replacing canola meal 1:1 with mustard meal created a diet containing 15% mustard meal. The pelleted diets were each fed for 28 days to grower pigs housed 5 pigs per pen.

The standard chemical characteristics of mustard meal and canola meal are listed in Table 1.

For each of the four weeks of the experiment, voluntary average daily feed intake of the grower pigs increased gradually, and differences in voluntary feed intake were not observed between pigs fed mustard meal or canola meal (Table 2).

For the first three weeks of the experiment, average daily gain and feed efficiency did not differ statistically between pigs fed mustard meal

Table 1. Analyzed nutrient content of mustard and canola meal

Nutrient, % as fed	Mustard meal	Canola meal
Moisture	7.2	9.9
Ash	7.3	7.0
Crude protein	42.4	39.0
Acid detergent fibre	11.4	17.0
Neutral detergent fibre	18.8	27.8
Crude fibre	7.7	11.4
Crude fat	1.4	2.5

or canola meal ($P > 0.10$). However, pigs fed mustard meal grew 17% more and had a 6% unit higher feed efficiency during the last week of the experiment ($P < 0.05$), resulting in an overall tendency for pigs fed mustard meal to grow faster than pigs fed canola meal.

The Bottom Line

Pigs fed mustard meal tended to have a 5% better growth performance and had a 2.5% unit better feed efficiency and an equal feed intake compared to pigs fed canola meal. Mustard meal might thus be a good opportunity ingredient with a nutritional value similar to canola meal.

Faba Beans

Faba bean (*Vicia faba minor*) production is not new to western Canada. Research was completed in the early 1970's; however, tannin and other anti-nutritional factors limited the use of faba beans in swine diets. Presently, zero-tannin

faba bean varieties are available. The general purpose of this project was to remove barriers, which were preventing increased production and use of zero-tannin faba beans in Alberta, especially in the Parkland and Peace regions. Analysis of the nutrient content of zero-tannin faba beans and a subsequent performance study confirming equal performance were thus needed. Objectives were (1) to determine chemical characteristics, energy and amino acid (AA) digestibility, the content of DE and Net Energy (NE), and tannin content of zero-tannin faba beans; and (2) to compare growth performance variables and carcass quality of grower-finisher pigs fed zero-tannin faba beans compared to soybean meal.

One sample of zero-tannin faba beans was collected in Alberta.

Exp. 1. Digestibility Study

Energy and amino acid digestibility was tested using cannulated 60-kg barrows. Energy digestibility was tested in a diet containing 96% faba beans. Amino acid digestibility was tested in a diet containing 62% faba beans and 35% corn starch. Diets were fed at 3 x maintenance. Faeces were collected for 2-d followed by 2-d collection of ileal digesta. Standardized AA, DE and NE contents were determined.

Exp. 2. Performance Study

100 grower-finisher pigs in 20 pens had free access to either a soybean meal or faba bean-based diet regime from 30–115 kg. Diets

Table 2. Voluntary feed intake and growth performance of grower pigs fed either mustard or canola meal

Variable	Mustard meal	Canola meal
Average daily feed intake (g/d)		
day 1-7	1,744	1,780
day 8-14	1,892	1,937
day 15-21	1,960	1,979
day 22-28	2,163	2,129
Total: day 1-28	1,940	1,956
Average daily gain (g/d)		
day 1-7	981	1,001
day 8-14	861	872
day 15-21	947	889
day 22-28	964a	825b
Total: day 1-28	939A	897B
Feed efficiency (%)		
day 1-7	55.9	56.3
day 8-14	45.4	44.9
day 15-21	48.4	45.4
day 22-28	44.6a	38.8b
Total: day 1-28	48.5a	46.0b

ab, means differed ($P < 0.05$); AB, means differed ($P < 0.10$)

Table 3.

Nutrient	% as fed
Moisture	13.4
Crude protein	27.5
ADF	9.6
NDF	19.8
Tannin	1.1
EE	1.0
Lysine	1.75
Threonine	0.88
Methionine	0.21
Total sulphur AA	0.56
Tryptophan	0.25

Table 4.

Energy	As fed
Ileal	
Digestibility (%)	60.2
DE content (kcal/kg)	2,362
Total tract	
Digestibility (%)	88.5
DE content (kcal/kg)	3,471
NE content (kcal/kg)	2,267

Table 5.

