



Whole flax and flax oils being used in functional feeds research

## Hub working to make Manitoba national leader in grain

Enhanced grain research in Manitoba is not only putting the province on the map as an industry leader, but also changing the way we look at foods.

Functionality of feed, the probiotics and nutrients in a grain or plant that help to reduce disease or improve health, is an area with promise, given the importance of livestock production and processing in Manitoba. So much so that Manitoba Agri-Health Research Network Inc. (MAHRN) has been asked to look into the potential to mount programming in this area—a proposal is under development.

One project currently in the works is looking at the effect that functional feeds have on animals. It is based on research already proven or underway with functional foods consumed by humans. The idea is to prevent diseases and reduce health risks in farm and companion animals through the consumption of enhanced or whole-food feeds.

The Functional Feeds project will explore the opportunities around grain-based feeds and feed ingredients that may offer health-related benefits that go beyond basic nutrition—a concept called Functional Feeds. For example, what is the effect of consuming certain grains and oils on factors such as meat flavour, health status or end product nutrition?

Lee Anne Murphy, executive director at MAHRN, explains that the MAHRN cluster is interested in determining if using functional feeds to maintain an animal's health will also improve the nutritional qualities of the beef, pork, chicken or dairy produced. They will be able to build on similar research they've done on functional foods for human health.

The functional feeds study is just one project being researched through the Grain Innovation Hub. Since being launched in May 2014, the Grain Innovation Hub has begun to lay the groundwork to build Manitoba as a national leader in grain research, production and processing. It is partially funded through *Growing Forward 2's* Growing Innovation program and brings together researchers, students, growers and other stakeholders to develop quality local products.

"Within the Grain Innovation Hub we believe we can parallel some of the results we've had with functional foods with research of functional feeds," says Murphy.

### Funding gives research a local focus

Murphy says that without the support from *Growing Forward 2*, a lot of the Manitoba-centred research wouldn't be getting done.

"When we start to look at a research project we like to make sure that there is a Manitoba grower connection—and if the answer is no we don't advance it as a cluster project. Being able to provide novel ways to improve health with Manitoba-grown grains gives each project a connected feeling," she says.

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Another exciting project currently in the works is the Manitoba Corn Initiative (MCI), which looks at advancing early corn maturity, examining flooding tolerance, studying Goss's Wilt disease and finding potential corn end uses in the province.

"We want to reduce production risks for our growers, and one way that we can do that is by developing lines with earlier maturity and more rapid drydown," says Karin Rose, research project co-ordinator at the Manitoba Corn Growers Association (MCGA).

With a collaboration between scientists in the University of Manitoba's faculty of agricultural and food sciences, Agriculture and Agri-Food Canada and researcher Dr. Lana Reid in Ottawa, Rose says the Grain Innovation Hub will bring more corn to Manitoba. They will also be testing the early maturity varieties developed in Ottawa under Western Canadian growing conditions to see how they perform in Manitoba.

"There's still areas that have challenges growing corn and we don't have the genetics in place yet," Rose says. "Further west and further north they have a hard time, but we're hoping with the right genetic combination that could change." ■

## Asking Manitobans

Since 2011, the Manitoba Consumer Monitor Food Panel (MCMFP) has been producing surveys for a panel of more than 4,000 Manitobans to establish what people's perceptions and preferences are when it comes to the food they're eating. This study is unique as it is social research, rather than crop or food research. With help from the Grain Innovation Hub's *Growing Forward 2* funding MCMFP does approximately five online surveys per year to gather research to be shared with growers, processors, developers and governments about their target markets.

"The importance of our study is that we can offer a service that can provide market segmentation to identify like-minded groups of consumers in order to effectively generate food products and policies that will lead to a healthier Manitoba," says Jocelyne Gaudet, project co-ordinator for MCMFP.

MCMFP just recently completed a survey on food safety, and will be surveying about pulses and grains in its upcoming questionnaires.

**For more information, including the summary results from past surveys visit [mcmfoodpanel.ca](http://mcmfoodpanel.ca).** ■