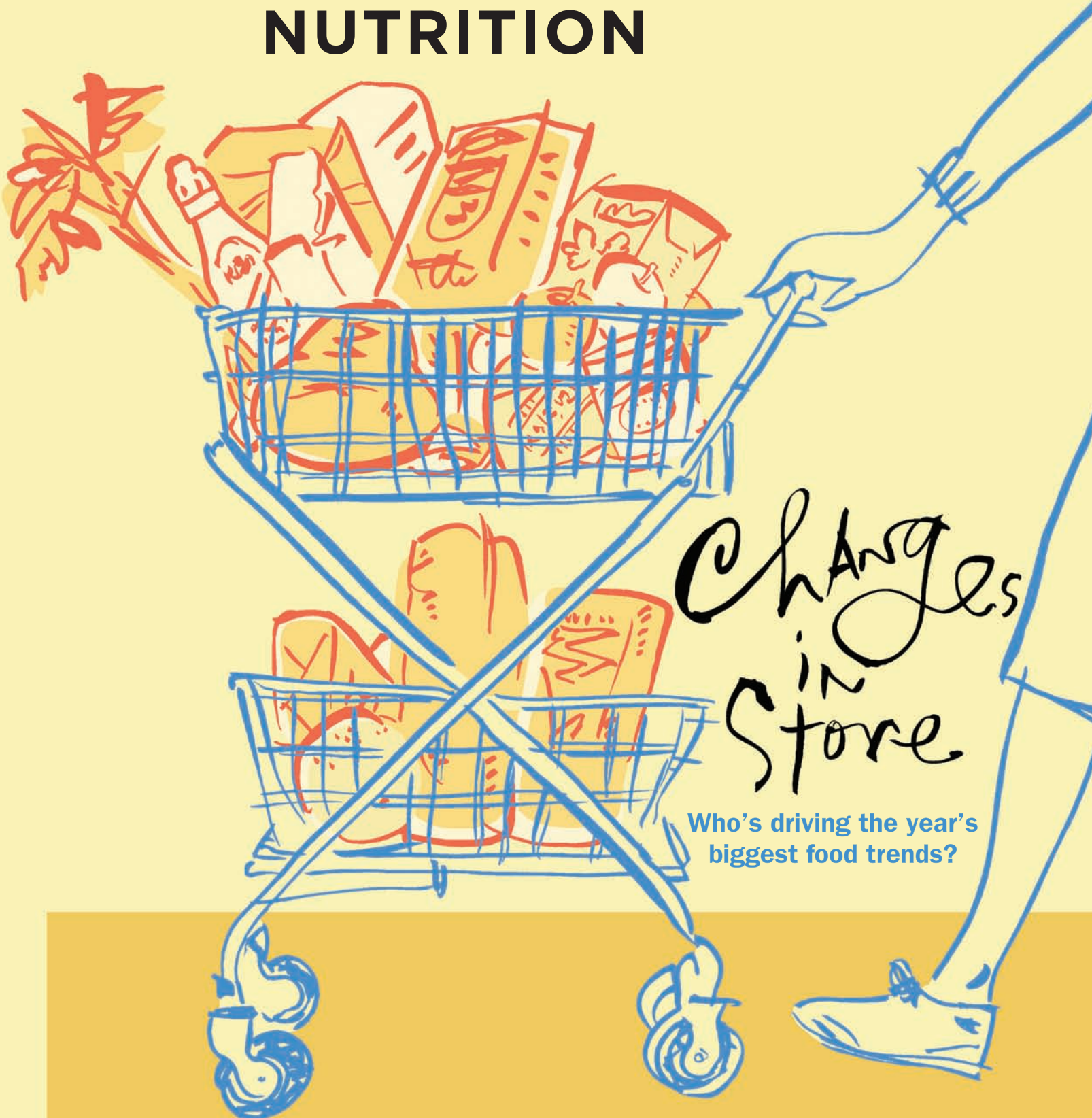


Tufts

NUTRITION



*Changes
in
Store*

Who's driving the year's
biggest food trends?

PLUS: ANTIOXIDANT UPDATE • CAMPAIGN FOR HEALTHY KIDS • SEER INSIGHTS

To Peel or Not? It's a Wash

For this installment of "Ask Tufts Nutrition," Helen Rasmussen, Ph.D., a senior research dietitian at the Jean Mayer USDA Human Nutrition Research Center on Aging and an instructor at the Friedman School, serves as our expert.

Q When it comes to fruits and vegetables, which is better: to eat the peel for its nutrients, or to cut it off to avoid contaminants?

A "We will all eat a peck of dirt before we die," or so the adage goes. I'll bet our ancestors never imagined that antibiotic-resistant bacteria and modern-day pesticides would one day be included in the dished-up dirt.

The good news is that the peels of most fruits and vegetables do contain some valuable plant chemicals as well as beneficial fiber. The bad news is that the peel can also be contaminated with pesticide residue, dirt and bacteria. More bad news: purchasing organic produce does not buy you contaminant immunity. Organic foods can carry organic fertilizer residues as well as dirt and bacteria.

Whether or not you reach for the peeler, produce handling should always start with washing, beginning with your hands. Rinse all fresh produce under running water; you can also rub the food with your hands or a soft, clean

brush. Be sure to wash around the stem or blossom ends where germs collect. Pay attention to bruised or damaged areas, where bacteria can thrive. Cut these areas out, and rinse the flesh.

We don't think of cantaloupe, watermelon and pineapple as foods that need scrubbing, but they do. When you cut open unwashed produce, you are potentially creating a contaminated milieu as the knife blade carries bacteria from the outer peel through the flesh.

There are commercial fruit and vegetable washes, but their effectiveness is unclear. Researchers at Tennessee State University tested both a commercial produce wash and a vinegar solution, but they worked no better than plain water, which got rid of 98 percent of surface bacteria.

Salad greens may benefit from soaking before rinsing, even the pre-prepped ones. A 2010 *Consumer Reports* test on bagged leafy greens found bacteria lurking in "prewashed" and "triple washed" salad materials. So your lettuce will need a fourth wash before you add it to your salad bowl.

Please send your questions for future installments of "Ask Tufts Nutrition" to Julie Flaherty, Tufts University Office of Publications, 80 George Street, Medford, MA 02155. Or send an email to julie.flaherty@tufts.edu.



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We welcome your letters.
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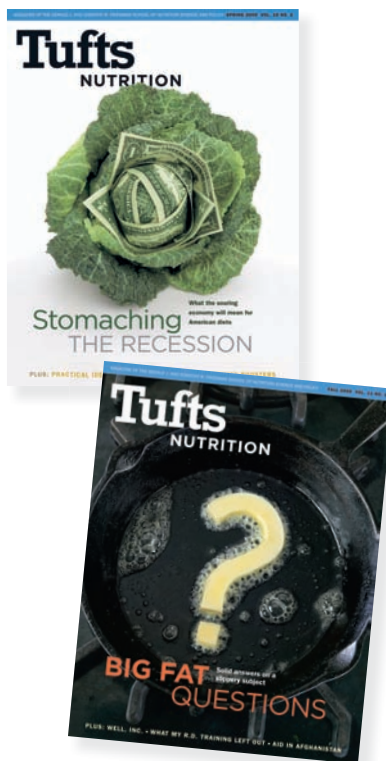
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SPREAD THE NEWS

I just read your article on dietary fats ("Fat Chance," Fall 2009). This is a subject that has always confused me, so thanks. Question: can you specifically recommend a buttery spread to me? Or is there one recommended by the researchers? There are tons on the market.

GREG BIEHN
MINNEAPOLIS, MINNESOTA

Alice Lichtenstein, D.Sc., the Stanley N. Gershoff Professor, responds: "The landscape of spreads is ever changing, but there are some general principles that you can use to help guide you. Look for a spread that lists zero trans fat. Although, as you may have heard, this actually means that each serving can have up to 0.5 grams of trans fat, it is the best criterion we currently have for selecting a spread. For spreading on food, consider the reduced-fat or 'lite' products to save on calories; for cooking consider the full-fat versions for best results. Finally, select one that tastes good to you. Although you should always keep portion size in mind, you should not have to choose between something that is 'good for you' and something that you enjoy."



High Praise

Tufts Nutrition won a silver medal in the Best Overall Magazine category from the Council for Advancement and Support of Education (CASE) in its 2010 District I Communications Awards competition.

The awards recognize outstanding achievement in higher education, independent school and nonprofit organization communications.

TALK TO US

Tufts Nutrition welcomes letters with concerns, suggestions and story ideas from all its readers. Address your correspondence, which may be edited for space, to Julie Flaherty, Editor, *Tufts Nutrition*, Tufts University Office of Publications, 80 George Street, Medford, MA 02155. You can also fax us at 617.627.3549 or email julie.flaherty@tufts.edu.

A Nutrition Renaissance



NOT LONG AGO, I PHONED TWO PROSPECTIVE students to talk in-depth about the unique aspects of the school. During one of these conversations, the person asked me what I thought would be the future of nutrition. My immediate response was that nutrition is going through a renaissance—a rebirth of sorts. Increasingly there is renewed recognition that investments

in nutrition will be key to sustained improvements in health.

At the national level, First Lady Michelle Obama has identified prevention of childhood obesity as a priority for the administration [see story, page 20]. Her program, called Let's Move, emphasizes healthy eating and active living. Let's Move draws on the research of Christina Economos, Ph.D., with the Shape Up Somerville program, which is why Joseph Curtatone, the mayor of Somerville, was asked to speak at the White House launch of Let's Move.

A spotlight is shining on nutrition at the global level as well. A consortium of organizations, including United Nations agencies, bilaterals, non-governmental organizations and academic groups, has developed a Global Action Plan (GAP) for scaling up nutrition. The basic premise of GAP is that cost-effective nutrition interventions exist; what is needed is to scale up these approaches to a national and international level. As one of the few academic institutions involved as founding members of GAP, the Friedman School is focused on capacity-building in food and nutrition in order to effectively scale interventions and policies.

Increasingly, our alumni are being publicly recognized for their wide-ranging contributions to the field. The Tufts University Alumni Association has given Elizabeth Cochary Gross, Ph.D., N82, N88, a 2010 Distinguished Service Award, its highest honor. Liz is the first Friedman School graduate to receive this award. In addition to Liz's many activities, she is an active member of the Friedman School Board of Overseers. Congratulations, Liz.

Our faculty are also gaining attention for their contributions to science. At this year's annual meeting of the American Society for Nutrition (ASN), a leading professional organization, Joel Mason, M.D., received the Mary Swartz Rose Senior Investigator Award for his outstanding research on the safety and efficacy of bioactive compounds for human health. At the same meeting, Jeffrey Blumberg, Ph.D., was inducted as an ASN Fellow for his lifelong contribution to scientific work focused on the biochemical basis for the role of antioxidant nutrients and their dietary requirements in health promotion and disease prevention [see related story, page 24]. Congratulations, Joel and Jeff.

I recently returned from Tokyo, where I had a series of meetings with the United Nations University (UNU). The Friedman School is designated as a UNU-associated institution, and in this capacity, we work with our counterparts in developing countries on critical issues facing nutrition. Throughout our discussions, UNU staff referred to the school's faculty as scholar-practitioners—individuals who combine an academic background with experiential skills. No place was this clearer than in Patrick Webb's recent work in Haiti, where he was part of the post-disaster needs assessment team that is developing, among other things, the long-term nutrition strategy to guide Haiti's recovery from the earthquake [see story, page 8]. His work is just one example of the many ways our faculty, staff and alumni are giving something back.

Finally, I am saddened to write that Joan Bergstrom, Ed.D., the former chair of the Friedman School's Board of Overseers and a Tufts trustee emeritus, passed away in April. A 1962 Tufts graduate and director of the Center for International Education, Leadership and Innovation at Wheelock College, Joan was a remarkable leader who sought to improve the lives of children worldwide. I will miss her wise counsel as well as the thoughtful and passionate leadership that she offered to the Friedman School. Her tremendous grace and intelligence made a deep and lasting impact on all that she reached. She will be deeply missed.

EILEEN KENNEDY, D.SC.



Calorie Miscalculation

EVEN AS A GROWING NUMBER OF CHAIN RESTAURANTS DISPLAY THE calorie contents of their dishes on websites and menus, eaters should exercise caution. Those meals can contain substantially more calories than advertised, according to a Tufts study.

Professor Susan Roberts, Ph.D., and her colleagues analyzed the calorie content of 18 side dishes and entrees from national sit-down chain restaurants, 11 side dishes and entrees from national fast-food restaurants and 10 frozen meals purchased from supermarkets. They compared their results to the calorie information provided to the public by the restaurants and food companies.

On average, the researchers found the restaurant dishes contained 18 percent more calories than the eateries claimed. Two side dishes exceeded the restaurants' reported calorie information by nearly 200 percent. The researchers also found that the supermarket frozen meals had 8 percent more calories than listed.

"If every time you eat out you get a couple of hundred calories or more than you think, that can add up really easily," Roberts told the Associated Press. "There's a big drumbeat for people putting calories on menus, but that's only useful if the calories are right."

Additional testing will be needed to see if this is a nationwide problem, said Roberts, who directs the Energy Metabolism Laboratory at the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts.

One Pot, Many Hands

Advances in agriculture and technology have made food in the United States cheap and plentiful. But they have also resulted in a huge government bureaucracy—15 separate agencies in charge of 30 different laws—to manage the food system.

In her report "Beyond the USDA: How Other Government Agencies Can Support a Healthier, More Sustainable Food System," Maggie Gosselin, N10, argues for a more coordinated, integrated effort among these regulators.

