

HN

DEPARTMENT OF HUMAN NUTRITION

2008 NEWSLETTER

Study Abroad Experience
Allows Human Nutrition
Student to Influence
Public Health in Kenya
see page 5

*Also inside: K-State Research
and Extension reaches out to
teach healthy food habits*

*Kelly Marshall,
senior in nutrition
and exercise
sciences, wearing
keepsakes from
her trip to Kenya*





Denis M. Medeiros, PhD, RD
Professor and Department Head
Associate Dean for Scholarship
and Research

Greetings!

Greetings from the Department of Human Nutrition! There's a lot going on here. In every aspect, we are growing. Whether it's the impact our students have, even as undergraduates, or the depth of faculty research, our department is finding ways to go further.

Enrollment continues to explode with over 350 students — more than triple the enrollment in 2000. This is a direct result of the constant effort put forth by our faculty and staff to attract top-notch students to the department. We also continue to offer unique opportunities, giving undergraduates a chance to conduct research alongside faculty and graduate students.

Our students also benefit from faculty that go the extra mile, and this is really demonstrated by Brian Lehmann. He is giving back to the nutrition and exercise sciences program by contributing to a scholarship in Dr. Kathy Grunewald's honor. You'll read more about Brian in this newsletter.

Faculty research remains one of our top priorities, increasing our understanding of the nutritional needs of people from a range of backgrounds and helping us find ways to get them the information they need. As you'll read in this newsletter, Dr. Tina Remig recently obtained a three-year food safety grant from the USDA to design a program that will inform older adults about food safety.

Extension Human Nutrition faculty continue to connect with consumers with "Nutrition News," a new electronic newsletter. To subscribe, please contact Shelly Burkund at 785-532-1670 or

sburklun@oznet.ksu.edu. You can read more about Extension's important work on page 6.

Yes, our department is growing — not just in regard to enrollment, but in our ability to reach out. Our students and faculty are touching the lives of people from Kansas to Kenya — read about Kelly Marshall on page 5. We have significantly increased our number of Ph.D. students, which suggests that our department has transitioned into a major research program. Your gifts to the department have helped facilitate this growth, whether in the form of a scholarship that funds a study abroad experience for students like Kelly Marshall, or an endowment that supports faculty research. We would like to thank you, our alumni and friends, for your contributions. Because of them, I am certain we will be reporting this kind of growth for many years to come!

Human Nutrition Professor's Research Will Lead to Longer, Healthier Lives

Increased risk of foodborne illness in older adults becomes subject of statewide study

Sometimes it's hard to draw a straight line between the research that's done by scientists in white lab coats and our everyday lives. But Valentina Remig, assistant professor of human nutrition, doesn't conduct her research while wearing a white lab coat — or even in a lab. The bulk of her current research is done in the community among the very individuals she's trying to help, with the goal of changing the way they

think about some of the biggest factors in everyday life: their food and how safe it is to eat.

One of every 500 deaths and one of every 100 hospitalizations are attributed to foodborne illness in the U.S.

"If older adults are hospitalized, or have a compromised immune system, foodborne illness only makes it worse. So we're really trying to prevent that exposure," Remig said.

Her team of researchers, including Kevin Roberts, assistant professor in Hotel, Restaurant, Institution Management and Dietetics; Toni Bryant, assistant coordinator for the Family Nutrition Program; and Gerry Snyder, multimedia specialist in extension, are in the first stages of a three-year research and development project funded by the USDA through the Cooperative State Research, Education and Extension Service.

“Collaboration among these departments will be an advantage for the final product. We have the mindset of different people thinking in different ways,” Remig said.

In December 2007, Remig and her fellow researchers received a \$599,000 grant from the USDA to develop a multimedia food safety training program for community-based older adults. Since then, they’ve been gathering data that will help them design a program to change the ways older adults think about food preparation, storage and safety, in an effort to reduce the occurrence of foodborne illnesses.

Community-based older adults are individuals who live independently and are responsible for the majority, if not all, of their personal care. Many food storage and safety practices among this population stem directly from a heritage that includes the Great Depression, World War II and other tough economic times.

How to make improvements in food safety at any age:

- Portion out large quantities of leftovers, such as casseroles or soups, into smaller containers for storage.
- Use thermometers — not just while cooking, but in refrigerators and freezers, too.
- Don’t wait for leftovers to cool before putting them in the refrigerator.
- If you have to leave foods like meat and dairy out, use the two-hour rule: If it’s been out for more than two hours, toss it!

