Ag-West Bio-Bulletin August 2010 InfraReady: Getting the goods from grain

When InfraReady Products opened its new facility on Fletcher Road in the southwest corner of Saskatoon in 2009, it was a tribute to the strength of vision, the power of innovation, and the vitality of Saskatchewan's business and professional networks.



The company now employs 28 people and contracts with more than 60 local producers to supply grains and pulses for its products. After nearly two decades in business, InfraReady food ingredients are sold to food manufacturers on five continents and used in everything from multigrain breads and bakery mixes to baby foods.

When Mark Pickard presented the business case for a new company that would add value to grain and open new markets, his boss at the time - Saskatchewan Wheat Pool

CEO Milt Fair - wanted to know only one thing:

"Who would launch this new business? Who would be the project champion?"

"I looked him in the eye and said, 'I would." Pickard says. He got the money.

Although pleased at his success, Pickard was puzzled at how he clinched the deal. His presentation contained all the detailed rationale of a solid business proposal. But it seemed Fair was more interested in the person who would be running the show.

"It came to me later that it wasn't my marvellous market projections and financial projections written on a piece of paper – it was more of an investment in me," Pickard says. "If he knew I was ready to commit my social capital – my career – to the development of this business, then he had what he needed to carry it forward."

"Every investment is really in people."



At the time, in the early 1990s, Pickard was head of processing research at the Saskatchewan Wheat Pool. There, his job was to come up with ways of adding value to the grains and pulses produced by the farmer-owners of the 50,000-member co-operative.

His research revealed that the easiest way to add value to a food is to cook it - not a very novel idea; pre-cooked foods are already a multi-billion-dollar industry. Was there anything new that could be brought to the market?

Pickard found the answer in an existing technology, cooking with infrared light. Thus the name of the new company: InfraReady Products, from "infrared light" and "making products ready." The sun icon on the company's logo is a reference to the most familiar source of infrared light: the sun. About half of the

light we receive from the sun is in the infrared part of the spectrum; infrared light is what warms our skin on a summer day.

Infrared cooking offers convenience, improved shelf life, safer food, and improved taste, texture and nutrition. For example, InfraReady's pre-cooked lentils cook in 15 minutes versus 45 minutes for untreated lentils. Its brown rice flour is widely used in baby foods, as the infrared cooking process inactivates enzymes and dramatically increases shelf life.

The most advanced infrared cooking technology was in Russia - there were even Russian textbooks on the subject. Pickard saw an opportunity to develop infrared processing for Saskatchewan.

Construction began in 1993 in a nondescript building in the north industrial area of Saskatoon. InfraReady Products opened for business in 1994. It was a bare-bones operation, with three employees, no products, and no markets. All R&D and market development was done in-house, and all available funding programs were tapped.

Despite the challenges, by 1997, InfraReady was building momentum, with healthy sales of its line of ingredients for multigrain breads, crackers, breakfast cereals, soup, baby food, side dishes, low microbial count products and even some industrial products. Future prospects looked promising.

Then everything changed.

The Saskatchewan Wheat Pool became a publicly traded company, and an army of consultants descended to review all business subsidiaries.

"Because we were so small and wouldn't make a rounding error difference on the financial statements of the Saskatchewan Wheat Pool, their recommendation was divestiture or closure," Pickard says.

But the InfraReady team had worked too hard to just walk away. Credibility is essential in the food ingredient business, and building it takes time and effort. InfraReady had pursued and received HACCP accreditation as well as approval from the American Institute of Baking. It processes products that are certified organic and kosher, as well as halal for the Muslim world. The company was growing, and had established a reputation as a responsible, reliable, and secure supplier to some major food manufacturing companies.

Pickard asked if he could buy the company and got the go ahead. Unfortunately, Saskatchewan Wheat Pool was also seeking other buyers for the company. Pickard worked fast, convincing old college friend and InfraReady supplier Bill Hetland to invest as a way of creating a market for his own grains. But it still wasn't enough.

Fortunately, at the time, the Saskatchewan government was investing directly in businesses through its Agri-Food Equity Fund. Hetland and Pickard put together a business case and secured the money they needed. InfraReady Products 1998 Ltd. was officially re-launched in February 1999. By 2003 InfraReady partnered with a customer to acquire the government's equity investment. These "three amigos", Pickard, Hetland and Ken Davis have been at the helm ever since.

