



Center for Physical Activity and Nutrition (CPAN) Improving the Health and Well-Being of People of All Ages

Scientific studies have shown that physical inactivity and unhealthy nutritional practices are root causes of chronic diseases such as obesity, cardiovascular disease, diabetes, osteoporosis, and some forms of cancer.

The consequences—poor health, increasing disability, loss of independence, poor quality of life, and premature death—are severe.

The costs in pain, suffering and medical expenditures to individuals, families and communities in Arizona and across the nation are staggering, reaching \$117 billion dollars and causing 400,000 American deaths annually.

The good news is that healthy physical activity and nutritional practices can help reverse these trends. Under the direction of Linda Houtkooper and Scott Going, professors in the College of Agriculture and Life Sciences, and Dr. Tim Lohman and Lauve Metcalfe in the College of Medicine, concerned faculty and staff in more than 10 University of Arizona departments and special centers have created the Center for Physical Activity and Nutrition (CPAN).

Launched on April 8, 2004, CPAN is a collaboration between the University of Arizona College of Medicine and the College of Agriculture and Life Sciences. Its mission is to improve the quality of life and longevity of people and communities in Arizona and America through physical activity and nutrition research, education and services.

CPAN evolved from several National Institutes of Health-funded research projects over the past 20 years that focused on the effects of physical activity and nutrition on body composition and health. Out of this research came follow-up studies over a two-to-eight-year period showing specific beneficial long-term effects of healthy physical activity and nutrition practices on disease prevention.

For example, CPAN team members have already developed and implemented several innovative nutrition and

physical and activity-based osteoporosis prevention and healthy weight management programs. These programs promote healthy long-term physical activity and nutrition practices that improve the health and well-being of children, adolescents, and young and older adults.

The Bone Estrogen Strength Training (BEST) study found that women between the ages of 40 and 55 who followed a specific weight training and exercise program were able to raise their bone density an average of 1 percent per year at a bone site in their hip, which is roughly equivalent to the amount of bone mass lost per year in individuals with osteoporosis. In the Healthy Weight 4 Life study, participants following a combined program of proper nutrition, regular exercise and motivational meetings were able to lose an average of 11 pounds over a 16-week period.

Based on these and other research results, the many faculty involved in CPAN have identified physical activity and proper nutrition as key areas in a strategic plan for improving the health of the nation. To translate this plan into action, CPAN is bringing together basic and applied scientists, educators, practitioners, and community leaders to:

- Foster innovative research and translate new discoveries into culturally appropriate and effective individual and family programs. These will include state-of-the-art exercise and nutrition research and education programs.
- Lead the way in advancing the understanding of the long-term effects of physical activity and nutrition on health promotion and disease prevention. ■

For more information on CPAN see www.cpanarizona.org or contact Michele Graves, mgraves@u.arizona.edu, (520) 626-2639. The BEST exercise manual is described on page 2.