Remember, the longer something sits at room temperature, the more opportunity for bacteria growth. Storing food in a timely manner and at the right temperature greatly reduces your risk of foodborne illnesses.

“One example of the risky behavior we see from older adults is buying food in large quantities because it’s less expensive and keeping it past expiration dates. Throwing things away doesn’t come easily to older adults,” Remig said.

Currently, Remig and her team work with focus groups in senior centers across Kansas. Each group contains 6 to 12 people, age 65 or older, from different socioeconomic groups. Some participants may have access to the latest technology, while others depend on the local paper for news. Some participants are raising their grandchildren, while others are widowed or widowers. And some might need to discuss food safety issues in a language other than English; program materials will be available in Spanish.

Remig is using focus group discussions to determine the most effective messaging medium. Once this is established, the team will begin the second phase of research, in which they will analyze their data and begin designing a multimedia program that effectively conveys food safety information to older adults, and may someday be available nationwide.

“We know there are many older adults who are increasingly using new technology. But what we don’t know is, if they’re to learn

Watch future issues for updates on Dr. Remig’s food safety research.



Dr. Valentina Remig

If you are age 65 or older, living independently and would like to participate in the study, e-mail research assistant Kerri Cole at kbc Cole@ksu.edu or call the Human Nutrition department at (785) 532-5508.

something new, do they prefer the new technology or do they prefer the older, printed forms of communication?” she said.

Remig hopes to have the program eventually posted on the extension Web site, so people across the state can access it. While she is excited to start work on this stage of the project, Remig admits there’s one small problem: space.

“We’re fortunate that our laboratory is really in the community. But we, too, are affected by the space constraints of Justin Hall. We just don’t have enough places to work on our data analysis. The campaign for expansion is something we’re really supportive of,” she said.

K-State Alum, Now Husker Director of Sports Nutrition, Calls on Fellow Nutrition and Exercise Sciences Grads to Give Back



Some people say it takes a village to raise a child. Well, maybe it takes a college to produce a top-flight sports nutritionist like Brian Lehmann. Lehmann (MS, RD, CSSD, SCCC, CSCS, '01 foods and nutrition, exercise science/kinesiology) is the director of sports nutrition for Nebraska Athletics. Although he's now a Cornhusker, Lehmann values the role many Human Ecology Wildcats played in his successful career.

"The folks in Human Ecology really listened to what my goals were, and if it seemed logical, they'd find a way to try to accommodate them," Lehmann said. "That's what attracted me to that college. I was being educated as an individual, not just as a cog in the machine."

Lehmann recently contributed to the Kathy Grunewald Scholarship in Sports Nutrition, and he hopes other nutrition and exercise sciences program alumni will pitch in.

"I am hoping other alumni and friends will join me in giving back to the college," Lehmann said. "College students are usually working two or three jobs. Even giving back \$100 or \$200 can make a big difference for them."

Lehmann, originally from Sabetha, visited K-State his senior year of high school and was impressed with K-State's strength and conditioning program. He was also advised to contact Kathy



Brian Lehmann works with Cornhusker athletes to improve their performance through better nutrition and exercise practices.

Grunewald and check out the nutrition and exercise sciences program, an option he hadn't even considered until he learned one crucial detail.

"When I originally visited campus, I wasn't planning to major in nutrition. It was the fact that there were scholarship opportunities in Human Ecology that even got me to walk across campus and take a look at the program."

Lehmann recalled gratefully how supportive and helpful Grunewald was, always making time to answer questions and provide encouragement.

"She really opened my eyes to opportunities in nutrition and dietetics. She challenged my professional development, and she has been a great person to consult about my career and professional decisions.

"You know how in athletics there are game-changing moments? Well, getting the Anita K. Laurent Scholarship in Human Ecology was a career-changing moment for me."

— Brian Lehmann

Grunewald and Dr. Deb Canter (department head of Hotel, Restaurant, Institution Management and Dietetics) both helped Lehmann get valuable experiences with K-State Athletics and find other nutrition and dietetics internships.

