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**SCHOOL OF PUBLIC HEALTH**

## **Mediterranean diet linked with lower risk of heart disease among young U.S. workers**

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Boston, MA — Among a large group of Midwestern firefighters, greater adherence to a Mediterranean-style diet was associated with lower risk factors for cardiovascular disease (CVD), according to a new study led by researchers from Harvard School of Public Health (HSPH) and Cambridge Health Alliance (CHA). The study is the first to assess the effects of Mediterranean-style diet among a group of young, working U.S. adults.

The study was published online in PLOS ONE on February 4, 2014.

“Our study adds more evidence showing the health benefits of a Mediterranean diet, even after adjusting for exercise and body weight,” said Stefanos Kales, associate professor in the Department of Environmental Health at HSPH and chief of occupational and environmental medicine at CHA.

U.S. firefighters are known to have a high prevalence of obesity and risk factors for CVD. A Mediterranean diet, rich in fish, nuts, vegetables, and fruits, has been shown in previous studies to lower risk of CVD. However, those studies have primarily been conducted among older people, those with existing health conditions, and among Mediterranean populations.

The researchers analyzed medical and lifestyle data, including dietary habits, from an existing cohort of 780 male firefighters in the Midwest. They developed a modified Mediterranean diet score (mMDS) to assess the participants’ dietary patterns.

The firefighter group with greatest adherence to Mediterranean-style diet showed a 35% decreased risk in metabolic syndrome, a condition with risk factors that include a large waistline, high triglyceride level, low HDL (“good”) cholesterol level, high blood pressure, and high blood sugar. The group with the highest mMDS also had a 43% lower risk of weight gain compared with the lowest mMDS group. Additionally, greater adherence to a Mediterranean-style diet was significantly associated with higher HDL cholesterol and lower LDL (“bad”) cholesterol. Consistent with previous investigations, obese participants in the firefighter study reported a higher intake of both fast foods and sugary drinks.

The study shows that promoting Mediterranean-style diets could have significant health benefits for young, working populations. “The logical next steps from our investigation are studies using the workplace to specifically promote Mediterranean dietary habits

among firefighters and other U.S. workers,” said Justin Yang, lead author of the study and a post-doctoral fellow at HSPH.

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