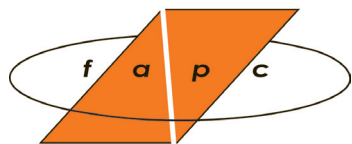


Food & Agricultural Products Center



FLASH!!

OKLAHOMA STATE UNIVERSITY™

October 4, 2005

Sales of Wholegrain Bakery Products Get a Boost

STILLWATER, Okla. – The U.S. Department of Agriculture’s new Dietary Guidelines for Americans, which was announced early this year, recommend that adults consume at least three portions of wholegrain per day.

“The effect of this recommendation on sales of wholegrain products was instantaneous,” said Nurhan Dunford, oil/oilseed chemist for the Food & Agricultural Products Center.

According to Nutraingredients.com, sales of wholegrain bread and baked goods rose 18.3 percent, to \$1.1 billion by June 2005. Increases in sales of wholegrain crackers, muffins and fresh buns were 10.2 percent (\$330 million), 287 percent (total of \$23.4 million) and 23 percent (\$22 million), respectively.

In the United States, wholegrain cookies are the fastest growing bakery products with a 1,364 percent increase in the last year. However, sales of frozen baked goods (4.2 percent decline) and breakfast bars (12.4 percent decline) were not very successful.

General Mills, Kellogg and Sara Lee are reformulating their products with wholegrain to cash in this new trend. A similar trend is happening in Europe as well, Dunford said.

“The objective of the HEALTHGRAIN Integrated Project, a European Initiative coordinated by the VTT Technical Research Center of Finland, is ‘to improve the well-being and reduce the risk of metabolic syndrome related diseases in Europe by increasing the

intake of protective compounds in wholegrain or their fractions,’” Dunford said

Research studies indicate wholegrain foods may have a protective effect against heart disease, stroke and type 2 diabetes.

“The aim is to produce new nutritionally enhanced grain varieties with optimal bioactive content,” Dunford said. “Vitamins, such as folate, tocopherols and choline, phytochemicals, including lignans, sterols, alkylresorcinols and phenolic acids, and indigestible carbohydrates are some of the target bioactive compounds in grains.”

Wheat and rye are the two major grains used for making bread in Europe. Europe produces 36 percent of the world’s wheat and 94 percent of its rye.

The HEALTHGRAIN research focuses on five areas: consumer research, plant breeding and biotechnology, processing technology, nutrition, dissemination of information and training.

Studies in Finland, Germany, Italy and UK are designed to understand consumer expectations of cereal foods.

Plant biotechnology will be used to identify and generate new sources of nutritionally enhanced grain. Also, new fractionation and bioprocessing methods using enzymes and starter cultures are being developed to improve coarser texture and hardness of wholegrain foods.

“These new techniques will allow food processors to incorporate more wholegrain and their outer parts in food products and make them more appealing to consumers,” Dunford said.

Bioavailability of bioactive compounds and their role along with glycemic properties of wholegrain foods in reducing metabolic risk factors are also being examined.

The technology and know-how about healthy cereal foods are being disseminated to European grain processing industry and health professionals.

“It is expected that the HEALTHGRAIN project will help the food industry, including a large number of small and medium size companies to develop new, competitive and healthy grain foods, as well as specialty products such as foods for individuals sensitive to particular cereal constituents,” Dunford said. “An example is gluten-free products.”

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Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Robert E. Whitson, Dean and Director of Oklahoma Cooperative Extension Service, Oklahoma State University, Stillwater, Oklahoma. This publication is printed and issued by Oklahoma State University as authorized by the Dean of the Division of Agricultural Sciences and Natural Resources and has been prepared and distributed at a cost of \$141.40 for 1010 copies. 1005 MHG.

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