

# BUSINESS

## Canola breakthrough has Manitoba roots

*Protein could replace eggs in mayonnaise*

By: Larry Kusch

A Canadian company with Winnipeg roots and know-how has made a breakthrough in the American market by isolating proteins in canola that could potentially replace eggs in mayonnaise and find their way into countless other foods and beverages.

Vancouver-based Burcon NutraScience Corp., which has a research and development arm in Fort Garry, announced Tuesday that the proteins have received the seal of approval from a panel of international experts, allowing them to be considered "generally regarded as safe" for human consumption in the United States.

"It's been a long, long, long time coming," said Johann Tergesen, Burcon's president and chief operating officer, from Vancouver.

He said the nod from the U.S. Food and Drug Administration is "a major advancement" in the commercialization of the world's first food-grade canola proteins, which the company has named Puratein and Supertein.

Burcon has partnered with the American-based agricultural giant Archer Daniels Midland (ADM) to market the proteins. And Tergesen, a Gimli native, said ADM is already working with some of the world's top food companies on products that could hit store shelves in

the United States.

The proteins have yet to receive regulatory approval in Canada.

Canola seed has long been processed to produce a healthy vegetable oil. The high-protein byproduct, or "meal," from the canola-crushing process is currently used in livestock feeds.

But researchers with Burcon in Winnipeg have been working for more than a decade on isolating proteins, similar to what is done with soybeans, milk and eggs, for the multibillion-dollar protein ingredients industry.

"It's good news for canola again," said Robert Hunter, a spokesman for the Canola Council of Canada, recalling the boost canola oil received in the U.S. two years ago when health authorities allowed the industry to make a qualified health claim for the product.

Work on isolating the canola proteins began in Winnipeg in the early 1990s at a company known as BMW Canola. It was purchased by Burcon in 1999.

A unique feature of one of the Burcon canola proteins is that it can be dissolved into highly acidic beverages, such as fruit juices, sport energy drinks or soda pop. The company dissolved some of the protein powder into a glass of champagne at its Waller Avenue research facility on Tuesday to demonstrate how the bubbly remained clear.



Burcon NutraScience researchers (from left) Sarah Medina, Kevin Segall, Jim Logie, Roland Rosset, Edwin Catipon, Russ Sampson and Brent Green toast with champagne containing canola proteins.

The other protein can be used as an emulsifier, ingredient binder or thickening agent suitable for use in mayonnaise, salad dressings, baked goods, protein bars and meat substitutes.

Archer Daniels Midland has yet to decide where to build the first commercial plant to extract the proteins, which it will then sell to food makers. But Tergesen said it is likely to be located in Europe, a potentially lucrative market for the proteins where none of the canola produced is genetically modified, unlike in North America.

While the financial benefits of Burcon's canola proteins won't be felt immediately in Western Canada, he

said the development is sure to firm canola values in the future.

Peter Jones, director of the Richardson Centre for Functional Foods and Nutraceuticals at the U of M Smartpark, said there are also potential nutraceutical spinoffs for the canola proteins.

"I think this really opens a huge opportunity for Manitoba, being a producer of canola, as well as Manitoba biotech to value-add in the canola industry," he said.

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