"With so many government bodies influencing the many facets of our food system," she writes, "how can we move toward federal food policies that are smart, non-contradictory and truly serve the public interest?"

The report, issued by the Institute for Agriculture and Trade Policy, illustrates the complexity of the food system. The USDA is the biggest player, with the FDA and EPA doing their part. But other, less obvious agencies play roles, too. The Department of Defense purchases more than \$4.5 billion in food a year to feed 1.5 million active military personnel. And Homeland Security, established in 2002 to protect the United States from terrorism and natural disaster, works at U.S. borders to enforce food labeling laws as well as immigration laws. Because a staggering 39 percent of U.S. agricultural workers are undocumented immigrants, immigration laws can have a tremendous impact on the food industry.

Gosselin recommends forming a task force that would draw on all the agencies and help spark a broader discussion of food policy.

—LESLIE MACMILLAN

D Before Ca, When It Comes to Building Strong Bones

GETTING LOTS OF CALCIUM, THE THEORY goes, is the best insurance against a fragile skeleton. But a study co-authored by Bess Dawson-Hughes, M.D., M75, director of the Bone Metabolism Laboratory at the Jean Mayer USDA Human Nutrition Research Center on Aging, found that getting vitamin D levels up to par may be more important than higher doses of calcium when it comes to strong hip bones.

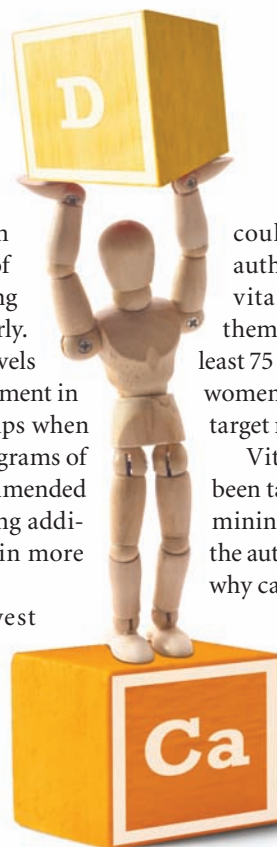
The study, published in the *Journal of Bone and Mineral Research*, looked at about 10,000 men and women ages 20 and older who do not take calcium supplements but who reported the calcium they took in through foods. They were also checked for the level of vitamin D in their blood.

The results showed that vitamin D status was the better predictor of bone density, which is itself a strong predictor of fractures in the elderly. Women with moderate blood levels of vitamin D showed no improvement in bone mineral density in their hips when they took in more than 566 milligrams of calcium (or about half the recommended daily intake). Men stopped seeing additional benefits when they took in more than 626 milligrams a day.

Only women with the lowest blood levels of vitamin D (less than 50 nanomoles per liter) gained bone density with higher calcium intakes. These women

could take in more calcium, the authors write, or they could take vitamin D supplements to shift them into the desirable range of at least 75 nmol/L. Many of the men and women in the study were below that target range.

Vitamin D status hasn't always been taken into account when determining how much calcium we need, the authors write, which may explain why calcium recommendations vary widely around the world. The United States calls for 1,200 mg a day for adults over age 50, while the United Kingdom suggests 700 mg.



TAKING RISKS TO MANAGE DISASTER

THE WORLD'S POPULATION IS EXPLODING, WITH THE BIGGEST increases expected in the poorest countries—and in the poorest areas *within* countries. It is happening so quickly, experts predict, that cities will not be able to keep up with the growth. People in slums will face even greater overcrowding, inadequate nutrition and poor health.

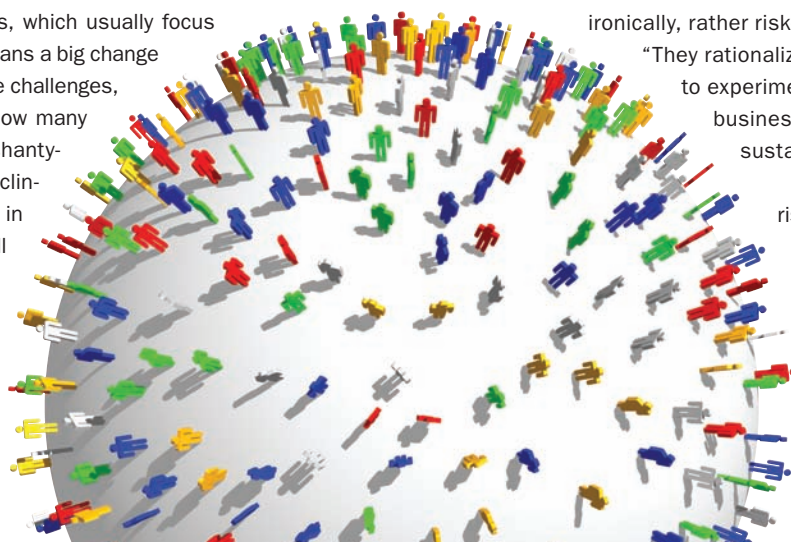
For humanitarian agencies, which usually focus on rural development, that means a big change in approach. "Basic but simple challenges, like being able to estimate how many people live and work in a shanty-town or how to map health clinics or water delivery sources in ever-changing slum areas, will need to be addressed," write the authors of "Humanitarian Horizons: A Practitioner's Guide to the Future."

The guide, published by the Feinstein International Center at Tufts and the Humanitarian Futures Program at King's College, London, warns that agencies will need to think more creatively to cope with population growth and more frequent natural disasters—brought on by climate change.

"We need to be honest: humanitarian agencies are, ironically, rather risk-averse," the authors write.

"They rationalize that they do not have the right to experiment with the unproven when their business is delivering life-saving and sustaining services."

Instead, agencies should manage risk by rigorously researching options, but also experimenting and working in consortia to spread the risk around. The report, the authors hope, is "but one nudge in that direction."





Susan Holman, N83, has read accounts of humanitarian assistance that date back as early as 300 A.D., when Christians provided food and clothing to prisoners.

Centuries of Need

An R.D. turned religious scholar,
Susan Holman studies the history of hunger,
poverty and aid through millennium-old texts



USAN HOLMAN'S FIRST JOB WAS AS a registered dietitian with the Women, Infants and Children (WIC) program in Boston. But working with so many low-income families who faced problems beyond nutrition was emotionally challenging.

"Day in and day out I could not escape sensing need," Holman, N83, would later write. "It adhered to the pores of my skin and lined my nerves."

To cope, Holman, who had always had an interest in religion, began reading fourth-century Greek sermons on poverty, hunger and disease, and was soon engrossed in how previous generations had dealt with these same issues. She eventually entered Harvard Divinity School and later earned her Ph.D. from Brown University.

Although her clinic days are behind her, she often draws on her nutrition background in her role as an academic research writer and editor at the François-Xavier Bagnoud Center for Health and Human Rights, where she is managing editor of *Health and Human Rights: An International Journal*.

"It's a delight to be able to encourage those in religious studies to think about poverty and justice issues as they relate to public health," she says, "while at the same time alerting colleagues in the sciences to these voices from the past that share many of their own concerns."

In her newest book, *God Knows There's Need: Christian Responses to Poverty* (Oxford University Press, 2009), she looks at how the early church dealt with poverty, and looks to her own experiences as a dietitian in making sense of it.

Q: What did humanitarian efforts look like for the early Christians?

As early as the year 300, Christians were providing food and clothing to strangers in prison. The life of a widow named Euphemia, who lived in what is now eastern Turkey, provides an encouraging model of someone who was visiting street people daily, asking what they wanted for lunch, and then providing it for them. She was constantly banging on her neighbors' doors (and even barging into their houses) to demand donations for the poor.

Q: What lessons do these writings have for people who fight hunger and poverty today?

The ancient texts provide the voices of exemplars of various stripes that show how these issues of public health, justice and basic respect for people have been addressed for millennia. They can be very encouraging reminders at moments when we might feel like giving up. They show us what has or has not been tried. And of course they remind us that poverty is not a new problem, that the responses take perpetual action that is new in each generation, new in each moment.

Q: Are the stories all ones of inspiration?

We can look at such models and accounts carefully and critically; not every practice is to emulate! We have several stories of Christian benefactors organizing handouts for people lined up in the street who then strike or shame the odd beggar who gets caught going through the line more than once.

While most of the examples from the past are more about handouts than they are about empowering people, there is a strong sense in the particular Greek texts

I've worked with that giving is justice, not "pity," and that there is a moral obligation to view these individuals in need as exactly like us, with a right to human dignity, basic services like water, clothing and food, and that it is a social injustice to discriminate against them because they are poor. Jewish charity, the Islamic system of alms and early Syriac Christian texts all share a common linguistic idea of "charity" or "almsgiving" as essentially synonymous with justice.

Q: You say that when you were studying public health food policy in the late 1980s, people were put off by discussions of religion. Why was that, and how have things changed?

When I was in graduate school, "religious responses to poverty" often seemed to translate into the idea of forced evangelism. I remember mentioning my interest to one nutrition professor, who became defensive and spoke of growing up in a missionary household—which was not at all what I was talking about, though it did help me understand her reaction.

In public health today, I think the work of [Partners in Health co-founder] Paul Farmer and others has helped create an openness, since discussions of poverty, anthropology, medicine and justice lead easily into topics such as Catholic liberation theology and faith-based NGOs. Dr. Geoff Foster, a pediatrician and community activist based in Zimbabwe, is one of a number of experts interested in formally connecting academics, religious groups and civil society practitioners engaged in children's health issues with the work of the U.N. and governments. The openness to such intersections is very exciting. [TN](#)



Clockwise from top: unloading food aid in front of the demolished presidential palace in Port-au-Prince; women carrying scarce drinking water; "Camp Charlie," where U.N. workers made their home while in Haiti



Some experts are looking beyond recovery to a new start for one of the world's poorest countries, but skepticism abounds BY LESLIE MACMILLAN

HIGH STAKES FOR HAITI

AS PATRICK WEBB DROVE THROUGH THE streets of Port-au-Prince just weeks after the earthquake on January 12, the mood was somber, and signs of frustration were everywhere. Graffiti aimed at the international relief and peacekeeping efforts proclaimed: *Aba ONG volè* (down with thieving NGOs), and *Aba okypasyon* (down with the military occupation).

Haitians had heard about billions of dollars in aid pouring into their country, yet many were, and still are, without basic shelter and food. "Haiti is used to calling for relief after natural disasters, and it's used to seeing very little of it get funded," says Webb, the Friedman School's academic dean, who was called in by the U.N. World Food Program to help rebuild the food sector. "A little bit of fatigue sets in for them after a while," he says.

Even before the earthquake, Haiti was broken. One of the world's poorest countries, the island nation has struggled with political upheaval, health crises, natural disaster, deforestation and, more recently, gang violence. A daunting picture, though some, like Webb, say the timing is right to rebuild the country—from scratch.

"Traditionally, reconstruction has meant focusing on immediate recovery and replacement of losses," says Webb, who worked on emergency response and needs assessment

after the 2004 tsunami in Asia and on other nutrition projects in Haiti. "This is the first time we were tasked with, 'Don't just stop there. Think blue sky. Give a 10-year vision of what it would take to fix Haiti.'"

In a process Webb likens to the wrangling over U.S. health-care reform, some 380 experts from Haiti and around the globe spent several weeks fleshing out their recommendations, not just to repair buildings and roads, but to revitalize education, jobs, health and nutrition. Their reconstruction plan, which sought \$11.5 billion over the next decade, went to a donor conference in New York City on March 31, and Haiti received nearly \$10 billion in pledges from 130 governments. The money will finance housing for 1.3 million people now living in tent cities, reconstruction of some 1,300 schools, building of new roads and other infrastructure and a program to boost agriculture so that Haiti can once again feed itself.

Now it comes down to implementation, and both donors and Haitians are skeptical. Will Haiti be able to assure donors that their money is going to be well spent, and will donors, who haven't always come through in the past, pay up this time?

"Ten billion is not a lot of money to rebuild an entire country," says Webb, who holds a doctorate in economic geography.

"But will even that amount be forthcoming when [the nation's] security could so easily go to hell in a hand basket?"

THE RIGHT FOOD

Of all Haiti's challenges, food is at the top of the list. The country's agriculture came to a standstill in the 1980s. Environmental degradation, an influx of food aid from the U.S. in the form of rice that was often sold at local markets, and one of the lowest rice import tariffs in the Caribbean all combined to make it difficult for Haitian farmers to compete with the cheap imports. Food security experts are saying only a complete reform of Haiti's farming industry will break its dependence on imports and foreign aid, and now is the time to get it right. The country spends a staggering 80 percent of its revenue to import 50 to 60 percent of its food, yet its people are still going hungry.

"When you 'cost' the economic losses due to malnutrition, it's almost equal to 30 percent of the gross national product," says Webb, pointing to poor health, premature deaths and loss of income as byproducts.

The nutrition portion of the plan represents roughly \$700 million of an initial \$4 billion requested for the first three years of reconstruction. It would fund better malnutrition treatment and prevention; a program that pays Haitians 60 percent cash and 40

percent food for their work on soil and water management projects, tree planting and expanding irrigation systems; better emergency management, including a new early warning system for natural disasters, and improved food warehouses. Warehousing is so poor now that a lot of food is lost to vermin and spoilage. The nutrition plan also includes a national school meal program that would rely on locally grown food—rice, beans and corn—to stimulate agriculture.

“Our concern is that food security should not just be about growing more food,” Webb says, “but that the food is the right food—nutritious and safe—and available to all who need it.”

Half of the nutrition team comprised representatives of the Haitian government. Webb had been working with the same group during the previous year, helping to draft a national nutrition policy, which gave them something to build upon. Because of the prior working relationship, the planning process for nutrition went “very smoothly,” he says, which was not the case in some other sectors.

