



UC center focuses on weight and health

For the first time in history, the number of overweight people — approximately 1.1 billion — rivals that of underweight people, according to a recent report from the Washington, D.C.-based Worldwatch Institute. Both groups suffer from malnutrition, an imbalance in the intake of vitamins, minerals and other nutrients needed for a healthy diet.

Obesity, hunger and food insecurity (the state of being hungry or on the edge of hunger) are closely related public-health problems that cut across cultural and national boundaries. Genetic, socioeconomic, cultural and behavioral factors all contribute to these problems, and myriad academic disciplines and strategies are needed to address them. Yet work in these areas has suffered from a lack of collaboration among the relevant disciplines, some UC researchers strongly believe.

In response, they have established an interdisciplinary research and outreach center to bring together experts from a variety of fields, including nutrition, public health, public policy, agricultural economics, genomics and psychology, with professionals outside academe who are working on nutrition and health problems in diverse communities.

Center for Weight and Health. Established in 1998, the Center for Weight and Health is based at UC Berkeley. It promotes and coordinates new analyses and approaches to problems associated with the increasing prevalence of obesity, hunger and food insecurity, and it works to disseminate research findings to communities throughout California and the nation. Its co-directors are UC Berkeley nutrition experts Sharon Fleming, Joanne Ikeda and Patricia Crawford.

"It is counterintuitive to connect hunger and obesity," Fleming says. "Yet there are strong indications of close connections." In populations receiving food and monetary assistance, for example, there is evidence that hunger and obesity coexist within individuals, she says. (Obese individuals often lack basic nutrition.) Additionally, some researchers believe that dieting, rather than reducing body weight, may actually lead to increased weight in the long term. "The

center arose out of our recognition of the need for an academic unit looking at reasonable and sustainable interventions to address obesity and the closely related problems of hunger and obesity," Fleming says.

The center includes researchers with the UC Agricultural Experiment Station and specialists and advisors with Cooperative Extension (CE), the university's outreach arm. This combination of renowned faculty members in nutrition, health and public policy, and CE personnel, with their expertise in working with minority groups, makes the center extremely well positioned to reach a broad spectrum of Californians, Fleming says.

One such expert is Mary Fujii, Contra Costa County nutrition advisor and a member of the center's steering committee. Food insecurity in low-income communities has long been a focus area for that county's extension office.

"Food insecurity includes hunger, but that's not all of it," Fujii says. "Our research shows that in low-income communities, access to nutritional foods is not available. Families may have an easier time buying a bucket of fried chicken than fresh melons. We must better understand the dynamics of access to nutritious food in low-income areas. The center will play a pivotal role in this work."

Providing factual information to policy-makers. Disseminating science-based information on malnutrition and food insecurity to policy-makers is another goal of the center. "We found there was no way to feed scientific information to state and federal policy-makers addressing problems of obesity, hunger or malnutrition," Fleming says.

In late September, the center participated in the "Healthy School Environment Policy and Community Action Summit" in Sacramento, sponsored by the California Department of Health Services (CDHS), California Department of Education, and the California Elected Women's Association for Education and Research (CEWAER). The center and CEWAER drafted a report that will be instrumental in setting legislative policy and action agendas concerning school-age children's health issues.

Other agencies the center works with include the state Women with Infants and Children (WIC) and Expanded Food and Nutrition Education programs, and the U.S. Department of Agriculture (USDA) and Centers for Disease Control and Prevention (CDC).

Prevention of pediatric obesity. Childhood obesity has risen sharply in the past decade and is now classified as an epidemic by the USDA Center for Nutrition Policy and Promotion. California has higher-than-average childhood obesity rates, particularly among African American, Latino and Native American children. Much of the center's work is directed toward preventing or reducing pediatric obesity. Such efforts have included:

- The center's inaugural symposium in fall 1999, "Pediatric Obesity in the 21st Century: A Research Symposium on Prevention." The gathering attracted 126 researchers and paraprofessionals to consider such topics as genetic contributions to body size, family influences, programs to promote physical activity and cultural factors in pediatric obesity. The center will host another conference on pediatric obesity in March 2001 in San Diego in collaboration with CDHS.
- The training kit "Children and Weight: What Health Professionals Can Do About It," which includes lesson plans and a video for health care practitioners and others working to combat pediatric obesity. The kit (ANR Publication #3416) is available from UC Communication Services at (510) 642-2431. The center is now developing a similar kit, "Children and Weight: What Schools and Communities Can Do About It."
- The California WIC Childhood Obesity Prevention Project ("FIT WIC"), a center-led project in five states to determine what changes state WIC agencies must make to be more responsive to problems of childhood obesity.
- The California Obesity Prevention Initiative. The center will partner with CDHS on a grant funded through CDC to address childhood obesity in the state.

Positive, proactive messages. A hallmark of the center is its positive, proactive approach to promoting healthy diets and lifestyles. In the United States, where 55% of adults are overweight and 23% are obese, emerging research



Dairy Council of California

Childhood obesity has risen sharply during the past decade. A new center at UC Berkeley is focusing on positive approaches to promoting healthy diets and lifestyles.

and outreach efforts are generally directed at weight-loss drug and diet regimens. The center focuses on finding ways to educate children and their families about the importance of physical activity and a healthier lifestyle overall.

"Much of the marketing and advertising in this country promotes high-fat, low-nutrient foods at the same time that it promotes impossible ideals of thinness," says Gail Woodward-Lopez, the center's academic coordinator. "Our center works to promote health and fitness in people of all ages and sizes, rather than an irrational fear of obesity or tendency toward self-blame for one's body size."

Cultural and socioeconomic factors may be at least as important as biological factors in influencing body size and health, she points out. As scientists learn more about genetic predisposition to obesity, she says, "It is equally important to understand the factors that make certain communities unable to gain ready access to nutrient-rich foods."

The center works closely with many other UC units that address nutrition and health issues. These include the nutritional science departments on the Berkeley and Davis campuses; the UC Davis and San Francisco medical schools; and the UC Division of Agriculture and Natural Resources' Body Weight and Health Workgroup. One current work group project is a study of the relationship among eating patterns, dietary quality, food insecurity and obesity in California preschool Latino children and their mothers.

For more information about the Center for Weight and Health, visit its Web site at www.cnr.berkeley.edu/cwh or contact Woodward Lopez at (510) 642-1599 or gwlopez@nature.berkeley.edu.

— Jill Goetz