## Bran to boost fibre for cookies, tortillas

By Karen Willmer, 05-Jul-2007

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Scientists from Kansas State University are examining the possibility of making cookies and tortillas with bran-enriched flour to boost the fibre content of the final products.

The research taps into the trend for producing 'healthier snacks', with experts encouraging consumers to eat a healthier diet in relation to the recent rise in obesity levels.

Indeed, the UK's Food Standards Authority (FSA) says eating a high <u>fibre</u> diet can help to lower <u>cholesterol</u> levels, which could reduce your risk of developing heart disease.

The new study uses extrusion processing; a manufacturing process commonly used in making products such as pasta, cereal and snacks as well as with various grains.

A publication in the National Library of Medicine says extrusion can denature antinutritional factors and improve protein quality.

"The more fibre you add, the more the dough quality deteriorates," said Sajid Alavi, who is conducting the research. "We're hoping this process will increase some of the properties of the flour. The foods might have a better physical quality."

The study involved making tortillas and cookies with bran-enriched flour, some that had been precooked using extrusion and some that had not, in the aim to make the taste as normal as possible.

The tasters noticed no difference between the products, however the study said there was an increased level of soluble dietary fibre in the precooked flour, which the body can easily absorb.

Alavi said that this precooked processing method may be used to add fruits and vegetables to snack foods.

"With fruit and vegetable-based snacks, it is still hard to process the dough so you really don't see those kinds of products out there."

A report by the Department of Health recommended an average intake of 18 grams of soluble fibre a day, while intakes were currently well below this. Intakes were reportedly 15.2 grams per day in men and 12.6 grams per day in women.