“There are a lot of very loud intellectuals arguing that the solution is to grow mangoes for processing and export, or it should all be about textile industries or tourism—that’s the solution!—and when their project doesn’t get funded, they end up criticizing everything else. It’s too often like that,” says Webb.

He speaks from experience. Lining the walls of his office at Tufts are maps of North Korea, where he managed large-scale nutrition surveys and micronutrient programs, and Ethiopia, where he worked on famine relief in the 1980s.

Besides the problem of donors coming with their own agendas, Webb says, Haiti hasn’t always had much say in what’s offered as relief. Among the \$2.4 billion sent to the island as “humanitarian donations” after the quake were \$10,000 worth of shoes, \$30,000 worth of energy bars and vitamin water, \$1 million worth of eye drops and 2,000 mobile phones, all given by the manufacturers of those goods. “Some of the donations are well-intentioned,” says Webb. But the companies benefit from

tax breaks and good public relations, even when they send items that are not much use to a country struggling just to house and feed its people.

Webb recalls his experience after the tsunami in Aceh, Indonesia, a conservative Muslim society, where donations of revealing clothing and drugs and food past their expiration dates had to be destroyed. “That’s why there were giant pyres at the airport,” he says. “A lot of the stuff sent just gets burned.”

AGENDAS AND AFTERSHOCKS

The nutrition team spent nearly a month in Haiti, and Webb says signs of unease were everywhere. “The meetings we had were always disrupted by minor aftershocks that sent people running into the streets. Survivors were very, very jumpy,” he says. “Some of the government people refused to meet indoors and didn’t want to sleep with roofs over their heads.”

Team members brought their own tents and slept at a U.N. base dubbed Camp Charlie, surrounded by Nepalese and Brazilian peacekeeping battalions. Webb notes that the visitors lived in relative luxury compared to their Haitian counterparts.

He recalls that one day after their meetings had ended, the country’s director of nutrition, a physician, asked Webb if he wanted to see her “home.” It was a bedroll under a tree in a courtyard outside a demolished church that was surrounded by hundreds and hundreds of patients. “She had to go to these high-level meetings and talk about plans and numbers, and then come back and treat all these people for free,” Webb says. “These were really sub-optimal conditions under which to expect our Haitian counterparts to be on top of their game.”

There are other Tufts people in Haiti, Webb says, including eight Friedman School alumni who work for a variety of organizations, from UNICEF and World Vision to the U.N. special envoy’s office. As horrific as the circumstances are, Webb says there’s a strange poignancy to working in a disaster zone: “There’s a consciousness of the fragility of life that’s there 24/7. There’s contact with people pushed to the extremes. There’s putting your professional knowledge immediately to good effect.”

“Our concern is that food security should not just be about growing more food, but that the food is the right food—nutritious and safe—and available to all who need it.”

—PATRICK WEBB





Left and below: a U.N. helicopter bearing food aid struggles to land in the mountainous terrain; the sacks are then carried by donkey or on foot. Opposite: Graffiti in the capital proclaims, “Long Live President Preval,” “Down with the Occupation” and “Down with NGOs.”

POOR MAN OF THE AMERICAS

Haiti was not always poor. Two hundred years ago, the country was one of France’s most prosperous colonies in the Caribbean. A bloody slave revolt in 1804 ousted the French occupiers, and Haiti became the first black country to gain independence. Webb says that sets it apart from other developing nations.

“It’s often the former colonial power that oversees development in newly independent countries, but France washed its hands of Haiti,” he says. “The Spanish- and English-speaking countries of the Caribbean did not see any common ground, and that left the U.S. as the donor of last resort because of proximity and the large Haitian immigrant population. But no donor has ever committed to nation-building in Haiti.”

Without a “patron” or a strong central government to oversee operations, a disaster like the earthquake can become a kind of free-for-all, says Webb, with everyone trying to grab a piece of the action. “You have freelance photographers trying to make a buck. Informal NGO types completely dazed by what they’re seeing. People who pay their own way down with no mandate, let alone training, and they’re taking up a camp bed and food and becoming a security burden.

“Haiti was founded as a pirate colony; it was a haven of French buccaneers,” says Webb, who notes a certain mercenary air still prevails. He recalls a cafeteria he went to some nights, where he would watch a steady stream of humanity coming in. “It was just a hole in the wall kind of place, but it was



open to the sky, and they had cold beers. So you’d be talking to a Japanese Red Cross person or maybe a Turkish surgeon, and then suddenly a group of American paratroopers would walk in with machine guns, and they’d be followed by Italian helicopter pilots with giant Bowie knives strapped to their legs, followed by Chilean naval crews with a pistol on each hip, and I’d think it must have been just like this 200 years ago—people from all over the world, armed to the teeth, all mixing, all downing alcohol, all there with some kind of interest in Haiti.

“Haiti has always been the outlier,” Webb continues. “It’s the poor man of the Americas. It’s not the most malnourished—because other countries in Central America have greater nutrition problems—it’s not

necessarily the poorest, but when you put it all together, it’s quite a mess. It’s going to take a long commitment, and donors are not always very good at committing for the long run.”


There is a lot at stake for Haiti, which in the long-term, aid experts say, teeters on the brink of failed statehood. It could descend into the anarchy of a Somalia or Kosovo. In the short-term, the hurricane season approaches, and more than 10 percent of the population is living in tents without proper toilets. “Are the donors going to step up to the plate this time? It’s not a given,” says Webb. “But I hope so, because now’s the time.” **TN**

Leslie Macmillan can be reached at leslie.macmillan@tufts.edu.

➔ For more on Tufts’ presence in Haiti after the earthquake, visit go.tufts.edu/emt to read about an EMT who was part of the first U.S. medical team to treat quake victims and go.tufts.edu/whatnext to learn what Fletcher School experts say about the country’s options.

CHANGE *is in the* AISLE

Demanding consumers are driving the year's biggest food trends **BY JULIE FLAHERTY**



TALK ABOUT A TOUGH CUSTOMER. INFLUENCED BY THE BELT-TIGHTENING OF THE recession—but also by opinionated celebrity chefs like Jamie Oliver, food writers like Michael Pollan and documentaries like *Food Inc.*—Americans are spending more time in the grocery store, looking for food that is natural and uncluttered in composition, but also safe and convenient. Oh, and they would like to know something about where that food comes from, if you don't mind.

Where consumer tastes go, industry must follow. To find out where we're headed, we spoke with Friedman School faculty and alumni who specialize in nutrition communication and who work closely with food companies to help them stay on top of nutrition trends. Here are their predictions for what buyers will want, what government will dictate and how manufacturers will respond in 2010 and beyond.

HOME-COOKED MEALS (KIND OF)

The recession has encouraged many families to forgo restaurants meals and dine in. According to the market research company Information Resources Inc., 60 percent of consumers are more frequently creating and serving up simple meals at home.

"That doesn't mean they are making meals from scratch," says Howard Goldstein, N05, a registered dietitian and an account supervisor at FoodMinds, a food and nutrition company. "They are still busy and looking for convenience."

While cooking the way grandma did may not be a widespread phenomenon, Rachel

Cheatham, Ph.D., N05, N08, vice president of nutrition communications for the international public relations firm Weber Shandwick, says, "partially preparing, assembling and cooking to a finish will be on trend." Instead of complete frozen meals, consumers may build a dinner out of frozen sweet potato fries, microwave-in-bag green beans and rotisserie chicken.

"We'll see a lot of that," Cheatham says. "It will be about trying to get the elements and pieces together with ease and on a budget." Pre-prepped foods have been increasing in popularity for some time now, but she expects this year the trend will go "farther than it's ever gone."



ILLUSTRATIONS BY WARD SCHUMAKER

She points to a sharp increase in sales of sauces, seasonings and marinades, which “help give flavor while getting you halfway there and keeping calories in check.”

Eating at home may keep people from exposing themselves to the oversized portions common in restaurants. But is food “assembled” at home inherently more nutritious? Cheatham is optimistic.

“In general, the more you have individuals in their home doing a few more pieces of the assembly, it probably will be healthier,” she says. “It forces people to think about the ingredients a little bit more and customize them to their health needs more. Is a person on high-blood pressure pills? He may need to buy the lower-sodium sauce. You can tailor it along the way to feed your personalized tastes and health needs directly.”

The question, says Adjunct Professor Sylvia Rowe, president of SRStrategy and the former president and chief executive of the International Food Information Council and the IFIC Foundation, is whether spending time in the kitchen and at the dining table will continue after the recession ends.

“That was the trigger,” Rowe says, “but whether or not the trigger has made people realize there are values to the home meals,

there are values to eating together, there are values to the experience beyond the financial savings” remains to be seen.

A SIDE OF SUSTAINABILITY

If money were the only factor in food decisions, sales of organic products, with their premium prices, should have fallen off during the recession. But it seems that consumers are not giving up their Stonyfield Yogurt and Honest Iced Tea.

“The opposite has happened,” Goldstein says. He points to research from the Hartman Group that found people are not changing their sustainable behavior. To keep buying the organic products they like, Americans are making cuts in other categories, such as “buying a generic label of something else they normally purchase,” Goldstein says. Hello no-name toilet paper.

The Grocery Manufacturers of America, partnering with Deloitte, found that 95 percent of shoppers would buy green, and 65 percent are looking for green. And green encompasses not only organic foods, but products that are sustainable in other ways, such as carbon footprint, water use, fair trade practices and biodegradable packaging. Goldstein points to Frito-Lay’s new packaging for its Sun Chips brand of multi-

grain snacks that decomposes in two weeks: “They show that when you buy that product and you throw the bag into a composting bin, it gives back to the environment.”

Wal-Mart, the largest retailer in the world, has been using a sustainable packaging scorecard for its suppliers so they can see how they rate against their peers in earth-friendly design. Goldstein has also heard rumblings that the retail giant is creating a system that will look at other measures of sustainability, such as how products are sourced, their carbon footprint and how workers are treated.

Wal-Mart is more than a bellwether when it comes to industry change. When Wal-Mart had high consumer demand for milk without hormones, it got its suppliers to go hormone-free. “Since they’ve switched, almost all milk containers say rBHT free,” Goldstein says. “If they do something, every single food company has to follow what they want.”

KEEP IT SIMPLE

Consumers are seeking out foods with streamlined ingredient lists and less stuff that isn’t inherent to the food. There’s a reason that Healthy Choice’s “all natural” line of frozen entrees—which have ingredient lists a fraction the length of its other frozen meals—made the Information Resources Inc. list of top-performing new food products in 2009.

“People don’t want as many chemicals in their foods,” Rowe says. “They are concerned about low-calorie sweeteners and artificial colors. Concerns about pesticides are up. There is a chemophobia that hasn’t been there for a long time, probably since the 1970s.”

Cheatham says she sees a push among the big food companies to simplify ingredient lists down to “positive nutrients.” But with that comes a potential dichotomy. “Everyone is crying out they want more simple, locally sourced, back-to-the-farm foods,” Cheatham says. “On the other hand, they want it at the price they want and the convenience they want.”

Thus, we find the consumer who wants whole-wheat bread that is free of preservatives, but shelf-stable enough to sit on the counter for a week without going moldy. How will food companies try to satisfy these



high demands? “My money I would put on packaging,” Cheatham says. “Is there something we can put in the container the bread comes in that can keep it fresher longer?” Or in the case of meat, “Can it be wrapped in such a way that there is a package indicator that changes color to signal freshness?”

What about foods with more of the supposedly good stuff tossed in, like vitamins in water, omega-3 fatty acids in milk and fiber in ice cream?

Consumers are of two minds on this one, Rowe says. There are certainly some people who want to get their benefits as painlessly as possible, and orange juice with calcium can be a godsend for those who are lactose intolerant. At the same time, she says, “you also have, to a certain extent, a kind of backlash that’s developed” against such fortified foods, with consumers reporting they are more interested in foods that are naturally rich in vitamins and minerals.

But that doesn’t mean that foods with added nutrients will disappear. “I think we’ll see a little more conscientious respect for the way the ingredient of interest is found in nature,” Cheatham says. “What we’re learning is that nature is complete in that way, and if you pull one lone thing out of that food and put it elsewhere, it might not have the positive effects you hoped for.” So instead of separating the lutein out of spinach and adding it to a protein bar, food companies may try to add the spinach itself. “Can you concentrate that down and get what you want?”

Part and parcel of that, Cheatham says, is “not just throwing in a positive over something that is kind of a hollow-type food.” (Diet sodas with added vitamins come to mind.) So expect fewer products advertising their incongruent additions. That said, “omega-3s might be the exception,” Rowe predicts. The market researcher Nielsen notes that products containing omega-3 recorded a 42 percent growth in 2009.

LOCAL IS KING

It’s not hard to see the origins of the push for local foods. Influential chefs are advocating the tasty benefits of ingredients that are local and seasonal; global warming has many experts pointing a finger at the high carbon price of food “miles.” But perhaps more important to the development of



SMART PHONES THAT GIVE NEAR CONSTANT ACCESS TO THE INTERNET ARE MAKING IT EASIER THAN EVER FOR CONSUMERS TO FIND OUT THE BACK STORY ON EVERYTHING THEY EAT.

this trend have been the food safety scares. Everything from spinach to bottled water to cookie dough has been subject to recalls in recent years.

“It’s really hard to go a month without another food being implicated in some food-borne illness problem,” Goldstein says. “This is really getting to the nerves of consumers.”

Most of the foods grabbing the headlines were handled and packaged in enormous volumes and sent out for national distribution, and consumers have noticed. If nothing else, buying local just feels less risky.

“They are associating [the notion that] if you buy local and seasonal, you are buying safer,” Goldstein says. In theory, at least, “you get to know your farmer, you get to know your breeder, and you can talk to them and know their methods.”