Over time, Lehmann grew to value nutrition as a tool for athletic performance development. In his junior year, Lehmann worked in the Derby Dining Center at the athletic training table. Thanks to a lot of encouragement from Housing and Dining Services and HRIMD faculty members John Pence, Mary Molt and Mark Edwards, Lehmann decided he wanted to pursue his RD. However, he also found himself at a low point financially and was seriously considering leaving the program. Then something unexpected happened.

"You know how in athletics there are game-changing moments? Well, getting the Anita K. Laurent Scholarship in Human Ecology was a career-changing moment for me, because I was really on the fence," Lehmann said. "I was cash-strapped, and feeling the financial pressures of higher education. Although I was receiving excellent career experiences in sports nutrition, it wasn't paying the bills. I was almost ready to make a change.

"And then that scholarship came along. It meant I didn't have to work a second or third job at night. I could finish up some extra RD coursework on top of my dual major. That scholarship for me was a really big deal. And that's what motivated me to give back to the college, to provide an opportunity for somebody else."

His rather late start in pursuit of RD coursework, and a post-graduate opportunity that would evaporate after summer 2001, meant that Lehmann had to take 18 hours of summer school in his senior year. He received special permission for this monumental summer load from then associate dean Virginia Moxley, and Grunewald helped him plan his time, down to the minute.

• Continued on back page

Taking Nutrition into the

WILD



Kelly Marshall with a Masai man (above) and measuring the upper-arm circumference of children to determine malnutrition (bottom right).

When Kelly Marshall talks about her life, you have to wonder how she ended up at K-State. Her scrapbook — thick with photos from her competitive break dancing days and mementos from places she’s traveled — shows that life could have taken her anywhere. But then you turn the page to find a garter belt, covered in purple Powercats and white lace. The question of how the garter belt came into her possession, despite the fact that she’s not a bachelor, becomes secondary as you listen to her describe the memory.

“I was trying to decide which school to go to and I ended up at this wedding reception. It was like a sign,” Marshall recalled. “The champagne glasses, the napkins... everything was K-State. It was bizarre. And now that I’m here, I totally understand why it was like that. People who go to K-State *love* K-State!”

And so Marshall, a native of Shawnee, Kan., came to Manhattan, where she enrolled in the nutrition and exercise science dual degree program. And then the dietetics program. And then in a secondary major in international studies, as well as a minor in anthropology. It’s a full load, no doubt, but she feels each discipline is vital to her goal of reaching all kinds of people.

“I feel like the anthropology is what makes me unique. It’s what taught me to be an observer. I’m able to go places and practice nutritional anthropology. Not many students have that ability,” Marshall said.

This background came in handy when Marshall found a fledgling public health internship program and was chosen to go on

their first excursion. In summer 2007, she traveled to Kenya with 27 other students, where they lived in the bush for five weeks. The students spent the duration of their internship surveying tribes of Masai people about current health practices, exploring local healthcare facilities, and serving the local populace in mobile clinics.

“When I got out there, I was able to elaborate on a lot of questions and things people didn’t understand. My education in nutrition made me feel very prepared,” Marshall said.

Groups of students and one or two community health workers, who also served as interpreters, surveyed each household about their health practices. They also used a series of measurements — including weight, height and mid-upper arm circumference (MUAC) — to determine malnutrition in children. Once the data had been collected, the students analyzed it and presented their findings to the Kenya Ministry of Health.

“The Ministry’s response to our findings was very encouraging. They seemed very interested in change,” Marshall said. “So the program has added an education component to the experience for the next trip. Those students will actually go out and teach people.”

Marshall has received an incredible amount of support from both Human

Student uses study abroad experience to influence public health in Kenya

Nutrition faculty and scholarship funds. Scholarships like the Nina M. Browning Memorial Scholarship and the Rose Straka and William M. Fowler Scholarship are part of what make her study abroad experiences possible, helping offset the cost of her tuition for the academic year. They also compensate for the fact that she’s not paid for the work she does while overseas. To Marshall, experiences like her trip to Kenya are invaluable.

“Everywhere I’ve gone, I’ve learned something new, and those experiences help me bring something back to our culture,” Marshall said. “I can take things I’ve learned in Kenya and apply them to underrepresented populations here.”

Marshall intends to graduate in May 2009, with plans to spend her last semester studying abroad in a Spanish-speaking country. After that, she hopes to continue her education in nutrition and dietetics by obtaining her master’s degree in public health, and will then serve the underrepresented population in the greater Kansas City area in a clinical capacity...for a while. Her trip to Kenya makes her think she might not stay in one place for too long.

