

Whole grains rise in SW Idaho

The Situation

The 2011 Dietary Guidelines for Americans continue to emphasize the importance of eating more whole grains. Whole grain foods are valuable sources of nutrients that are lacking in the American diet, including dietary fiber, B vitamins, vitamin E, selenium, zinc, copper, and magnesium. Whole-grain foods also contain phytochemicals, such as phenolic compounds, that play important roles with vitamins and minerals in disease prevention. Nutritional studies have shown that consumption of whole grains is far less than the recommended intake of three servings a day (*Journal of American Dietetic Association*, 2001).

Researchers from the Harvard School of Public Health and Tufts University (*American Journal of Clinical Nutrition*, 2006) found that eating 3 servings of whole grains a day lowered blood sugar and overall body weight. Results also showed that consuming large amounts of refined grains doubled the risk of developing diabetes and heart disease.

Our Response

A University of Idaho Extension Educator taught eighteen workshops to educate the public on how to identify and use a variety of whole grains, include whole grain flours in bread recipes and make Artisan bread. Since Idahoans make up to 300 food choices daily, samples of the whole grain Artisan bread were provided to help participants begin to develop a taste for more nutrient rich foods. Tasting of whole grains and whole grain bread is one way to encourage nutritious eating.

Many consider making yeast breads and cooking whole grains to be time consuming or difficult. Workshop participants learned an easy method to prepare whole grain breads that taste good and fit



Workshop participants shaping Artisan loaves of bread.

into busy schedules. A variety of bread classes were offered in which participants made quick breads, yeast breads and Artisan yeast breads. Artisan bread is a hand shaped loaf of bread.

Pre-workshop data provided by approximately 100 participants indicated 35% baked bread on special occasions, 22% baked once a month and 18% baked weekly, while another 18% never baked bread.

Table 1: Pre-workshop survey of daily servings of whole grain eaten.

Daily Servings of Whole Grain	n=105
None	3%
One Serving	21%
Two Servings	37%
Three Servings	31%
Four Servings	8%

The number of whole grain servings participants reported consuming is fewer than what is recommended. This is the reason why the 2011 choosemyplate.gov recommendation of “At least half of all the grains eaten should be whole grains.” continues to encourage Americans to eat whole grains.

The amount of grains one needs to eat depends on age, gender, and level of physical activity. Most Americans consume enough grains, but few are whole grains (choosemyplate.gov, 2011).

Program Outcomes

More than 470 participants attended classes during 2009-2011. One hundred sixty people who attended the Artisan Bread and whole grain workshops were surveyed for knowledge gained. Participants learned: the health benefits of eating whole grains, serving sizes for grains, how to identify a whole grain, the cost of baking from basic ingredients and how to make Artisan breads.

The results showed that there was a need for practical, skill-based education about nutritious eating. Classes were well-attended; participants reported knowledge gain and increased bread making skills.

Participants reported knowledge gained using a Likert-type scale, the skills learned show a gain from pre- to post-workshop in knowledge and skill mean values as reported on the pre- post-reflective survey.

Table 2: Knowledge gained during Artisan Bread workshop.

Skills Learned	Pre-Workshop mean value	Post-Workshop mean value
Appropriate serving sizes	5.16	8.64
What makes a whole grain?	5.91	9.22
Cost of making bread from scratch?	4.54	9.13
How to make Artisan bread?	3.34	9.00
What to look for when purchasing foods from grain?	6.00	9.20

Additional comments indicated that one family is baking whole wheat bread weekly and has not purchased bread in 3 months. Making bread by hand saves money (as much as \$4.00 a loaf) and if you are “eating local” and reducing preservatives you know exactly what goes in the bread. Another family used the knowledge gained to prepare quick breads

and biscuits from basic ingredients. Others reported they were better able to make informed decisions when selecting whole grain pasta products at the grocery store, they know how many servings to eat and how to add whole grains to their diet.

A follow up survey was mailed to 181 participants after they attended a workshop. Eighty-three responses were returned with 55% reporting increased whole grain consumption (stating consumption was already high). Eighty-seven percent responded yes they were more confident and informed about whole grains and foods containing whole grains. Sixty-three percent improved their bread making skills, and 67% added different whole grains to their diets. Overall, participants indicated a change in their behavior by including more whole grains in their diets after attending this workshop.

The Future

More classes will be offered to new and past participants to measure mid- and long-term changes in diet and whole grain consumption. Potential topics may include: cool fermentation, sour dough, other whole grain flours, and how to shop, plan and cook whole grains as side dishes or main dishes.

References:

Journal of American Dietetic Association, 2001; 101:780-785.
American Journal of Clinical Nutrition, February 1, 2006.
<http://www.choosemyplate.gov/foodgroups/grains>, June 4, 2011.

FOR MORE INFORMATION

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