Look for supermarkets to start working more closely with local farms and suppliers, promoting whenever they can that the blueberries on display came from New Jersey and not Mexico. National food manufacturers will

undoubtedly try to jump on the local foods bandwagon, as paradoxical as it sounds.

“Some food companies are recognizing that sometimes when consumers say they want local, it doesn’t necessarily mean, ‘I’m going to walk to the local farmers’ market on Sunday morning and buy some asparagus,’” Cheatham says. “If you read between the lines, consumers just want a sense of place and want to know where their food is from. Vermont may not be local to me in Illinois, but if my maple syrup comes from Vermont, I feel a little better knowing that.”

In some cases, the biggest changes may simply be in the wording food manufacturers choose. “Companies will really try to push in their advertising that they are from next door, that their dairy farm is in the state you live in,” Goldstein says.

At the same time, Goldstein points out, a lot of the words companies will seek to use—like “local,” “green” and “natural”—have not yet been defined by the FDA, which regulates food labeling.

"They can massage the word 'local' in order to fit their end goal," Goldstein says. "That's what's happening in sustainability. Any company can just massage how they see sustainability."

Even so, he doesn't expect many consumers to be hoodwinked. "Buyers themselves are becoming smarter," he says.

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—SYLVIA ROWE

FOOD NEWS AT YOUR FINGERTIPS

"It is my sense that there is more consumer discussion and caring and more passion around this issue of knowing my food, knowing where it came from and knowing which foods are generally better for me," Cheatham says. "And I think this has less to do with the changing food environment and more to do with the changing technologies we use to communicate."

Smart phones that give near constant access to the Internet are making it easier than ever for consumers to find out the back story on everything they eat. Of the 100,000 or so applications available for smart phones, a good 7,000 of them are devoted to food. Goldstein is anticipating the release of the Augmenting Living mobile application, which will allow smart phone users to take a picture of a food's bar code and call up the location of the farm where it was raised or grown, as well as its nutritional value, pricing history and other data.

Already consumers are tuning into a young online food rating system called the Good Guide (goodguide.com), which rates foods on a scale of 1 to 10, based not only on their nutritional values, but on their environmental impact and even corporate social responsibility. Ingredients like high fructose corn syrup and FC&C Red No. 3 can knock down a score, while a company that treats its workers well gets higher marks. Perhaps most appealing to consumers is that a product's score can easily be compared to other products in the same category, which makes choosing a loaf of bread from the dozens of varieties on the store shelf a simple matter of 8.5 versus 3.7. Goldstein imagines this

kind of technology evolving to supermarket shelves. "It might even be a push of a button next to the item," he says.

In short, consumers want to know what's going on behind the scenes, and technology is obliging. "The USDA has a huge following on Twitter," Goldstein points out, adding that social media sites like Facebook are

particularly good for quickly getting out information about food safety scares.

They have also helped food and consumer advocates mobilize a following. For example, the Nestlé company was recently criticized for importing palm oil from suppliers accused of destroying the Indonesian rainforests. A group of individuals started a Facebook page against the practice and then went to Nestlé's Facebook page and cluttered it with information to inform the consumer. Nestlé soon changed suppliers.

"You have a couple people with an idea easily mobilizing huge numbers of loyal product buyers to make the company change its ways," Goldstein says. "It's such an easy way to reach out to a huge population and really make significant changes in how industry does business or who industry supports. And it's global. You might have people all around the world who buy the product; all you need is a couple million of them."

BIG BROTHER WEIGHS IN

Obesity in the United States now accounts for \$147 billion in direct medical costs each year, just over 9 percent of all health-care spending. "The secretary of health and human services was quoted as saying that curing obesity would save the health-care system 50 percent more dollars than curing cancer," Rowe says.

The obesity epidemic is the umbrella reason that government is getting more involved in regulating the U.S. food system. The leaders at the CDC and FDA, Rowe notes, all have public health backgrounds, most notably Tom Frieden, director of the Centers for Disease Control. As health commissioner in

New York City from 2002 to 2009, he required chain restaurants to post calorie information in an attempt to raise consumer awareness of fast food's caloric impact. A similar law was just enacted nationally as part of the health-care reform package.

Reducing sodium in foods is also on the government agenda. In April, the Institute of Medicine, a federal advisory panel, urged the FDA to regulate the amount of salt added to foods, emphasizing that high salt intakes can lead to high blood pressure and strokes. The American Heart Association recommends no more than 1,500 milligrams of sodium per day, but Americans average about 3,400 milligrams, and most of it comes from processed foods. Senators and congressional representatives have said they would put pressure on the FDA to take action.

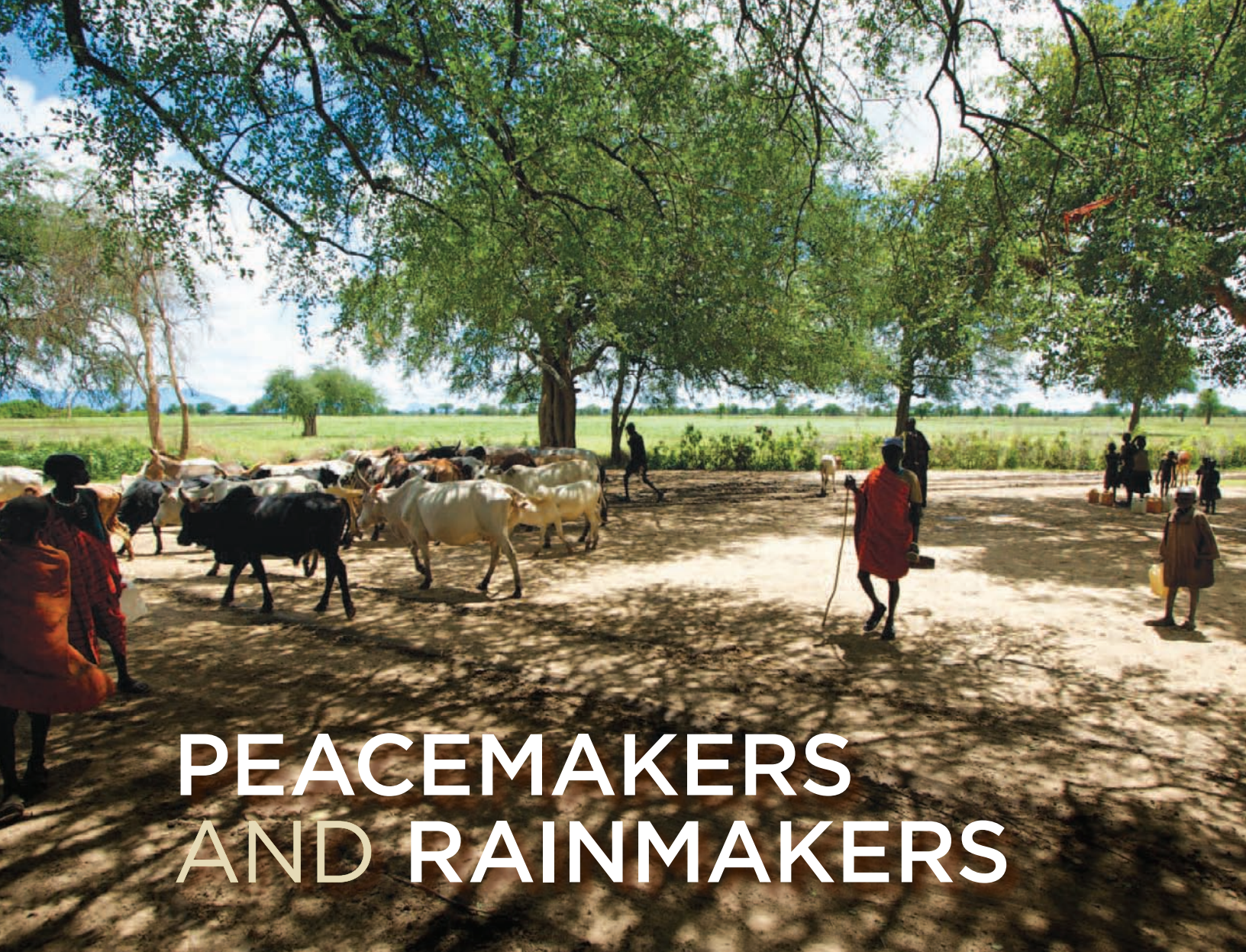
What makes this food trend different is that it is not being led by consumers—who like the taste of salt—but by thought leaders and legislators. Food companies have long seen the writing on the wall, and many, including ConAgra, Campbell Soup Company, Kraft, Unilever, Sara Lee, Kellogg's and General Mills, have made sodium reduction announcements.

"The food industry has shown that they have reduced sodium in food significantly," Goldstein says. "They think they are making strides. But the government doesn't feel it's happening fast enough."

In tightening the reins, the United States seems to be following the lead of Europe, where sodium is more closely controlled and dubious health claims have begun to be investigated. In March, the Food and Drug Administration sent 17 warning letters to food manufacturers, making good on a vow to crack down on misleading labels on food packages. Gorton's Fish Fillets, for example, was taken to task for boasting the product contained no trans fat, even though it has high levels of saturated fat.

Whether it's in Washington or around the dinner table, nutrition is a hot topic. And that's exciting for people who work in nutrition communication. "We've got the public's attention now," Rowe says. "Let's not waste it." **TN**

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PEACEMAKERS AND RAINMAKERS

How traditional seers became research allies in conflict-ridden eastern Africa

BY LESLIE MACMILLAN PHOTOGRAPHS BY KRISTOPHER CARLSON

FOR THOUSANDS OF YEARS, CATTLE HAVE BEEN THE LIFE-blood of the region known as the Karamoja in eastern Africa. For the migratory herdsmen who eke out a living in the remote drylands between Uganda, Kenya and southern Sudan, cattle represent wealth and status. They provide food in the form of meat and milk. But in recent decades, the herdsmen's way of life has come under threat, as conflict over scarce natural resources like grazing land and water has led to violent clashes, and a deadly cattle virus has spread like a plague over

the region, wiping out entire herds.

As part of a larger initiative to promote stability and eradicate animal disease in the region, researchers at the Tufts Feinstein International Center have been working with an unusual group—traditional seers. Seers have a special status in their communities because they are believed to possess powers that allow them to see into the future, which they divine through rituals such as reading animal entrails or decoding the messages in tossed stones.



Clockwise from left: a seer who uses stones to tell fortunes; sisal, an agave plant, is used to extract the source of pain; three youths in the Karamoja region of northwestern Uganda.

Preceding page: young boys are tasked with leading cattle and other livestock out to pasture during the day. In Karamoja, military-imposed curfews limit where and for how long cattle can graze.



“By better understanding the seers’ roles as war-makers, peacemakers, rain-makers and healers, we hope to learn more about how they can alleviate conflict in the region,” says Khristopher Carlson, a senior researcher at the Feinstein Center.

Working with so-called witch doctors occasionally raises eyebrows within academic circles, says Carlson. But whether the seers’ predictions are true or not is beside the point. “There are practical applications to the work we’re doing,” he says. “Seers have a lot of influence over migratory patterns of people and animals. The rains may or may not come, but the seers are telling their people this is the time to go from place X to place Y.” Using the seers’ predictions to track the movements of nomadic people has been useful, for example, in providing human and animal health care.

Carlson is collaborating with Feinstein senior researcher Darlington Akabwai, a veterinarian who has worked on livestock health and conflict resolution in Karamoja

for 27 years. Akabwai recognized the value of working with seers years ago when he first tried to vaccinate cattle against the deadly virus rinderpest. “I discovered that whenever I set out with the vaccination teams, the pastoralists would dodge us, saying that the seer [needed to] carry out his ritual first,” he writes in an email from Kenya. “So I changed tack. My new strategy was a simple one: I decided to befriend most of the influential seers.”

Akabwai found that giving the seer simple gifts, such as sturdy shoes made from tires and suitable for the rough terrain, helped pave the way. “I would shower him with tobacco for chewing, sugar and tea leaves and tire shoes for his herders in return for such freedom to access his huge [herd for vaccination],” he says.

Feinstein researchers estimate that Akabwai has saved tens of thousands of cattle through his dogged pursuit to vaccinate. In 1999, he was issued a certificate of appreciation by the Organization of

African Unity, the body that oversees the project in Karamoja.

In addition to preserving animal health, working with the seers has allowed the Feinstein team to get warring parties to sit down and talk. Conflict persists, but tribes including the Toposa in southern Sudan and the Turkana in Kenya have already engaged in early peace talks, and there is hope that more will follow. As Akabwai says, “The use of animal health as an entry point to broker peace among the warring pastoralists has improved access to contested grazing areas, and this in turn improved the nutritional status of livestock and food security for the owners.”

EARLY WARNING SYSTEM

Working with seers has gone extremely well, says Carlson, in part because the seers really do seem to be skilled prognosticators. “In many cases, their predictions have been accurate,” says Carlson, who notes the herders’ livelihood depends on finding



Clockwise from top left: a seer who tells the future through dreams; seers and elders; Darlington Akabwai and Khristopher Carlson (first and second from right) with other members of the Feinstein International Center research team; a healer uses sisal to treat pain.

good grazing land and predicting raids on their cattle. “Seers have this early warning system where they’re predicting raids, predicting clashes with enemy groups,” says Carlson, noting that such information has been useful in forestalling conflict and engaging parties in dialogue.

So how do the seers do what they do?

“I think you live a life that is very much in harmony with the environment around you,” Carlson says. “These people have been living on this land for centuries. They’re in tune with climate change, with weather patterns. So when it comes to predicting rainfall, there really is a sense. Maybe it’s a clairvoyant sense, or maybe it’s a more practical sense,” he says. “Sometimes our joints swell up when it’s humid, [so] maybe it’s going to rain today.”