“My experience made me realize I have this gift of being able to communicate with just about anyone,” Marshall said. “I feel like I’m on this Earth to go out and reach people. With my education, I’m going to have a lot of opportunities.”



TEACH A MAN TO FISH

Extension's mission to "bring the University to the people" means HN faculty help Kansans avoid hunger, manage food dollars more wisely, and handle foods safely

Tough times are even tougher on the poor. No news there. But what might be news to you is how an amazing team of K-State Research and Extension HN faculty, with their Extension colleagues across the state, improves the lives of children, older adults, and families.

Attacking Hunger on Many Fronts

The Family Nutrition Program (FNP) and Expanded Food and Nutrition Education Program (EFNEP) are USDA-funded educational efforts that give lower-income people practical information about nutrition, food preparation, budgeting and food safety. These educational efforts help create food security — access at all times to enough food to give everyone in the household an active, healthy life.

Both programs rely on strong partnerships between county Extension personnel and local agencies that already serve low-income families, such as Kansas Department of Social and Rehabilitation Services (SRS), schools, health departments and food pantries — agencies that know intimately the food security needs of people in their communities. These community agencies identify folks who could use a hand and the local K-State Research and Extension staff delivers the programming. The Manhattan-campus part of the team provides training, materials, support and expertise to county faculty and staff.

"In some ways, the role of Extension hasn't changed over the years, but our audience has," said Paula Peters, assistant director, Family and Consumer Sciences

Extension. "From the beginning, we worked with rural homemakers and families because that's where the needs were. Now one of our biggest audiences is the low-income family because they are the ones most in need."

Family Nutrition Program: Agile Innovation

From infants to older adults, FNP serves 80,000 people in about 80 Kansas counties. Established in Kansas in 1996, FNP offers nutrition education to anyone eligible for food assistance, formerly called "food stamps."

FNP spreads practical, easy-to-understand information through newsletters, cooking demonstrations and classroom lessons. USDA funds FNP through a contract with SRS, which partners with K-State to build food security among people in need.

"Approximately 51 percent of all Americans at some point will use food assistance, usually temporarily — single parents, people going through a divorce, people whose family farms aren't doing well, people going through a natural disaster," said Karen Hudson, FNP coordinator and Extension associate. "This is truly a safety net that protects America."

Inventiveness is a watchword with FNP, as evidenced by its award-winning, nationally recognized initiatives.

For instance, *Kids a Cookin'* is a show designed to teach kids about nutrition, food preparation and food safety. In partnership with the K-State Department

of Communications, FNP produced 104 *Kids a Cookin'* episodes between 2003 and 2006 and won numerous national awards from the Association for Communication Excellence.



***Kids a Cookin'* is a show produced by K-State Research and Extension to encourage good nutrition and food safety habits among children.**

You can watch the programs on the interactive Web site (kidsacookin.k-state.edu) in either English or Spanish, and print recipes, tips and techniques. The *Kids a Cookin'* & *Movin'* curriculum added physical activity segments and "live" tours to a cheese factory and a flour mill — a real plus to help kids learn where their food comes from.

"Schools, afterschool programs, summer programs and family and consumer sciences classes all use the programs," Kathy Walsten, extension assistant, said. "Even some senior meal

sites use the programs! Older adults enjoy watching the kids, and the recipes don't take a lot of ingredients."

In another example of creativity in the service of good nutrition, FNP was recently awarded a grant by the United Methodist Health Ministry to produce short Spanish-language nutrition messages for local cable TV viewers in southwest Kansas.

These *telenovelas* (mini soap operas) will be performed by local actors and will chronicle a family that struggles to adopt healthy habits. Hudson is the project coordinator with a production team that includes members from K-State and Garden City, Kan.

FNP personnel recognize that families come in different forms. Grandparents raising grandchildren struggle with many issues, which include providing good nutrition for kids and how to stretch the food budget. Mary Meck Higgins, Extension nutrition specialist and associate professor, conducts research to help those who are "parenting for the second time" not only feed the kids well, but build a strong family.

"The whole point of this research is to learn what information these folks who are parenting for the second time can use," Higgins said. "And cooking with children can have a really good effect on family communication. We think cooking together could help with some of the other issues they're facing, as well as with family relationships."