Amino acid (AA)	% as fed
Lysine	
App. Digestibility	85.9
SID	1.54
Threonine	
App. Digestibility	76.1
SID	0.70
Methionine	
App. Digestibility	74.1
SID	0.16
Tryptophan	
App. Digestibility	76.4
SID	0.20

Figure 1. Average daily gain of pigs fed zero-tannin faba or soy bean meal

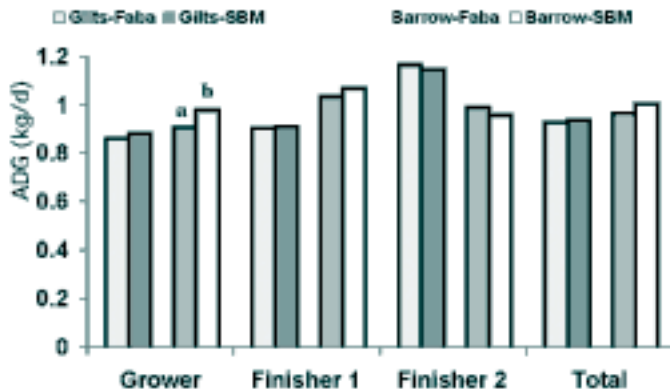
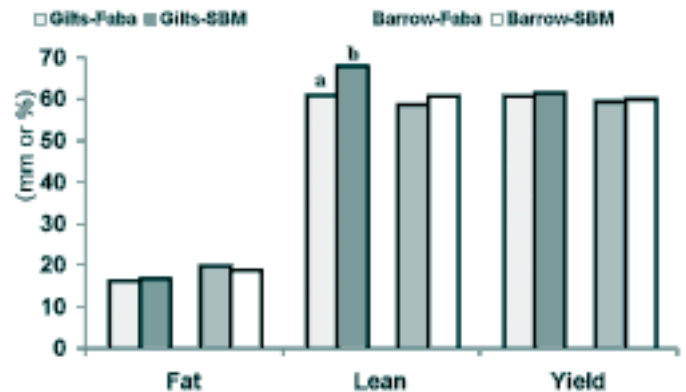


Figure 2. Carcass date of pigs fed zero-tannin faba or soy bean meal



were formulated to equal NE and Standardized Ideal Digestibility (SID) (Grower (30-60 kg), 2.40/3.95; Finisher I (60-90 kg), gilts 2.38/3.15, barrows 2.38/2.76; Finisher II (90-115 kg), gilts 2.38/2.92, barrows 2.35/2.55; Mcal kg⁻¹ NE/g SID lysine Mcal⁻¹ NE, respectively), with up to 30% faba beans. Pigs were weighed, feed intake was measured, and carcass measurements were obtained.

The chemical characteristics (Table 3) and energy (Table 4) and amino acids (Table 5) profiles suggest that zero-tannin faba beans have

a desirable nutrient content (slightly better than peas; NRC 1998). Overall, ADG (Figure 1) and ADFI (data not shown) did not differ between zero-tannin faba beans or soybean meal ($P > 0.10$) suggesting that faba bean inclusion up to 30% might be possible without reducing ADG. The higher ADG for barrows during the Grower phase and higher lean depth for gilts fed soybean meal compared to zero-tannin faba beans (Figure 2) suggest that the available energy content needs further investigation.

The Bottom Line

The chemical characteristics, energy and amino acid (AA) digestibility, the content of DE and NE, and tannin content of zero-tannin faba beans were determined and indicate, together with the subsequent growth performance variables and carcass quality of grower-finisher pigs, that zero-tannin faba beans can replace soybean meal and result in similar performance in grower-finisher pigs. 🐷

Continued from page 1

in his practice. "Having the answers when your clients need them is important. I have a very good liaison with the other swine practitioners in Canada and the US, this is an invaluable resource for our client base."