Beyond that, he acknowledges, “There’s a lot to it that we simply don’t know.”

Eventually, the Tufts researchers hope to preserve the pastoralists’ way of life by engaging the governments of Uganda,

Sudan and Kenya in talks that will inform policy. Right now that way of life is threatened. For example, the government of Uganda, attempting to gain better control of the region, is forcing the population to disarm and settle. Researchers warn this will leave them vulnerable to incursions from armed herdsmen in Sudan and Kenya and would force them into subsistence farming, which isn’t sustainable given the degradation of the land.

Akabwai notes that other organizations are now following the Feinstein researchers’ lead. “Peace-building agencies are using lessons learned from our strategy to continue [negotiations among] the pastoralists, with the seers playing a central role.”

In 2009, Carlson, a documentary photographer, set out to chronicle the work of the seers. “We haven’t encountered any resistance for us to have access to some of these very intimate rituals that the seers are performing,” says Carlson, who adds that’s surprising, given that seers are often targets

of violence themselves because of the power they hold. “We do everything we can to make their safety a priority,” says Carlson, noting that his photos of the seers often show only hands, not faces.

With funding from the International Development Research Centre in Canada, the team collected data during two field visits to northern Uganda in 2009 and one to southern Sudan in 2008. The Feinstein International Center published a report, illustrated with Carlson’s photographs, at the end of last year. Carlson hopes his photos will illuminate a people who perform a service for their community that will only grow in value as the world continues to modernize.

The seers are “remarkable people,” he says. “There’s a particular wisdom about them. It stays with them, it *is* them, and it goes away with them.” **TN**

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**As the U.S. prepares to attack childhood obesity
from all sides, what have we got to lose?**

BY HELENE RAGOVIN PHOTOGRAPHS BY JOANIE TOBIN

the Battle for Healthy Children

On a rainy afternoon inside Boston's Oliver Wendell Holmes Elementary School, a small girl with a serious expression is engaged in a battle with a carrot.

Grasping the vegetable in one hand and a box grater in the other, she brings the two together, clumsily at first—after all, until a little while ago, she didn't even know what a box grater was. Now she has figured out how to steady the grater, and rubs the carrot intently across the grates, picking up speed and confidence, until, triumphant, she shows off a small, colorful mound of shreds.

The carrot, along with a cornucopia of other vegetables and some red beans, will be used to make "protein pitas." It's part of a project called Jumbo's Kitchen, in which Friedman School students run hands-on healthy cooking classes for Boston school kids.

The struggle between the girl and the carrot is emblematic of a larger battle to change the eating and activity habits of America's kids as the nation grapples with a decades-old epidemic of childhood obesity.

Now the White House has taken up the banner. In February, Michelle Obama launched the first

national effort to combat weight gain in kids, an obesity prevention campaign called Let's Move. It uses an approach called community-based intervention, in which schools, government, public health resources, youth services and other agencies, along with children and their families, are all called upon to help change unhealthy behaviors.

"About 10, 20 years ago, all [obesity prevention] efforts were aimed at the individual, with the thinking, 'If we can just get this kid to eat the right foods and do a lot of exercise, we'll be all set,'" says Virginia Chomitz, Ph.D., N85, N92, a senior scientist at the Institute for Community Health in Cambridge, Mass.

"As we've gotten wiser and started to look around at children, we realized they're just one cog in the wheel," Chomitz says. "If they live in an area where they can't walk to school, either because of safety or because it's too far; if they don't have an opportunity to be active; if there are no after-school programs or their school doesn't offer recess; if school lunches aren't very healthy; if parents are not providing good meals; if there are no grocery stores in the neighborhood—it's very hard for that child to do the right things."

In developing Let's Move, the first lady took several cues from a Friedman School project, the seven-year-old community intervention in Somerville, Mass., known as Shape Up Somerville that resulted in children gaining less weight than their peers in other cities. And dozens of other communities are doing similar things. Chomitz, for example, recently released the results of a three-year community-based healthy weight intervention called Healthy Living Cambridge Kids, which found modest reductions in obesity and improvements in fitness levels among that city's public school students.

But as encouraging as community anti-obesity programs have been, researchers caution that the childhood obesity crisis is far from being solved, and that millions of children still face serious health risks.

"The sweeping, contextual piece around this is that in this nation, childhood obesity rates are very high and have been skyrocketing for decades," says Chomitz. "Although it looks like [those rates are] starting to stabilize, nothing that has been done to date has been all that effective."

Last year, when Michelle Obama was looking for scientists to advise her on childhood nutrition, Christina Economos, Ph.D., N96, was an obvious choice. Economos, the holder of the New Balance Chair in Childhood Nutrition at the Friedman School, was the creator and force behind Shape Up Somerville, mobilizing restaurants to highlight healthy menu choices, schools to teach more about nutrition and the city to paint new crosswalks to encourage children to walk to school. Now Economos is helping adapt the Somerville model for programs across the country, in locations as varied as the Central Valley of California and the Mississippi Delta.

A vital component in the success of Shape Up Somerville, Economos says, is that it was designed with the specific needs of that community in mind. For instance, Somerville is a fairly compact and walkable city, yet it lacks green space—so while developing walk-to-school and bike-to-school programs was not difficult, it was more challenging to find ways to promote other outdoor activities. In a more rural area, where open spaces are abundant but schools are far apart, a walk-to-school program may be impractical.

The program was also devised to mesh

with the city's demographics. Materials distributed in the schools, for example, were presented in four languages: English, Spanish, Portuguese and Haitian Creole. "You want to be creating healthy alternatives while maintaining the cultural preferences in every community," Economos says.

Shape Up Somerville was also successful because it had staff and funding—something that can be difficult when municipal finances are tight, Economos says. "A lot of communities rely on volunteers, who can show up and have lots of great ideas, but to really transform a community and create the environment and policy changes that were realized in Somerville, it takes dedicated, paid staff. And when there are a lot of competing economic pressures, programs like this are often the first to go."

A federal initiative like Let's Move could give communities the tools to address some of these issues, she says. For instance, Let's Move intends to involve pediatricians throughout the country to reinforce anti-obesity messages at well-child visits. It could bolster efforts by the USDA to abolish "food

deserts"—areas that lack supermarkets and other places to purchase fresh foods—and to improve the school meals program. "It will be how national change occurs over the next few years," Economos says.

OVERWEIGHT BUT MALNOURISHED

Some recent data from the National Health and Nutrition Examination Survey indicates the childhood obesity rate may have plateaued. "It looks like things are sort of at a standstill," Economos says. "Nevertheless, there are still 32 percent of children between the ages of 2 and 18 who are overweight or obese. If you go to Somerville or the Mississippi Delta, you've got 45 to 50 percent of kids overweight or obese. There are real pockets where it's quite different, and it's related to poverty."

It's also possible for overweight children to suffer from nutritional deficiencies.

"Certainly there are a lot of kids who are overweight and eating too many calories who still have micronutrient issues," Economos says. "Vitamin D, iron, calcium, fiber—there are still a lot of foods they are not consuming,

WEIGHTY STATS



**5% to
12.4%**

**Increase in obesity
rates (a Body Mass Index
above the 95th percentile)
in children ages 2 to 5
between 1971 and 2006**

**4% to
17%**

**Rise in obesity
rates for kids ages
6 to 11 between
1971 and 2006**

**6.1% to
17.6%**

**Jump in obesity rates
among adolescents
ages 12 to 19 between
1971 and 2006**

despite the fact that their calorie intake is high. We all know you can eat 3,000 calories of white bread and sugar-sweetened beverages, probably gain some weight, but lack a lot of important micronutrients.”

A study published this past February in the *New England Journal of Medicine*, which tracked thousands of Native American children for several decades, found that the heaviest youngsters were more than twice as likely as the thinnest to die before age 55.

“The things associated with childhood overweight—risk of cardiovascular disease, sleep apnea, depression, Type 2 diabetes—all these things we’re seeing more of, and it can only get better if we reverse those obesity rates,” Economos says.

SCHOOL LUNCH REVAMP

A major goal of Let’s Move is to improve the nutritional quality of school lunches. Since many of the nation’s children, particularly those from low-income households, eat more than half of their daily calories at school, lawmakers, public health officials and even celebrity chefs have targeted school cafeterias in the fight against obesity.

“Here in Woonsocket, we potentially have control over the children for breakfast and lunch,” says Frances DeRuiter, N01, a registered dietitian and former chef who is food service manager in the economically depressed city along Rhode Island’s northern border. DeRuiter is northeast district dietitian for Sodexo School Services, which, along with the two other major suppliers of school lunches, Chartwells Schools Dining Services and Aramark, has signed onto the Let’s Move initiative.

The food service companies have pledged to include more fresh fruit and vegetables, whole grains and legumes in meals for the federal school lunch program. Separately, the Obama administration is proposing legislation that would ban candy and sugary drinks from schools throughout the country; at least 11 states have already passed laws either banning junk food or encouraging the sale of healthier foods at public schools.

Rhode Island is one of the states that has beefed up its nutritional requirements for school lunches and instituted restrictions on snacks and vending-machine food. The requirements for the type and quantity of

fruits, vegetables, whole grains and legumes included in Rhode Island school lunches now exceed federal standards.

Of course, the fickleness of young palates is also an important part of the equation. For example, DeRuiter talks about the attempts to introduce whole-grain bread in Woonsocket: “Our bakery has formulated a bread that’s 60 percent whole wheat and 40 percent white, and the children are really eating it. Before this, we had had a bread that was 70-30, and, honestly, the children were throwing the bread away. So this 60-40 is

The idea is to teach kids the joys of fruits, vegetables and whole grains—without heavy-handed messages.

lighter and a bit sweeter, and the children are accepting it,” she says.

She touts the success of the district’s new federally funded fresh fruit and vegetable program. At five elementary schools in Woonsocket’s low-income neighborhoods, the children get a mid-morning snack of an “unusual” fruit—think papayas, not bananas—or a fresh vegetable twice a week.

“That’s a wonderful way to make a difference in a child’s life, and it does translate into the community, into the home,” DeRuiter says. “The child goes home and says, ‘Oh mommy, I tasted a cantaloupe today—can you get one for us?’”

CHOP, STIR, EAT, LEARN

That “Hey, ma, look what I ate!” approach is exactly what drives Jumbo’s Kitchen, a partnership between Friedman School students; the Albert Schweitzer Fellowship, a non-profit that works to address health disparities by developing leaders in public service; and DotWell, a community-based organization that runs after-school programs at several Boston public schools.

Once a week for 10 weeks, the student volunteers arrive at an urban school on a Friday afternoon, carrying bags of mixing bowls, blenders, beans, carrots, cucumbers, lettuce—and even roasted garlic.

The idea is to teach kids the joys of fruits, vegetables and whole grains—without heavy-

handed messages. “What we’ve learned is that kids love fruits and vegetables and being able to chop them up, eat them and become familiar with them,” says Dawn Undurraga, N10, the program coordinator and a 2009–10 Schweitzer Fellow.

For the Jumbo’s Kitchen kids who are chopping and stirring in the teachers’ lounge at the Holmes School, the consequences of being overweight are all around them. Twenty-four percent of the adults in their primarily African-American North Dorchester neighborhood are obese, accord-

ing to 2005–06 data from the Boston Public Health Commission. Black residents of Boston have higher rates of overweight and obesity, and far higher hospitalization rates for heart disease and diabetes, than white or Asian Bostonians.

As a volunteer at Boston’s Martha Elliot Health Center, Undurraga works with teenagers who are already dealing with the consequences of weight-related ailments.

“We’re raising a whole generation of kids who have not had experiences in the kitchen and then are left to fast foods or whatever is easily accessible,” she says. “The point is to demystify the garlic press and the grater and the whisk and give the kids the feeling they know what these things are.”

Whether this newfound appreciation of fruits and vegetables will last for the long haul is unknown. But sometimes victories come in the short-term: earlier this semester, a child at another Jumbo’s Kitchen site, the Joseph Lee Elementary School, asked her mother to serve hummus and veggies at her birthday party.

Their efforts may not make a dent in the budgets of companies that make junk food, Undurraga says, “but maybe we’re getting a bit more vegetables in there.” **TN**

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Science, Supplements and Superfruits

How much do we really know about antioxidants?

BY JACQUELINE MITCHELL ILLUSTRATION BY FEDERICO JORDAN

WALK DOWN ANY AISLE IN THE GROCERY store and you're likely to see the word "antioxidant" emblazoned on the labels of multi-vitamins, juices, teas, energy bars, even cereal boxes. It's a nutritional buzz word that suggests a product is good for what ails you. Manufacturers claim that antioxidants, naturally occurring chemical compounds found in most plants, reduce the damage of aging and can prevent certain illnesses. But do they?

Antioxidants and their health benefits have been the subject of more than 200,000 scientific publications since the 1940s. Over that time, researchers have concluded that

antioxidants—including selenium, the vitamins C and E, carotenoids like beta-carotene, and the plant compounds known as flavonoids—indeed soak up the harmful free radical molecules our bodies produce and encounter over our lifetimes. It's less clear-cut, however, if they have any power to prevent or cure diseases like cancer, heart disease and dementia. While research in the laboratory and in animal studies has shown consistently that antioxidants do good work, long-term dietary intervention studies in humans have produced conflicting findings.

Take the case of vitamin E. In 1993, an observational study of more than 87,000 female nurses suggested that

vitamin E supplements could reduce the risk of heart disease by as much as 40 percent. Other observational studies provided similar evidence, but follow-up intervention studies have not been able to demonstrate the same benefit. One 2007 study, which followed women with cardiovascular disease or with a high-risk of getting it for nine years, found no benefit to taking vitamin E supplements.