A SAFETY NET

- Most recipients will only use food assistance for a few months.
- Over 184,000 Kansans receive food assistance.
- Kansas is 12th among states for food insecurity.
- The average household receives about \$200/month.

Expanded Food and Nutrition Education Program: Long-Term Success

EFNEP, established in 1969, currently serves youth and families with young children in eight high-need Kansas counties. The program is a series of individual or small-group lessons delivered over weeks or a few months, so the learning is well-reinforced, and well-retained.

The success of EFNEP is remarkable. Nationally, 91.5% of adults who have gone through EFNEP reported improved dietary intake, 83% bettered their food budget practices, and 66% improved their food safety habits. Youth in the program reported comparably high improvements in choosing a variety of foods and understanding the essentials of nutrition. EFNEP targets people who can benefit from core skills to help them weather difficult times.

"We're helping moms at a very receptive stage of their lives, when they want something better for their child than perhaps they've had," said Sandy Procter, EFNEP coordinator, Extension specialist and assistant professor. "And we often connect people with local services so they can get food assistance or reduced-price school lunches for their child — whatever it takes to get them out of an immediate crisis."

The program assistants and nutrition assistants who deliver the bulk of the training usually come right from the communities they serve, whether they are rural or urban, and whether the clientele speaks English, Spanish, Vietnamese or Laotian. And they are powerful role models for their clients.

"Almost all of our nutrition educators have been successful in changing their own nutrition practices. They can say, 'I did it, you can do it, and here's how you can get started,'" Procter said.

If you know someone who might be eligible for food assistance, the number to call in Kansas is 800-221-5689. From anywhere in the state, you'll be connected to your local SRS office.



A PRUDENT INVESTMENT

According to a December 2000 analysis by Iowa State University Extension, for every **\$1.00** EFNEP spends on educational programs, it returns **\$10.75** in community benefits from improved nutritional behavior and better health.



Lehmann gives back

• Continued from page 4

Lehmann's path has since included a graduate assistantship at the University of Tennessee (partly thanks to a connection with Volunteer alum Canter) until 2003, when he finished both his RD and his master's in human performance and sports studies with a concentration in sports management.

He continued at Tennessee in increasingly more responsible sports nutrition roles, until June 2007, when he left for his current position with the Huskers, moving closer to home and back in the Big 12.

Lehmann has a simple challenge for his fellow nutrition and exercise sciences alumni.

"With expanding career opportunities in sports nutrition, it is important to support students in their higher education pursuits. Dr. Grunewald taught us the importance of understanding science to avoid the hype so prevalent in sports

nutrition. Please consider honoring Dr. Grunewald with your contribution to a worthwhile program."

If you'd like to contribute to the Kathy Grunewald Scholarship in Sports Nutrition, please contact Jennifer Rettele-Thomas, director of development, at 800-432-1578 or jenniferr@found.k-state.edu.

BRIEFS

Dr. Carol Ann Holcomb is retiring after 29 years of service to K-State. She was the founding director of K-State's master of public health program and trained many M.S. and Ph.D. students, as well as serving as advisor to undergraduate students. President Wefald has named her professor emeritus.

Dr. Edgar Chambers IV was named University Distinguished Professor, the highest honor bestowed upon a faculty member at K-State in recognition of scholarly contributions in their discipline.

Michelle Higgins, a senior in human nutrition, has been named a Goldwater Scholar. Michelle is the daughter of Dr. Mary Meck Higgins of our department. Michelle plans to pursue a Ph.D. in pharmacology and also has a major in biochemistry.

Mr. John DiCicco has joined us as clinical coordinator of athletic training. John earned B.S. and M.S. degrees from Arizona State University.

Dr. Ric Rosenkrantz is joining HN this fall as an assistant professor with a focus in public health. Dr. Rosenkrantz holds degrees from the University of Kansas, K-State and the University of North Dakota.

Dr. Brian Lindshield is joining us as an assistant professor this fall with a focus on nutrition and cancer. Brian received his B.S. from K-State in 2003 and completed his Ph.D. in nutritional sciences from the University of Illinois.

Dr. Delores Chambers was promoted to associate professor and received tenure.

Dr. Paula Peters, associate professor, received the College of Human Ecology's Outstanding Extension Award this year. Dr. Peters is associate director of Family and Consumer Extension.

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