

Wheat breeders put greater emphasis on human health

A University of Guelph team will look at some 50 varieties to determine their health properties

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Wheat researcher Koushik Seetharaman is looking forward to the day when there will be a better understanding of the human health properties of wheat varieties grown in Ontario.

Getting to that goal will now be a little easier for the University of Guelph associate professor and Ontario cereals industry research chair. He will head up a research project that will help determine what varieties contain high levels of antioxidants

and other healthy ingredients that can be included in consumer food products.

The federal government recently announced it was putting up \$200,000 to help fund the University of Guelph research project. Seetharaman said he and a number of colleagues will examine between 40 and 50 wheat varieties in the study.

"We will be looking at the health-based components of wheat varieties grown in Ontario and benchmarking what is there," said Seetharaman. "It's important to do because healthy eating has become a key factor in overall health."

He said the research project will take a systems approach

across all parts of the food value chain. After identifying the wheat varieties that have beneficial ingredients further research will then be done to evaluate the survival of these functional ingredients and antioxidants through the baking process so as to determine their availability as healthy food components in finished food products.

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Adequately evaluating these nutritional attributes will have benefits for everyone in the wheat value chain, says Seetharaman.

Wheat breeders would have a scientific basis on which to select wheat lines and varieties that are rich in antioxidants and compounds necessary for healthy food products. This in turn would offer incentives to wheat growers to produce varieties that are demanded by food processors and millers.

A possible outcome for growers would be a more diversified industry offering identity-preserved opportunities and a data base for Ontario wheat varieties based on the health properties of each variety.

Establishing a data base on the health properties of Ontario wheat varieties would further enhance the development of protocols for processors to develop more healthy whole grain products for the food system, said Seetharaman.

He said he should have a report on preliminary findings readied for Oct. 1.

In addition to the government funding, he said the Ontario Cereals Industry Research Council and ADM will put up an additional \$36,000 for the project.

Ottawa is funding the project through the Canadian Agricultural Adaptation Program which is delivered in Ontario through the Agricultural Adaptation Council.