The news has been disappointing for other antioxidant vitamins as well. A 2008 study that tracked almost 15,000 male physicians for a decade reported no differences in cancer or heart disease rates among those using vitamins E and C compared to those taking a placebo. The same year, a study of 35,000 men found that high doses of vitamin E and selenium did not lower the risk of prostate cancer.

When the results of long-term clinical trials look like this, is it time to give up on antioxidants?

"I say, '*au contraire*,'" says Professor Jeffrey B. Blumberg, Ph.D., director of the Antioxidants Research Laboratory at the Jean Mayer USDA Human Nutrition Research Center on Aging (HNRCA), who suspects it's the studies—not the antioxidants—that aren't working. Blumberg takes issue with large-scale clinical trials that never screen for the subjects' baseline levels of the nutrient in question. Maybe some people don't respond to vitamin E supplements because they already consume adequate levels of the nutrient. "It's like testing a hypertension drug without taking the baseline blood pressure," he says.

Researchers, Blumberg suggests, also need to establish better thresholds—or how much the body actually needs—for each antioxidant before running trials. For example, what if researchers compared the health outcomes in people taking 40 units of a vitamin to those of people taking 400 units and found no difference between the groups? "Well, what if the threshold is 39?" he asks. "I do believe in the power of nutrition, but we're not going to see it with this naïve approach."

Newer fields like nutrigenomics and metabolomics are one way scientists—and eventually consumers—may get their arms around the question of whether antioxidants make a difference. "We now know that [vitamin E] probably worked for some people and didn't for others. In a new age of personalized nutrition, we have capability to see how antioxidants affect individuals," says Blumberg.

But studies that pose the question "does vitamin E reduce the risk of cardiovascular disease?" are asking the wrong question, Blumberg argues. "The real question is, 'In what way does vitamin E *contribute* to reducing the risk of CVD?'" he says, noting that there are dynamic interactions among the thousands of antioxidants, the bulk of which remain untested. The thousands of flavonoids, for example, react not just with each other, but also with the hundreds of carotenoids, the multiple versions of vitamins B and E, as well as the environment and genetics of each individual. "There are so many variables," says

Blumberg. "We can't invent a new way of doing science, but we can ask more sophisticated questions."

For example, scientists recognize that when it comes to food, it seems the whole really may be greater than the sum of its parts. When James A. Joseph, Ph.D., a research physiologist in the HNRCA's neuroscience lab, broke blueberry juice down to its component micronutrients and tested the antioxidant potency of each compound on its own, none was as powerful as the whole juice.

"The moral of the story is eat the berries," says Joseph, who has gathered bushels of evidence that the antioxidant compounds in nuts and fruits can slow down the aging process in the brains of animals.

And eat a variety, too, says Blumberg. An all-blueberry diet devoid of leafy greens will provide you with more than enough of some kinds of phytochemicals but likely not enough of others. "They are all part of a complex defense network. You can't substitute them for one another," says Blumberg. "That's like having a 10-foot wall, but leaving the gate open and the bridge across the moat."

With that in mind, don't expect an occasional glass of acai or pomegranate juice, which are heavily marketed as antioxidant-rich "superfruits," will cover all the bases. The word "superfruit," so often splashed across juice labels and the covers of glossy magazines, is both meaningless and misleading, says Blumberg. With no scientific or regulatory definition, the term superfruit has become little more than a code word for "healthy," the use of which the FDA does regulate. "To my knowledge, no one is even trying to define it—it's too silly," says Blumberg.

Moreover, Blumberg worries that deeming certain fruits and vegetables—usually exotic, expensive ones—"superfruits," makes the more familiar apples and oranges seem like the Clark Kent of the produce section. The term "implies some fruits and vegetables are clearly much better than others. The science doesn't support that," says Blumberg. "What [we all] need to do is eat more fruit, period." Current guidelines recommend consuming two to four servings of fruit each day; most Americans barely get one. Blumberg is concerned that in an era when obesity is producing the first generation of children who are not as healthy as their parents, some people may believe a so-called superfruit can make up for the lack of fruits and vegetables in kids' diets. "Consumers are being misinformed. All fruits are good," he says. "The problem is we are not choosing them often enough."

With new technologies and faster computers, scientists should be able to unravel the complexities of antioxidants. Whatever they find, it's unlikely to conflict with that sage advice from mom: Eat your fruits and veggies. **TN**

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Presidential Search

Bacow to step down in 2011, after leading Tufts University for a decade

LAWRENCE S. BACOW, WHO HAS ADVANCED TUFTS UNIVERSITY'S leadership in teaching, research and public service, while championing access to higher education, announced at the February 5–6 meeting of the university's board of trustees that he would step down in June 2011.

Bacow took office as Tufts' twelfth president on September 1, 2001. From the aftershocks of 9/11 to the economic challenges of the recent recession, he has consistently led the university according to the fundamental principle that he outlined in his seminal essay "A University Poised"—that all decisions should be based on what would help Tufts "to attract, recruit and retain the very best students and the very best faculty."

In announcing his decision in a message to the university community, Bacow noted, "I have often said that 10 years is about the right term for a university president. It is long enough for one individual to have a substantial impact but not so long that the institution, or the president, becomes comfortable."

James A. Stern, E72, A07P, chair of the board of trustees, said, "Larry Bacow has been unwavering in his commitment to educational excellence, and Tufts has truly prospered under his watch. Time and again, people have put their faith in his vision for Tufts' future, and he has not let them down."

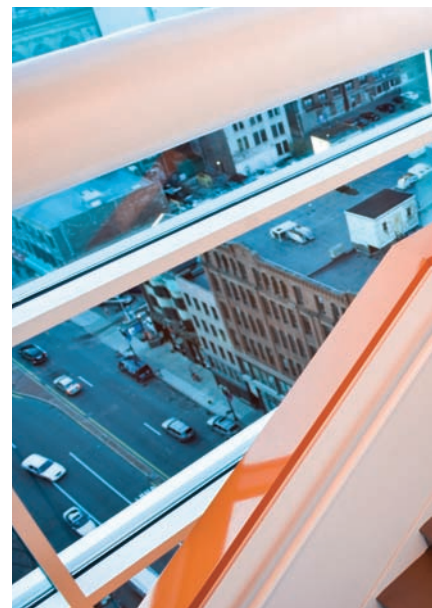
During Bacow's tenure, Tufts built on its historic strengths to enhance the undergraduate experience, deepen graduate and professional education and critical research, broaden international engagement and foster active citizenship throughout the university. At the same time, the student body became measurably stronger and more diverse.

Tufts also made significant financial progress, raising more than \$1 billion for its current \$1.2 billion Beyond Boundaries campaign. The university's endowment grew by nearly 86 percent from 2002 through December 2009, to \$1.26 billion. Bacow established an office to manage university investments.

Bacow has been nationally recognized as an advocate for increasing access to higher education. As other institutions began expanding merit aid to gain an edge in competing for the most talented students, Tufts never wavered in its commitment to need-based financial aid for undergraduates. "It is far from



Lawrence S. Bacow



clear to me how society is better off when scarce financial aid resources are diverted from the neediest students to those who are not needy by any measure, simply to redistribute high-scoring students among our institutions,” Bacow told the Secretary of Education’s Commission on the Future of Higher Education in 2006.

Since 2001, Tufts has increased financial aid for undergraduate, graduate and professional students by almost 94 percent. In 2007, the university replaced loans with grants for undergraduates whose family income was below \$40,000 a year. The following year, Tufts launched the first university-wide program in America to ease the debt of graduates pursuing careers in public service and the not-for-profit sector. The university has maintained its commitment to these programs despite the financial downturn.

The university has also strengthened its relationship with its principal teaching hospital, Tufts Medical Center. Under Bacow’s leadership and in collaboration with hospital CEO Ellen Zane, a strong partnership was formed that brought the hospital and Tufts School of Medicine closer together.

Bacow is known for his transparency and accessibility. The annual President’s Marathon Challenge he established in 2003 brings members of the Tufts community together to run and volunteer at the Boston Marathon. He has completed five marathons, including four in Boston, where he

has led the challenge team. The marathon challenge has raised \$2.4 million through direct fundraising by Tufts runners, and has also garnered two \$5 million gifts in support of nutrition and medical research and education. The annual race has also provided countless opportunities for students, faculty and staff to talk informally with the president during early morning training runs. Bacow regularly serves as an adviser to first- and second-year undergraduates, and initiated Senior Dinners where all graduating seniors are invited to his home on campus. Graduating students’ chants of “Larry, Larry” have become a tradition at annual Commencement ceremonies.

“It has been a great privilege to lead Tufts for these past nine years, and I look forward to working with the board to ensure a smooth and successful transition to the next president,” Bacow said. “There will be plenty of time over the next months to reflect upon the past and say goodbyes. For now, I am focused on the future, on completing the Beyond Boundaries campaign and on working with each of you in the months ahead to make Tufts an even better place.”

A presidential search committee, headed by Peter Dolan, A78, A08P, vice chair of the board of trustees, was named in late February. The committee is working with

the executive search firm Isaacson Miller, which led the search that culminated in the selection of Bacow in 2001. “There will be opportunities for the Tufts community to meet with the committee and provide comments on the university’s future directions and the leadership qualities most important for our next president,” said Stern, the trustee chair.

In addition to Dolan, the managing director of PRDolan LLC and former chairman and CEO of Bristol-Myers Squibb, members of the search committee are:

- Julian Agyeman, professor and chair of urban and environmental policy and planning, School of Arts and Sciences
- Carla E. Brodley, professor of computer science, School of Engineering
- Barbara E. Clarke, J88, president-elect, Tufts University Alumni Association, and national director of the National Alliance for Grieving Children
- Sarah F. Habib, A11, a junior majoring in American studies
- Bernard Harleston, H98, a trustee emeritus; president emeritus, City College of New York; and a former faculty member and dean of the faculty of Arts and Sciences at Tufts
- Philip G. Haydon, the Annetta and Gustav Grisard Professor and chair of neuroscience, School of Medicine
- Deborah R. Jospin, J80, a university trustee; partner and co-founder of sagawa/jospin and former director of AmeriCorps
- Deborah T. Kochevar, dean, Cummings School of Veterinary Medicine
- Brian K. Lee, A08P, A11P, vice president for University Advancement
- Kathleen A. McCartney, J77, university trustee and dean of the Graduate School of Education, Harvard University
- Neal B. Shapiro, A80, university trustee and president and CEO, WNET.ORG
- Alfred I. Tauber, A69, M73, a university trustee; the Zoltan Kohn Professor of Medicine, Boston University School of Medicine, and professor of philosophy, College of Arts and Sciences, Boston University



Left: President Bacow with Dean Lonnie H. Norris in an open stairway of the newly expanded dental school building. Above: A presidential hug for Anjali Nirmalan, A09, G10, winner of the 2009 Wendell Phillips Award, given to an undergraduate for public speaking and civic responsibility.

➔ For updates on the presidential search: <http://presidentsearch.tufts.edu>.



Christian Peters looks at the connection between farming and nutrition.

Local Potential

Christian Peters maps the flow of foods to cities by Julie Flaherty

LOCAVORES SAY BUYING FOOD CLOSER TO THE SOURCE MEANS more nutritious products that are better for the environment than stuff that's been trucked in over miles and miles. But even if we gave up bananas and pineapples and strove to eat within a 100-mile radius, would there be enough food for everyone? Can all food be local?

In New York State, at least, the answer is no. That is where Assistant Professor Christian Peters, Ph.D., has studied the potential of local food systems by mapping “foodsheds.” Much like its cousin the watershed, a foodshed is a tool for understanding the flow of food in a food system. Peters collected data on the location of New York’s available farmland and its productivity; the location of population centers and the number of people living in or near them; and the land needed to feed people an adequate diet.

He found that it would take all of the state’s agricultural resources to meet just half of the total food needs of New York City alone. But there was good news for locavores, too. Cities like Albany, Buffalo, Syracuse and Rochester could meet nearly all of their food needs surprisingly close to home.

“That’s valuable information to help frame the debate” about local foods,

Peters says. “If you can’t produce everything, what should you choose to produce?”

Peters, a new faculty member in the Friedman School’s Agriculture, Food and Environment Program, hopes his mapping method will help in the search for sustainable agriculture strategies in the face of growing food needs and diminishing resources.

For a study published in 2007, for example, he looked at 42 different diets to determine which offered the most efficient use of farmland in New York State. The diet that fed the most people (about a third of the population) was a low-fat vegetarian diet. But interestingly, when he looked at diets with higher amounts of fat—such as a vegetarian diet with plenty of oils and a diet with small amounts of meat—the omnivore diet was more efficient. Why? Because oil-producing crops like corn and soybean require high-quality acreage, while cows, sheep and goats can be raised on lower-grade hay and pasture lands, which might not otherwise be put to use.

That’s useful to know, even if Americans aren’t ready to radically change their diets.

NOVEMBER 5–6

Friedman Symposium

The fifth annual Friedman School Symposium, which will take place on November 5–6, will tackle the subject of “Nutrition Security: Challenges & Advances.” The conference, to be held at the Friedman School, will precede the American Dietetic Association’s annual meeting, also in Boston.

Confirmed speakers include Deputy Secretary of Agriculture Kathleen Merrigan, representatives from UNICEF and the World Bank and other leaders in agriculture policy, sustainable agriculture and nutrition in the developing world.

A special track of lectures focusing on U.S. issues will be offered on November 6. Obesity, food safety and marketing to children are among the scheduled lecture topics.

