Researchers bake a better loaf of bread

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University of Alberta researchers have found a way to replace artificial preservatives in bread, making it tastier.

After loafing around in the lab analyzing strains of mould fermented in sourdough bread, Michael Ganzle, professor and Canada Research Chair in the University of Alberta Department of Agricultural, Food and Nutritional Science and fellow researchers were able to isolate natural compounds that can help keep bread fresh without changing its flavour. Preservatives added to store-bought bread are safe to eat and extend shelf life, but alter the flavour and give off a distinctive odour, said Ganzle.

The U of A research is the first to link the compounds—hydroxy fatty acids— to antifungal activity and to show that these compounds are formed in the production of fermented foods. "We were able to put known compounds into quite a new and exciting context," Gaenzle said.

The findings served up by the researchers also have the potential to replace or complement fungicides used in treating crop seeds such as barley, wheat and canola, and in protecting crops.

The study appears in the March 6, 2013 issue of Applied and Environmental Microbiology.

Provided by University of Alberta