"One of the things we learned as we were growing is the importance of having strategic networks of independent businesses working around us and with us," Pickard says. "The term for that is 'value

chain', sometimes called 'vertical cooperation'. We have a number of these vertical alliances and they're really quite beneficial to us."

A core philosophy at InfraReady is the commitment to research and development. Competitors cannot replicate the years of know-how and innovation that allows InfraReady to provide innovative solutions and consistent product to their customers. The company's tag line, "the good we get from grain" is more than a slogan, it's part of a philosophy of constant innovation to stay at the top of their game.

"The worst thing you can do is sit back and do nothing, because your business will be just slowly eroded by competitors," Pickard says.

Thus, while InfraReady's core business is in food products, they also look for other applications. One is an environment-friendly cat litter - LitterMate - based on waxy hulless barley. The product is clumpable, biodegradable and compostable. It can even be safely flushed down the toilet.

LitterMate is also non-toxic since it is made from top quality grain. Pickard explains that InfraReady tested a competitors' product made with wheat that is "fit for neither food nor feed" and found it to be contaminated with alarming levels of fungus toxins.

Another intriguing initiative is purple wheat, an ancient grain that contains high levels of anthocyanins. These are the same powerful antioxidants as found in blueberries and touted for their health benefits in mopping up harmful free radicals in the body.

InfraReady processes purple wheat for sale in Korea, where it is flaked and mixed with oats for breakfast cereal. It is also mixed with blue corn by a Singapore company to make noodles. One serving of these noodles is equal to eating 80 grams of blueberries.

The InfraReady R&D team also found that the anthocyanins could be extracted with potable alcohol, resulting in an "AnthoVodka" that delivers the anthocyanin equivalent of 100 grams of blueberries per ounce. The product has a distinctive colour, much like a rosé wine. InfraReady hopes to pique the interest of a distiller to take it to market.

Pickard has high praise for the network of scientific and business expertise available in the Saskatoon life sciences community. Having served on numerous boards over the years, including that of Ag-West Bio, he has developed a strong network of experts in the Saskatoon research community. This includes such organisations at the University of Saskatchewan's College of Agriculture and Bioresources, the National Research Council-Plant Biotechnology Institute, and the Saskatchewan Research Council.

"Being able to talk to somebody and get something done - you can do it here in Saskatoon but you can't do it anywhere else in the world. It's just a wonderful place to be located as a business."

Friendship Soup



A man leans over a bowl, one arm on the table, as if huddling over the warmth of the soup, intent on every spoonful.

With the last bite, he pushes away the bowl with a contented sigh.

"How did you like the soup?" someone asks.

"Really good! That'll stick with me all day."

He zips up his heavy green parka, soiled and shiny from days of searching through alleys for recyclables, and heads for the door. It's a cold day in December at Saskatoon's Friendship Inn, a place for the disadvantaged to come in from the cold.

It's also a day of great personal satisfaction for Mark Pickard, president of InfraReady Products in Saskatoon. He has come to personally witness how his company's Friendship Soup is being received. InfraReady, which manufactures premium ingredients for some of the world's largest food manufacturers, has put the power of its technology to the task of helping hungry people at home.

"You have to have some reason, some social objective for your business," he says. "It isn't all about making money and driving the nicest truck. You've got to do something good with what's been given to you."

Friendship Soup has become a big hit, so much so that InfraReady now provides it for sale, with all proceeds going to the Friendship Inn. Last year, the program turned over more than \$7,000 to help feed those in need. Considering the organization's former budget for the year was \$10,000, this is a significant contribution. One donor from Pulse Canada also bought a tonne of the soup mix to donate to Saskatoon's Food Bank.

Giving back is a tradition at InfraReady, dating back over a decade when the company supplied 1,600 tonnes of pre-cooked wheat to the war-ravaged African country of Sierra Leone. In the refugee camps, where water is precious, the fast-cooking, nutritious grain fed thousands.

"When I'm dead and gone, all people will remember is 'what good did I achieve?" Pickard says. "If you don't do it through your business, you have to do it some way, somehow."

Visit the company website: www.infrareadyproducts.com