Visit www.friedmansymposium.com to learn more.



THE 2010 GERSHOFF SYMPOSIUM explored what drives us to eat the way we do. The panelists were, above, Gene-Jack Wang, M.D., of Brookhaven National Laboratory and Susan Roberts, Ph.D., of the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts and, left, Marcia Pelchat, Ph.D., of the Monell Chemical Senses Center and Richard Daynard, J.D., Ph.D., of Northeastern University.

PEOPLE & PLACES

Professor **Jeffrey Blumberg**, Ph.D., has been elected a fellow of the American Society for Nutrition.

Associate Professor **Christina Economos**, Ph.D., N96, holder of the New Balance Chair in Childhood Nutrition, will take over as director of the Nutrition Communication Program on July 1. The program was created in 1995 by founding director **Jeanne Goldberg**, Ph.D., G59, N86, J92P, in recognition of the need for communications professionals who are able to interpret research studies and communicate that information in ways the public can understand. To date, more than 80 students have graduated from the program

Associate Professor **Joel Mason**, M.D., is the recipient of the 2010 Mary Swartz Rose Senior Investigator Award from the American Society for Nutrition. He received the award at Experimental Biology 2010 in April.

Assistant Professor **Nicola McKeown**, Ph.D., is the new director of the Friedman School’s Nutritional Epidemiology Program. McKeown is a scientist with the Nutritional Epidemiology Program at the Jean Mayer USDA Human Nutrition Research Center on Aging and is active on the national and international level as a member of several editorial boards and working groups.

Professor **Allen Taylor**, Ph.D., was elected vice president of the International Society for Eye Research. The society was founded in 1968 to support eye and vision research, and members include vision research scientists from more than 34 countries.

The John Hancock Center for Physical Activity and Nutrition at Tufts University has changed its name to the **John Hancock Research Center on Physical Activity, Nutrition and Obesity Prevention (JHRC)** to reflect the center’s increasing engagement in research and policy focused on obesity prevention. Learn more about the JHRC at the center’s new website: jhrc.nutrition.tufts.edu.



The Power of an Internship

In working with malnourished children, Hanqi Luo, N10, finds her calling by Lauren Katims

IN ETHIOPIA, MALNUTRITION CAUSES MORE than half of all deaths of children under the age of 5. Hanqi Luo, N10, spent five months in Africa's second most populated country, helping UNICEF provide emergency nutrition to malnourished children. Luo says she was horrified to see children suffering with nutritional edema, swelling caused by an insufficient intake of protein. It is but one symptom of severe acute

malnutrition, a life-threatening condition that requires immediate treatment.

Trying to help these children was overwhelming at first, Luo admits. But with the support of a mentor, she was able to focus on the job she had gone to Ethiopia to do: supervise health workers who were conducting therapeutic feeding programs in rural areas and facilitating master training on treating severe acute malnutrition.

"In these five months, happiness came with the achievements, as well as sadness, when I realized I could not give the people any further help," she wrote. "Throughout the whole experience, I compared what I have seen in the field with what I have learned in class. This valuable internship opportunity made me more confident in my choice to pursue a career in humanitarian assistance."

Luo, who is from Beijing, did the internship in Ethiopia as a graduation requirement for her M.S. in food policy and applied nutrition from the Friedman School.

Her internship—and the experience she gained—was made possible by donors like the Robert and Margaret Patricelli Family Foundation, which has made a two-year commitment to support internships for Friedman School students.

"I was an internship recipient myself, so I know the difference a paid internship can make between taking a non-relevant job working for free and going into further professional school debt, and being treated as a true team member in a study or program that directly impacts people's lives," says Margaret Patricelli. "My husband, Bob, and I are grateful to have this opportunity to support projects that stabilize or enhance the nutrition and health of populations at risk."

Since returning from Ethiopia, Luo has landed an interview for a nutritionist position with an international agency dedicated to fighting malnutrition.

"Without this internship experience, I wouldn't have discovered the confidence in myself to be able to handle these types of situations in the field," she says. "It changed my life."

TUFTS RECEIVES 4-STAR CHARITY RATING

For the eighth year in a row, Tufts University has received a coveted four-star rating from Charity Navigator, America's largest independent evaluator of charities. The "highly rated" ranking is a reflection of the university's ability to effectively manage and grow its finances.

Only 1 percent of the nation's charities have achieved such a long record of four-star ratings, "indicating that Tufts University consistently executes its mission in a

fiscally responsible way, and outperforms most other charities in America," wrote Ken Berger, president and CEO of Charity Navigator, in a letter to Tufts President Lawrence S. Bacow.

Each year Charity Navigator highlights the work of efficient charities, providing donors with information that gives them greater confidence in their philanthropic choices. To see Tufts' rating, visit go.tufts.edu/charity.

Alumni Association 2.0



WHEREVER YOU ARE IN THE WORLD, THE FRIEDMAN School Alumni Association is always eager to connect with you. We strive to develop and maintain an active community of engaged alumni, and we are using a host of technologies to stay in touch.

Do you use social media? Search “Friedman Alumni Association” on LinkedIn and Facebook to join our online community. You can even become a fan of the Friedman School on our Facebook Fan Page. If you tweet, Tufts Alumni has a Twitter account with university-wide updates, and for you media mavens, there is a Tufts Alumni YouTube channel.

Our school alumni pages (www.nutrition.tufts.edu/alumni) are a great resource for all things Friedman. We have a newly updated “giving and its impact” section where you can read about the inspiring students being supported by your annual fund gifts and learn why your fellow alumni give back.

The Tufts Online Community also received a facelift (www.tuftsalumni.org), making it easier to update your address, find job information and seek out fellow Friedman alumni. And the online alumni directory is currently being merged with the Alumni Career Network, making it seamless to catch up with

friends and search out career information from other Tufts alumni.

The virtual world is a great way to stay informed, but we really want you to connect in person! Last year we held receptions in Boston, San Francisco, Los Angeles, Washington, D.C., Denver, Anaheim, Bangkok and Dubai. We hold career panels, networking nights and have officially launched our first alumni chapter in Washington, D.C. Join us for the Friedman School Symposium and the school’s 30th anniversary kick-off celebration during the American Dietetics Association conference in Boston this November. Whether online or in person, we hope to hear from you.

SAI KRUPA DAS, PH.D., N02
PRESIDENT, FRIEDMAN SCHOOL
ALUMNI ASSOCIATION

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You Are What You ‘Tweat’

WHAT’S THE PERFECT END to a healthy meal? A non-fat latte? Tea with almond milk? For Stephanie Clarke, N05, and Willow Jarosh, N05, owners of C&J Nutrition, no repast is complete without a Twitter digestif.

Twitter is a service that allows users to broadcast short bursts of text to the mobile devices of their friends and followers. About a year ago, the registered dietitians saw that “tweeting” what they eat—meal-by-meal—could be a useful service for their private clients, who are often stumped when coming up with nutritious meal ideas.

“They were always saying, ‘I don’t know what to eat for a snack, or for breakfast,’” Clarke says.

And so, voyeurs get an update when Jarosh digs into a lunch of “smoked her-ring on Ryvita oat/pumpkin seed crackers w tomato and red onion; baby carrots with roasted red pepper hummus.” Dinner comprises “wheat berries tossed with TJ’s goat cheese gouda, tomato, olives, white beans, canned salmon.”

“Our meals aren’t always super gourmet or things that take a lot of time to prepare,” Clarke points out. Since the two women are often flying between their office in New York City and meetings with corporate clients in Washington, D.C., and Los Angeles, no-cook meals and on-the-go snacks are frequent. And the snack might be as simple as ants on a log (celery with peanut butter and raisins), which Jarosh writes is “a grade school fav that I still love.”

They also document how they handle dinners out with friends (sharing a dish is typical) and parties (desserts are usually described in “bites,” as in “1 bite each: creme brulee and molten choco cake”).

A scan of their tweets reveals that not all nutritionists eat alike. Clarke seems to like a sweet breakfast (“Mixed nut butter on TJs ww Tuscan pane bread w/ sliced banana & cinnamon”) while Jarosh tends toward savory (“Dr. Praeger veggie burger topped with sauteed mushrooms, gouda cheese, and an egg”).

It’s not just their clients who are curious to know how the professionals eat. They now have 770 followers on Twitter.

Clarke and Jarosh met at the Friedman School, where they were both combining the dietetic internship at the Frances Stern Nutrition Center with the Nutrition Communication program.

They both worked in the Energy Metabolism Laboratory at the Jean Mayer USDA Human Nutrition Research Center on Aging, and spent a summer interning at magazines in Manhattan, albeit for different publications.

They started C&J Nutrition four years ago, and in between their tweets, they have a thriving business counseling private clients, writing freelance nutrition articles,

designing workplace wellness programs and consulting with food companies like Bumble Bee Foods and Bob Greene’s Best Life program.

They claim that they’ve never intentionally left out a meal from their tweets that would reflect poorly on their nutrition credentials. “We usually will put in if we mess up on something,” says Clarke, alluding to a certain carrot cake cupcake. Such sins are usually (and quite publicly) atoned for with extra servings of vegetables later on. They say it’s important to show people they can recover from missteps.

“There was the time that I was eating peanut butter out of the jar,” Jarosh says, confirming there is no healthier-than-thou attitude here. “Sometimes that happens.”

Stephanie Clarke and Willow Jarosh show their “followers” how to eat like a dietitian.





1



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(1) Julie Thayer, N07, MPH07, Karey Kenst and Sally Abbott, J01, N06 (2) Friedman School Overseer Ed Cooney, who gave the keynote address, Professor Parke Wilde and Leah Horowitz's father, David



3



4



5

(3) Andrew Shao
(4) Elanor Starmer, N07, F07, Christine Lee, N07, MPH07, Kumar Chandran, N07, MPH07, and Barrett Colombo
(5) Daniel Hoffman

Alumni Brunch

This year's Alumni Association Awards were presented at the reunion brunch in April. Daniel Hoffman, Ph.D., N00, an associate professor at Rutgers University, accepted the Expertise/Innovation Award. The Leadership Award went to Andrew Shao, Ph.D., N00, senior vice president of scientific and regulatory affairs for the Council for Responsible Nutrition. Warm words from faculty and friends accompanied the presentation of the inaugural Leah Horowitz Humanitarian Award, named for a 2006 graduate and international aid worker who died in a car accident in Ghana last year. Courtney Anderson, N09, MPH09, a monitoring and evaluation consultant with World Vision, accepted the award via video from Cambodia, as several members of Horowitz's family looked on.

SAVE THE DATE Join us as we kick off a year of celebrations for the 30th anniversary of the Friedman School with a Dean's Medal Ceremony honoring Johanna Dwyer, D.Sc., and Jeanne P. Goldberg, Ph.D. A reception and dinner will be held on Saturday, November 6, on Tufts' Boston campus. Check out alumni.nutrition.tufts.edu for more information or contact Cindy Briggs Tobin, director of development and alumni relations, at 617.636.0962 or cindy.briggs@tufts.edu.

G69 Carole Palmer organized and moderated an Alumni Association career panel titled "Networking 101: The Why, How and When Guide." The alumni panelists were: **Jennifer Bourbeau, N06**, director of communications for the New England Dairy and Food Council; **Michael DeAngelis, N00, MPH00**, vice president/nutrition director for Porter Novelli's Food, Beverage and Nutrition Practice; and **Helene Fuchs, G75**, principal of HF Associates. The career panel is available online at alumni.nutrition.tufts.edu.

G75 Helene Fuchs, see G69.

N82 Mary Farkas writes: "Hello Tufts Beautiful Souls, I am writing, happily, peacefully, with my heart and soul at: <http://eldermuse.net>. Come and read a Woman's Voice for Love & Reason as I write about A Call for Reason Regarding Our Food, etc."

Liz Cochary Gross, N88, a Friedman School overseer, founding president of the Friedman Alumni Association and the school's vice chair for Beyond Boundaries, the university's fundraising campaign, received a Distinguished Service Award from the Tufts University Alumni Association on April 10. She was recognized for being a champion and advocate of the Friedman School since her graduation from the first class in 1982. The award is the highest honor bestowed by the alumni association.

N85 Virginia Chomitz, N92, had an article on the collaborative Healthy Living Cambridge Kids weight promotion work published in a special supplement to the journal *Obesity*. In February, she gave

a presentation on "Physical Activity among Middle School Students in Somerville, Mass.: Trends Over Time and in Relation to a Comparison Community" at the Active Living Research Conference in San Diego.

N96 Chris Economos received a 2009 Innovators in Health Award from the New England Healthcare Institute. The award recognizes pioneers whose efforts reflect NEHI's own spirit of innovation and collaboration and whose work advances NEHI's mission to improve the quality of health care for patients and their families.

N97 Diane McKay, G89, N00, was quoted on ChicagoTribune.com as

she explained the significance of the Oxygen Radical Absorbance Capacity (ORAC) scale, which is commonly used to measure the antioxidant power of foods.

Amy Myrdal Miller assumes the role of chair of the Food & Culinary Professionals practice group of the American Dietetic Association on June 1. She will work with an executive committee of volunteer leaders to oversee communication, education and outreach efforts to the 2,300 members of this growing group of food, culinary and nutrition influencers. Members include culinary educators, cookbook authors, supermarket dietitians, public relations professionals and many fun-loving "foodie" R.D.s who work in a variety of clinical and food service settings.

For more information on Food & Culinary Professionals, visit www.foodculinaryprofs.org.

N00 Michael DeAngelis, see G69.

Daniel Hoffman, an associate professor at Rutgers University, received the Expertise/Innovation Award at the 2010 All-Alumni Reunion. His research seeks to improve the understanding of biological and environmental factors that promote obesity and chronic diseases.