Mike and his partners are very passionate about continuing education, devoting time and

energy to stay informed in their industry and providing opportunities for their clients to access information readily through meetings organized at their clinic, producing courses and even videos. Sheridan, Heuser, Provis Swine Health Services continue to be actively involved in the evolution of the industry, serving on committees, contributing their energies and financial resources to new

projects like the Pork Interpretive Gallery. Dr. Sheridan notes "After years of creating biosecurity barriers to visitors going into pig barns for herd health protection, we jumped at the opportunity to support the PSC to allow the public to see our industry from the inside. The P.I.G. showcases what we feel is a great industry." 🐷

Linda Ball

I was born in Edmonton and spent the first 18 years of life in Drayton Valley, Alberta. My original intent was to be a high school teacher so with that in mind I attended the University of Alberta. At the end of the first year, I realized that teaching was not how I wanted to spend my future. Instead, I got married and went into the work force in the secretarial area.

The next few years were spent raising our daughter, Dana and son, Jeff. During this time, I felt the need to further my education so I enrolled in the Certified General Accountants program to become an accountant. My husband, in the meantime, worked in the gas and oil industry so we moved around Alberta quite a bit. The CGA course fit nicely into our nomadic lifestyle.


My first positions were in public practice preparing personal and corporate tax returns, new client consulting and preparation of financial statements for a variety of corporations. The experiences I gained in the accounting sector set a solid base for finance that could be transferred to any type of operation.

In 1982 my husband started a new career so we moved to Saskatchewan and have lived in various communities here ever since. Each move offered new learning opportunities and

challenge to my accounting skills. After 18 years in public practice I decided a change was in order and accepted a position with the Department of Health as the Director of Finance for the Northeast Health District. From there, I consulted for the hospital at Uranium City in Northern Saskatchewan.

I moved to Saskatoon in April 2000 to take the Manager – Finance and Administration position with Prairie Swine Centre Inc. and by extension the accounting for PSC Elstow Research Farm Inc. It was a very dynamic and exciting time as the new barn was just opening and the accounting system had yet to be set up. Each day with the Swine Centre offers new opportunities and challenges due in part to the ever-changing needs of the pork industry.

In my spare time I like to golf, curl, read and travel. I am continually updating my professional development as required by the CGA Association bylaws and supervise exams for CGA students.

I have really enjoyed my time with Prairie Swine Centre Inc. and more importantly working with a great bunch of people. 




Dr. Murray Pettitt

"We conduct contract research on behalf of corporations or associations in a professional environment designed with their needs and interests in mind"

Dr. Murray Pettitt is the Research Scientist – External Research Services at Prairie Swine Centre Inc. He joined the staff of Prairie Swine Centre Inc. in 1999 in the position of Assistant Manager – External Research Services, and has held his current position since August 2003.

Murray leads a staff of highly qualified, trained technicians in conducting research and development for corporations and associations on their own products on a fee for service basis. Participating companies determine their own research needs, and with Murray's assistance, research studies and experimental protocols are developed. All studies are conducted in a confidential manner following typical commercial swine management practices unless specified in the protocol. The client retains data ownership at the end of the study. Prairie Swine Centre's facilities are diverse and well equipped, thus making it possible to conduct research ranging from basic and intensive to very practical and commercial. The program's capabilities include but are not limited to: animal performance trials, preference and palatability studies, determination of nutrient digestibility, vaccine

antibody responses, evaluation of carcass modifiers, use of vascular and gastrointestinal tract cannulations, measurement of carcass characteristics and pork quality traits, and equipment development and evaluation.

The External Research Program at Prairie Swine Centre also offers clients the opportunity to conduct studies applying the highest standards of study conduct – Good Laboratory Practices (GLP) and Good Clinical Practices (GCP). Applying such standards is desired or sometimes required by the U.S. Food and Drug Administration, Health Canada, and the Canadian Food Inspection Agency in order to register drugs, hormones and feed additives and other products intended for use in meat-producing animals. The program staff has a combination of education, training and experience required to comply with these very stringent standards and regulations. The External Research Program works with clients in all areas of swine production, and contributes to the health of the Western Canadian Swine Industry by providing research access to corporations that develop products for the industry. 



Growing the Livestock Industry Conference

Saskatoon, Saskatchewan
October 25-26, 2005

Saskatchewan Pork Industry Symposium

Saskatoon, Saskatchewan
November 8-10, 2005

Manitoba Hog Days

Brandon, Manitoba
December 7-8, 2005

Banff Pork Seminar

Banff, Alberta
January 17-20, 2006



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