FRONT LINES



THE END OF TRANS FATS?

A proposal issued in November 2013 by the U.S. Food and Drug Administration (FDA), if finalized, would eliminate trans fat from the food supply. Trans fat—which is produced by partial hydrogenation and found in many processed foods, from cookies to frozen pizza—both raises LDL "bad" cholesterol and lowers HDL "good cholesterol." The FDA move vindicates decadeslong research and advocacy by Walter Willett, MPH '73, DPH '80, chair of the HSPH Department of Nutrition, and his colleagues. "By getting trans fat off the table entirely," Willett told the Harvard Gazette, "we can redirect efforts to the many other aspects of our diet that need attention."

Your on Breakfast

An HSPH study in the journal *Circulation* confirms generations of folk wisdom. As senior author Eric Rimm, SD '91, associate professor of epidemiology and nutrition, put it, "It's a simple message: Eat your breakfast."



Men who regularly skipped breakfast had a 27 percent higher risk of heart attack or death from coronary heart disease than those who had a morning meal. Noneaters of breakfast likely were hungrier later in the day and ate more of their calories compressed into fewer meals, a habit that may lead to adverse metabolic changes and heart disease.

A Public Health Portrait of Africa's Elders



Like other populations world-wide, Africans are living longer. But with greater longevity come chronic diseases—both infectious and non-infectious. A new study by the Harvard Center for Population and Development (Pop Center) will paint a broad picture of aging, health, productivity, and well-being among thousands of older adults in

sub-Saharan Africa. The study will be conducted in South Africa, with launches in Ghana and Tanzania to follow. "We know very little about chronic disease and aging in sub-Saharan Africa," said principal investigator Lisa Berkman, Pop Center director and Thomas Cabot Professor of Public Policy and of Epidemiology. "Over time, we'll be able to understand country-level differences and ultimately pinpoint policies that promote population health." The three-year HAALSI Program Project (Health and Aging in Africa: Longitudinal Studies of INDEPTH Communities) is being funded by the National Institute on Aging.

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FIRST, DO NO HARM ...

More than 43 million people are injured worldwide yearly due to unsafe medical care, according to a recent study from HSPH. The research focused on adverse

events in hospitals from medications, catheter-related urinary tract and bloodstream infections, hospital-acquired pneumonia, blood clots, falls, and bedsores—injuries that lead to an annual loss of nearly 23 million years of "healthy" life. The study, which appeared online in *BMJ Quality & Safety*, is "the first attempt to quantify the human suffering that results from unsafe care," said lead author Ashish Jha, MD '96, MPH '04, professor of health policy and management.

... AND MAKE SURE HARM DOESN'T PAY

A separate study in the *Journal of the American Medical* Association by HSPH and other collaborators revealed that hospitals have financial disincentives to reduce harm and improve quality of care. Privately insured surgical patients who had a complication provided hospitals with a 330 percent higher profit margin than those without medical complications. The study's senior author, Atul Gawande, MD '94, MPH '99, professor in HSPH's Department of Health Policy and Management, said, "Hospitals are not rewarded for quality. This [research] is a clear indication that health care payment reform is necessary. Hospitals should gain, not lose, financially from reducing harm."

More Black Americans Are Sleep-Deprived



An HSPH research study has found that black workers—particularly black professionals—are more likely than whites (43 percent vs. 26 percent) to experience "short sleep" (under seven hours a night), which has been linked with increased risk of occupational injuries, obesity, high blood pressure, diabetes,

heart disease, and premature death. Chandra Jackson, SM '07, Yerby postdoctoral research fellow in the Department of Nutrition and the study's lead author, noted, "With increasing numbers of blacks entering professional roles, it is important to investigate and address the social factors contributing to short-sleep disparities."

Possible sleep-disrupting factors for blacks include discrimination in the workplace, greater job strain, and home stress. Blacks may also suffer from a phenomenon known as John Henryism, in which black professionals, for example, may display an extraordinarily high work ethic to overcome negative racial stereotypes—a coping strategy that can induce anxiety, disrupt sleep, and impair health. The authors have called for more investigation to explain disparities and develop interventions to improve sleep among blacks. The study appeared in the *American Journal of Epidemiology*.



Low Vitamin D Higher Risk for Type 1 Diabetes?

Having adequate levels of vitamin D during young adulthood may reduce the risk of adult-onset type 1 diabetes by as much as 50 percent, according to an HSPH study in the *American Journal of Epidemiology*. If confirmed, the findings could lead to a role for vitamin D supplementation in preventing the autoimmune disease in adults. According to lead author Kassandra Munger, SD '09, research associate in the Department of Nutrition, "It is surprising that a serious disease such as type 1 diabetes could perhaps be prevented by a simple, safe intervention."

