



BUILDING STRENGTH WITH



IMMUNITY+

Immunity+ disease-resistant genetics now represents 37% of Semex dairy sales. What started as a research project more than 20 years ago, before Semex was established, has indeed changed the game.

Semex Geneticist and Business Analyst Dr. Steven Larmer believes there are many reasons for the growth of Immunity+, but the ultimate measure of the genetic program's success is the confidence dairy producers have in its ability to improve the health of their herd.

Recently, research work with the University of Guelph has put a dollar value on the return producers can expect from their Immunity+ investment. These studies show Immunity+ sired daughters show less disease, saving dairymen \$72 per cow, from birth to the end of first lactation.

BENEFITTING FROM HIGH IMMUNITY

Larmer says measuring financial payback is important but when he talks to producers it's obvious that Immunity+ has an event greater impact. "High immune response means cows get sick less often, they are more productive and more profitable. Ultimately, no farmer wants to deal with sick cows. You can spend your time on the farm doing other things that are much more productive and satisfying."

Many producers point to fewer cases of mastitis and less lameness when describing Immunity+ benefits, but Larmer believes it's the total package that gives this technology an edge. "Overall, we try to not focus too much on the individual health event. The big difference with Immunity+ is we're selecting cows that are going to be resistant to any disease that comes their way," explains Larmer. "We really focus on how the whole immune system works, and making sure an animal's entire immune system is robust, and effective."

When animals have strong immune systems, farmers will see a positive impact on every disease present on a dairy operation, not only the most common ones like mastitis and lameness, notes Larmer. It's also important to understand that health challenges, pathogens and diseases present in your herd may change over time. "Farmers need to remember that it will be three years before the cows they're breeding today are in the milking herd."

CALF HEALTH GIVES CONFIDENCE

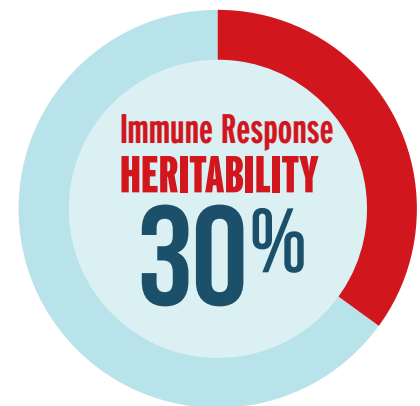
Larmer says conversations with Immunity+ producers often start with calf health. "The first thing they see is how their Immunity+ sired calves are less likely to "look off" or sick, or have health events right out of the gate. I think that really helps producers embrace the technology."

Over time, farmers start to see the results in their

milking dairy herd, says Larmer. "When they dig into the data, they see less lameness, mastitis and other diseases. I think Immunity+ has continued to grow since its 2012 launch because more and more dairymen are seeing these real effects on their dairies. Especially the difference between daughters of these sires and the rest of the herd - that's been really effective."

Larmer notes that other technologies compete with Immunity+ but two points of differentiation that attract farmers are higher colostrum quality and better response to vaccination. "It gives their calves a better start and they know that when they invest in vaccination, their animals are going to respond effectively and efficiently to those vaccines. Those are benefits that deliver value."

Semex is focused on solutions to help dairymen increase production and profitability, and Larmer feels an innovation like Immunity+ takes that commitment a step further. "We really need to understand that farmers around the world get busier each day. Our solutions in many ways are designed to make their lives as easy as possible and spend less time worrying about their cows. Immunity+ really fits that bill perfectly."



Production Traits 25-35%
Conformation Traits 15-40%
Immune Response 30%
Longevity 8-10%
Calving Ease Traits 6-7%
Daughter Fertility 4-7%
Disease Incidence 2-10%