## More whole grains linked with lower mortality

For immediate release: January 5, 2015 http://www.hsph.harvard.edu/news

Boston, MA — Eating more whole grains is associated with up to 15% lower mortality—particularly cardiovascular disease (CVD)-related mortality, according to a large new long-term study from Harvard T.H. Chan School of Public Health.

The study also found that bran, a component of whole grain foods, was associated with similar beneficial effects. Bran intake was linked with up to 6% lower overall mortality and up to 20% lower CVD-related mortality.

The study appears online January 5, 2015 in JAMA Internal Medicine. "This study further endorses the current dietary guidelines that promote whole grains as one of the major healthful foods for prevention of major chronic diseases," said Qi Sun, assistant professor in the Department of Nutrition and senior author of the study. Although eating more whole grains has been previously associated with a lower risk of major chronic diseases, such as type 2 diabetes and CVD, until now there had been limited evidence regarding whole grains' link with mortality. HSPH researchers and colleagues looked at data from more than 74,000 women from the Nurses' Health Study and more than 43,000 men from the Health Professionals Follow-Up Study who filled out questionnaires about their diet every two or four years from the mid-1980s to 2010. Adjusting for a variety of factors, such as age, smoking, body mass index, physical activity, and overall diet excluding whole grains, the researchers compared the participants' whole grain intake with mortality data over an approximately 25-year period.

They found that whole grain intake was associated with up to 9% lower

overall mortality and up to 15% lower CVD-related mortality. For each serving of whole grains (28g/day), overall mortality dropped by 5%, and by 9% for CVD-related mortality.

In contrast, the researchers found no association between eating whole grains and lowered cancer-related mortality. They also didn't find any decreased mortality from eating germ, another essential component of whole grains.

Replacing refined grains and red meats with whole grains is also likely to lower mortality, according to the study. Swapping just one serving of refined grains or red meat per day with one serving of whole grains was linked with lower CVD-related mortality: 8% lower mortality for swapping out refined grains and 20% lower mortality for swapping out red meat.

Other Harvard T.H. Chan authors included lead author Hongyu Wu, postdoctoral fellow in the Department of Nutrition; Alan Flint, research scientist in the Departments of Epidemiology and Nutrition; Laura Sampson, senior research dietetic coordinator; Eric Rimm, professor in the Departments of Epidemiology and Nutrition; Michelle Holmes, associate professor in the Department of Epidemiology; Walter Willett, Fredrick John Stare Professor of Epidemiology and Nutrition and chair of the Department of Nutrition; and Frank Hu, professor of nutrition and epidemiology.

Funding for the study came from the National Institutes of Health (research grants RO1 DK58845, PO1 CA87969, RO1 HL034594, UM1 CA167552, RO1 HL35464, HL60712, U54CA155626 and CA055075) and from the National Heart, Lung, and Blood Institute (Career Development Award ROOHLO98459).

"Whole Grain Intake and Mortality: Two Large Prospective Studies in US Men and Women," Hongyu Wu, Alan J. Flint, Qibin Qi, Rob B. van Dam, Laura A. Sampson, Eric B. Rimm, Michelle D. Holmes, Walter C. Willett, Frank B. Bu, Qi Sun, *JAMA Internal Medicine*, doi:10.1001/jamainternmed.2014.6283, online Jan. 5, 2015 Visit the Harvard T.H. Chan website for the latest news, press releases and multimedia offerings.

For more information: Todd Datz tdatz@hsph.harvard.edu 617-432-8413

Harvard T.H. Chan School of Public Health brings together dedicated experts from many disciplines to educate new generations of global health leaders and produce powerful ideas that improve the lives and health of people everywhere. As a community of leading scientists, educators, and students, we work together to take innovative ideas from the laboratory to people's lives—not only making scientific breakthroughs, but also working to change individual behaviors, public policies, and health care practices. Each year, more than 400 faculty members at the School teach 1,000-plus full-time students from around the world and train thousands more through online and executive education courses. Founded in 1913 as the Harvard-MIT School of Health Officers, the School is recognized as America's oldest professional training program in public health.