IN MEMORIAM ELIF YAVUZ, SD '13

Elif Yavuz, SD '13, was killed on September 21, 2013, during a terrorist attack on a shopping mall in Nairobi, Kenya. She and her partner, Ross Langdon, also killed in the attack, were expecting their first child.

Yavuz, 33, a Dutch national, completed her dissertation research on malaria in eastern Africa. After graduating from Harvard School of Public Health this past spring, she took a job in Dar es Salaam, Tanzania, as a senior researcher with the Clinton Health Access Initiative's applied analytics team. She was in Nairobi to deliver her baby, expected in early October.

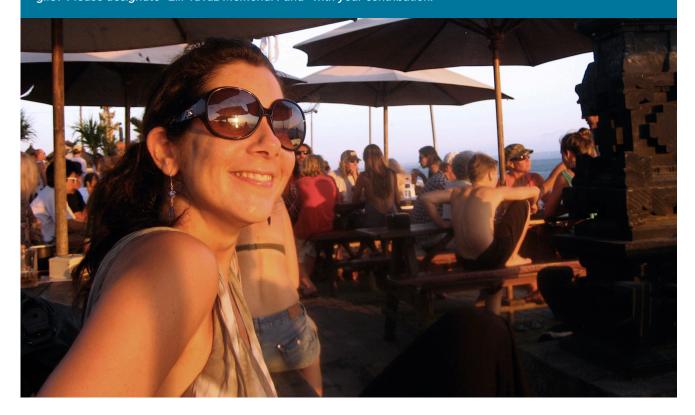
"Elif was brilliant, dedicated, and deeply admired by her colleagues, who will miss her terribly," former President Bill Clinton, former Secretary of State Hillary Clinton, and Chelsea Clinton said in a statement released on the Clinton Foundation's website.

At a memorial held at the School, doctoral student Corrina Moucheraud, SD '15, a close friend, remembered Yavuz as a "force of nature" with "boundless heart, brains, and spirit."

Yavuz's thesis adviser, Jessica Cohen, assistant professor of global health, recalled both the dedication and infectious joy she brought to her work. Yavuz tackled her doctoral fieldwork in Luwero, Uganda, with a "drive for perfection [that] was remarkable," Cohen said. But she also made it fun, teaching all of the children in town the Michael Jackson "Thriller" dance.

Although she was just at the start of her career, Yavuz had already made a contribution through the deep bonds she forged around the world, Cohen said. "No one forgets Elif."

The HSPH Department of Global Health and Population has established a fund in honor of Elif Yavuz, SD '13. Contributions will support next-generation students in global health to carry on Elif's passion for research and service. For more information, go to the HSPH Gift web page: http://www.hsph.harvard.edu/campaign/giving/how-to-make-agift/. Please designate "Elif Yavuz Memorial Fund" with your contribution.





Kent Dayton / HSPH



THE BEST POSSIBLE RESPONSE

PAUL BIDDINGER

DIRECTOR, EMERGENCY PREPAREDNESS AND RESPONSE EXERCISE PROGRAM HARVARD SCHOOL OF PUBLIC HEALTH

The world seems increasingly under the siege of public health emergencies: deadly new infections, catastrophic weather events, terrorism, industrial accidents. Do successful public health responses in one realm translate to other types of threats?

& Absolutely. In any disaster, the two main challenges for a public health or health care organization tend to be the same, irrespective of the threat. One is information flow or situational awareness. In a pandemic, the questions may be, 'How many cases are there? What is the virus? How is it behaving? How can we best protect ourselves?' In a mass-casualty event, the questions may be, 'How many critically injured patients are there? Where are they? Are there any chemical hazards? Are there other security threats?' In the chaos and stress of a disaster, you also have to be able to rapidly transform your organization from a day-to-day function to a fast, nimble, but still thoughtful operation.

In Boston, public health and hospital responders drew on the same overarching emergency operations plans for Hurricane Irene, Hurricane Sandy, the flu pandemic of 2009—and the Marathon bombings. But the reality of the world, of course, is that we can't possibly be fully prepared for everything. We have to continually revise our plans and systems, based on the lessons we have learned. We also have to reassess potential threats. Some things are common—you have to be ready for flu, mass vaccination, mass dispensing. But uncommon things of extraordinary consequence—whether a Category 5 hurricane or a large-scale improvised explosive device (IED) attack—also can take a tremendous human toll. Today, we worry about emerging infectious diseases, large-scale information systems failures, the nefarious use of biologic or chemical or radiation weapons, IEDs, and the persistent threat of lone-wolf shooters. You prepare for threats that are a combination of very likely and very consequential, or that require special talents not otherwise available in your day-to-day operations.

We're always faced with new threats, so we're always changing our response plans and always trying to get better. I use the analogy of a football team: Just because you won a game, you can't stop practicing. **99**

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