Andrew Shao was promoted to senior vice president of scientific and regulatory affairs at the Council for Responsible Nutrition. He also received the Leadership Award at the 2010 All-Alumni Reunion.

N02 Sai Krupa Das was a visiting lecturer in the Department of Nutrition and Dietetics at Universiti Kebangsaan Malaysia (National University of Malaysia). During her weeklong visit in January, Das shared her expertise on calorie restriction and aging and gave recommendations for designing and conducting a calorie restriction study in Malaysia. In addition, she conducted workshops on body composition assessment and scientific manuscript writing. She also worked with faculty and postgraduate students to evaluate their research and determine possibilities for collaboration.

Katie Martin has joined the faculty of the Department of Allied Health Sciences at the University of Connecticut as an assistant professor in residence. She received a K12 Scholar Award through UConn (similar to an NIH K award). Through the grant she will work with three organizations in Hartford, Conn., to build a model food pantry that will address long-term food security and build self-sufficiency, with the goal of serving as a national model.

N04 Diana Redwood, MPH04, received a five-year Centers for Disease Control grant to increase colorectal cancer screening in the Alaska tribal health system. She lives in Anchorage.

N05 Anna Herforth completed her Ph.D. in international nutrition at Cornell University and will graduate in May. She has started a new position as a nutrition specialist at the World Bank in Washington, D.C. Her work involves linking nutrition, agriculture and the environment.

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to hear from you!

Have a new job? Is your family growing? Are you getting together with classmates? Keep fellow graduates up to date by sharing your news at alumni.nutrition.tufts.edu.

Kelly Horton, a Health and Aging Policy Fellow, has accepted an offer to spend her fellowship in the U.S. Department of Agriculture Food and Nutrition Service's (FNS) Office of Strategic Initiatives, Partnerships and Outreach. During the next year, Horton will focus on FNS policy initiatives for the administration.

Shauna Sadowski and **Jessica Cohen, N08, MPH08**, organized an Alumni Association career panel titled "Focus on Sustainability." The panelists were **Alicia Harvie, A06, N09**, program manager for Farm Aid, and **Charlotte Vallaeys, N07**, a farm and food policy analyst with the Cornucopia Institute. **Melissa Bailey, V02**, a doctoral student in the Agriculture, Food and Environment Program, moderated the event. The panel is available online at alumni.nutrition.tufts.edu.

N06 Jennifer Bourbeau, see G69.

Laura Irizarry Figueroa has accepted a position with

UNICEF working as a nutrition consultant for the Americas and Caribbean region.

Jeanene (Cawley) Fogli co-authored a paper titled "The Economic Burden of Diabetes." The research found that in 2007, the national economic burden of diabetes and pre-diabetes was a staggering \$218 billion, including \$153 billion in medical costs and \$65 billion in reduced productivity.

Kerri Hawkins, a registered dietitian at the Tufts Medical Center's Weight and Wellness Center, received the Young Dietitian of the Year award from the Massachusetts Dietetic Association in recognition of her leadership and concern for the promotion of optimal health and nutritional status of the population.

N07 Sarah Borron has relocated to Arlington, Va., where she is a researcher focusing on agricultural policy with Food and Water Watch.

Lindsay Rayfield ElShazly and her husband, Tarek,

welcomed their first child, Connor Ingham ElShazly, at the end of March.

Christine H. Lee is a consumer safety officer with the Food and Drug Administration's New England District Office.

Charlotte Vallaeys, see N05.

N08 Rachel Cheatham has been promoted to vice president of nutrition communications at Weber Shandwick, a global public relations firm with a food/nutrition practice based in Chicago.

Jessica Cohen, see N05.

Emily Guertin will finish her dietetic internship at Massachusetts General Hospital in May 2010.

Mary Kate Keyes is a dietitian at Sensible Nutrition and Wellness Workdays. She also is the owner of Healthful Eating Boston (<http://www.myhealthfuleating.com>).

Michelle Markesteyn Ratcliffe joined the Oregon Department of Agriculture as the farm to school coordinator in January 2010.

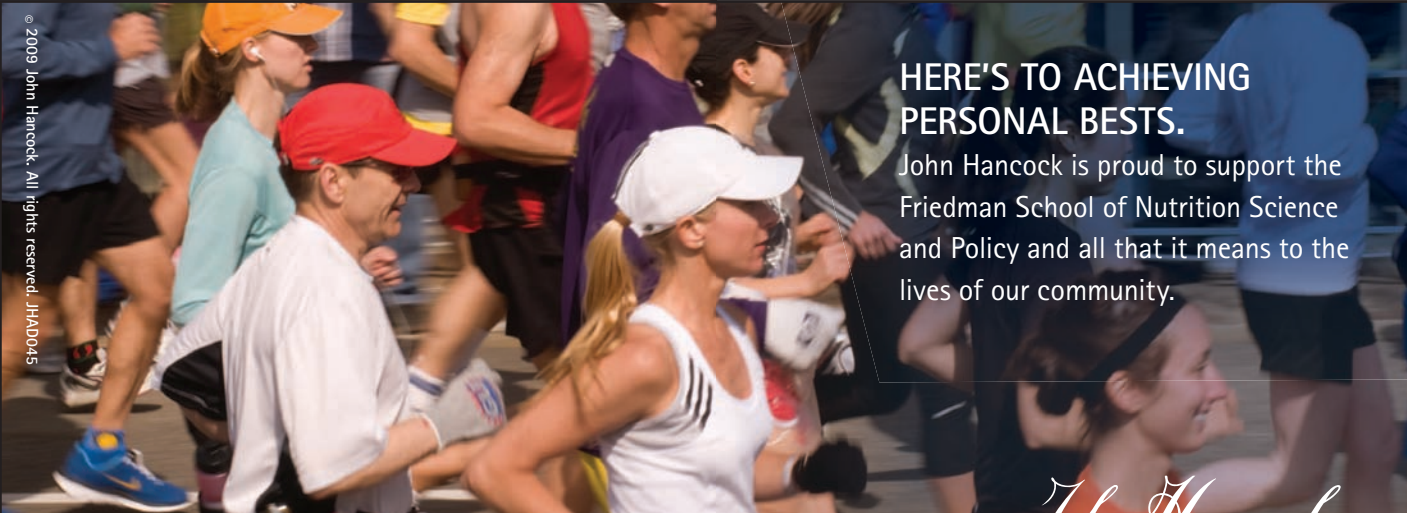
N09 Courtney Anderson, MPH09, was the inaugural recipient of the Leah Horowitz Humanitarian Award during the 2010 All-Alumni Reunion. She is a monitoring and evaluation consultant for the Health and Nutrition Program with World Vision in Cambodia.

Sonya Elder is the director of food service for the Brookline (Mass.) Public Schools.

Alicia Harvie, see N05.

Ssenkaali Mulondo, F09, was a project coordinator for the Medical Emergency Relief International program in northeastern Kenya.

N10 Betsy Rakocy published a policy brief with Timothy Wise, director of the Research and Policy Program at Tufts' Global Development and Environment Institute, titled "Hogging the Gains from Trade: The Real Winners from U.S. Trade and Agricultural Policies." The brief summarizes the ways in which multinational livestock firms have benefited from trade and agricultural policies.



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Woman with a Plan

Why was Molly McCullagh lurking behind the trees on Tufts' Medford/Somerville campus? To make a sweet point. Throughout the late winter, she worked with the organization Groundwork Somerville to collect sap from the university's stately sugar maples to be boiled down into syrup at a community gathering. The neighbors got a tasty complement to their waffles, and a taste of urban agriculture.

The connection between cities and food hasn't always gotten the attention it deserves, says McCullagh, who is pursuing dual degrees in urban and environmental policy and planning at the Graduate School of Arts and Sciences and in nutrition at the Friedman School's Agriculture, Food and Environment Program. It comes into play when supermarket locations and transportation options affect people's access to groceries, when farmland is threatened by urban sprawl, and when developed areas revert to agricultural uses. McCullagh, who grew up in Michigan, has a particular interest in declining rust-belt

cities such as Detroit and Pittsburgh that have seen their populations shrink and available land grow.

"They need to re-imagine what they are going to do with their now-vacant space," says McCullagh, who has worked to ensure some of it has been turned into gardens.

When McCullagh was looking at graduate schools a few years ago, Tufts was the only one with a developed dual-degree program in the field. But more schools are following suit, and the popularity of such programs is growing. She and Marisol Pierce-Quinonez are currently the only students enrolled, but 12 more have applied for admission this fall.

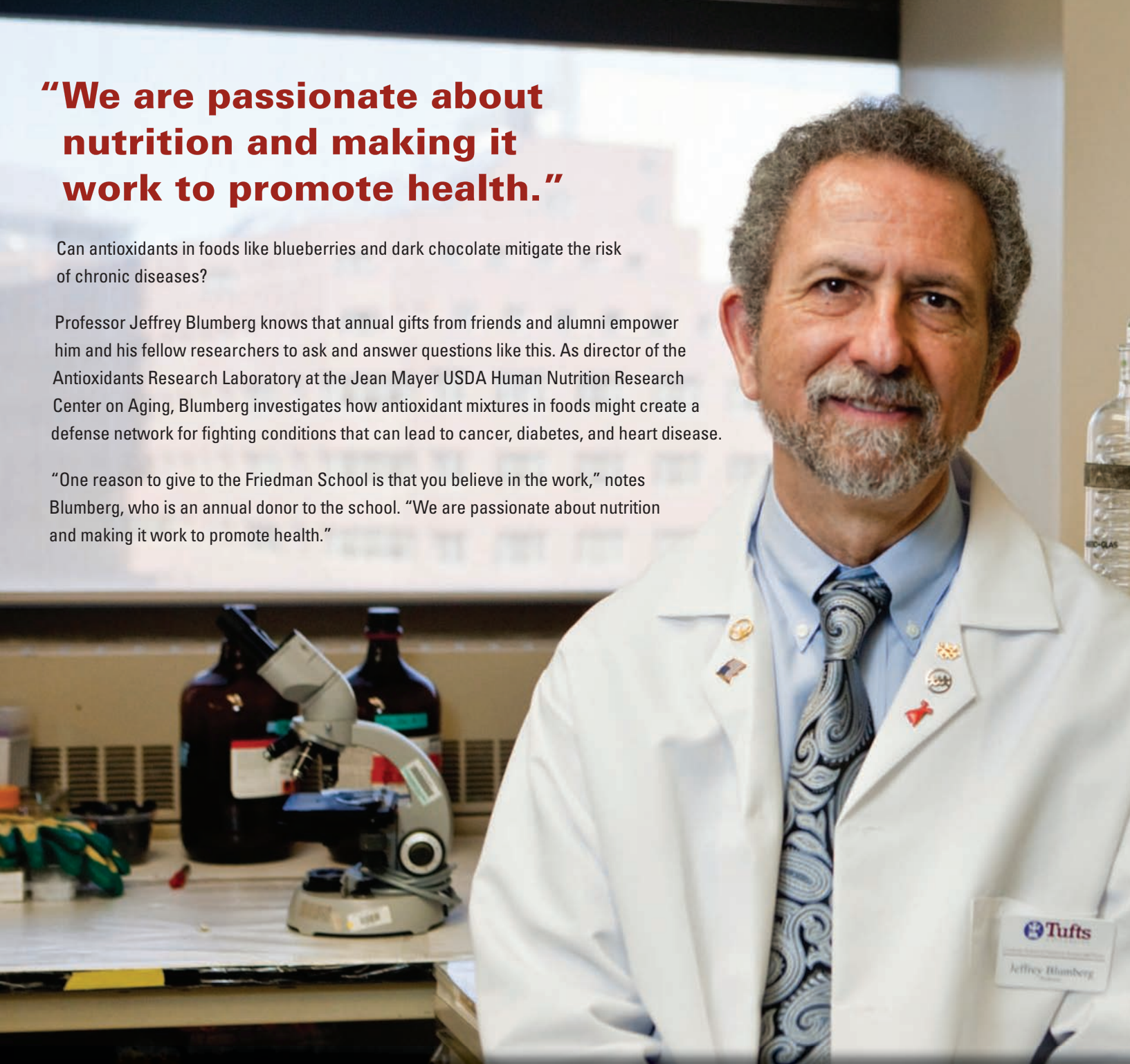
This year, McCullagh and Pierce-Quinonez started a student organization, the Tufts Food Systems Planning Coalition, with the goal of bringing together students throughout the university who are interested in "the role of planning in bringing healthy food to all communities." Now that's a plan we can get behind.

“We are passionate about nutrition and making it work to promote health.”

Can antioxidants in foods like blueberries and dark chocolate mitigate the risk of chronic diseases?

Professor Jeffrey Blumberg knows that annual gifts from friends and alumni empower him and his fellow researchers to ask and answer questions like this. As director of the Antioxidants Research Laboratory at the Jean Mayer USDA Human Nutrition Research Center on Aging, Blumberg investigates how antioxidant mixtures in foods might create a defense network for fighting conditions that can lead to cancer, diabetes, and heart disease.

“One reason to give to the Friedman School is that you believe in the work,” notes Blumberg, who is an annual donor to the school. “We are passionate about nutrition and making it work to promote health.”



Join Dr. Jeffrey Blumberg and thousands of others

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LISTENING TO HAITI

Of all the graffiti Patrick Webb saw sprayed on Port-au-Prince's walls in the weeks after the earthquake, he was most struck by this one, which translates to, "Down with thieving NGOs." Webb, the school's academic dean, was called to Haiti by the U.N. to help rebuild the country's nutrition sector, but was very aware of the public's suspicion of the many non-governmental organizations that have flocked to the island nation. For more on the story, turn to page 8.