

# IMPACT

CA&ES DEAN'S OFFICE • UNIVERSITY OF CALIFORNIA • ONE SHIELDS AVENUE • DAVIS • CA • 95616 • FAX (530) 752-9369

*IMPACT is a series of publications highlighting how UC Davis' College of Agricultural and Environmental Sciences makes a difference in the lives of Californians. Through research, teaching and outreach programs, UC Davis research touches almost all aspects of Californian life. Today, millions of people eat safer foods, breathe cleaner air and drink healthier water with the help of our researchers. We're making discovery work -- for California and the world.*

## PROMOTING HEALTHY LIFESTYLES

### THE ISSUE

Four hundred thousand people die in the U.S. every year due to physical inactivity or unhealthy diet. According to the latest study from the California Health Interview Survey, 54.4 percent of Californians are overweight or obese. Life-threatening diseases such as coronary heart disease, Type II diabetes and certain types of cancer are linked to obesity. In 2001, over 1.5 million Californians were diagnosed with diabetes. We recognize that the incidence of eating disorders is increasing and the consequences are alarming.

### WHAT WE'RE DOING

Professors and Cooperative Extension specialists in the College of Agricultural and Environmental Sciences are studying the causes of eating disorders and obesity and educating the public on healthy lifestyle choices.

#### **Analyzing causes of eating disorders and obesity.**

UC Davis' Center for Consumer Research (CCR) analyzes consumer attitudes toward food safety and quality. Extension specialist and CCR director Christine Bruhn's research reveals that many parents are aware of the importance of healthy food choices and the dietary needs of their children, but they may be unaware of how to select nutritious foods.

Associate researcher Peter Havel in the Department of Nutrition is studying the role of hormones produced



by fat cells and the gastrointestinal tract in the regulation of appetite, energy intake, metabolism and body weight. His studies show that dietary fat and fructose do not trigger the hormonal systems that promote maintenance of a stable body weight, thus possibly contributing to obesity.

#### **Researching obesity's impact on health.**

Professor of nutrition and internal science Judith Stern, Department of Nutrition, conducted research on the impact of obesity on women's health. Her research shows that obese women are at risk for osteoporosis and that non-dieting obese women can sustain healthy lives and maintain healthy behaviors. Stern also studied renal disease (a kidney condition commonly caused by diabetes) in genetically obese rats.

See additional IMPACT sheets on the web at <http://caes.ucdavis.edu/publications/impact/default.htm>

### **Analyzing culture's impact on dietary habits.**

Nutrition specialist Sheri Zidenberg-Cherr is studying obesity in Yup'ik Eskimos and collaborating with graduate student Andrea Bersamin and Stern in creating a nutrition education program that incorporates Yup'ik values and knowledge. Zidenberg-Cherr's research may benefit California in producing obesity research models sensitive to diverse populations.

In order to analyze America's own cultural impact on eating habits, Professor Louis Grivetti, Department of Nutrition, developed "America the Bountiful: Classic American Food from Antiquity to the Space Age," an exhibit that analyzes the history of 10 American foods and examines America's dietary diversity. The exhibit is showcased at UC Davis' Shields Library.

**Educating youth on proper nutrition.** Nutrition professor Liz Applegate believes that college student lifestyle can be a focal cause of eating disorders. "College is a time when students set up lifestyle habits for the rest of their lives," she said. To help students understand the scientific concepts in her nutrition classes, Applegate works with senior artist Steve Oerding to create animated PowerPoint and video presentations and an animated Web site.

Associate Extension specialist Marilyn Townsend is the principal investigator for EatFit, a nutrition and physical activity program for California adolescents that includes classroom information about healthy eating and physical activity, a magazine-style booklet for each student as well as an interactive Web site. Data from over 30,000 participants indicate that 42 percent of students made positive changes in dietary behav-

iors and 56 percent in physical activity behaviors. The EatFit program won the 2003 Dannon Institute Award for Excellence in Community Nutrition.

**Informing the public.** In 1995, Stern co-founded the American Obesity Association to re-conceptualize society's perceptions of obesity, as well as to fashion strategies to deal with the national impact of obesity. She is working with national and international experts through the Collaborative Obesity Research Evaluation Team (CORET), examining the latest obesity research and providing information online.

Kathryn Sylva, associate professor in the Design Program, Department of Environmental Design, and San Jose State University associate professor Robin Lasser promote awareness of anorexia nervosa and bulimia nervosa through their "Eating Disorders in a Disordered Culture" program. The program utilizes an interactive Web site, public art spaces such as billboards, and gallery and museum exhibitions. California assemblymember Helen Thompson saw one of Sylva's billboards and, as a result, added the disorders to mental health parity bill California Assembly Bill 88, which was signed into law in 1999.

### **A SHARED VISION**

UC Davis professors and Extension specialists are analyzing unhealthy dietary habits, determining the consequences of such behaviors, and informing the public about how to live healthy lifestyles.

That's impact -- science educating our community on proper nutrition.

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## **CONTACTS**

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*Eating Disorders in a Disordered Culture*  
<http://www.eating.ucdavis.edu>

CORET  
<http://64.106.173.179/PublicSite/>

EatFit  
<http://www.eatfit.net>

*America the Bountiful*  
<http://www.lib.ucdavis.edu/exhibits/food/>

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