

Ruth Huenemann: An Extraordinary Teacher, Researcher, and Role Model

The word "pioneer" aptly describes professor emerita Ruth L. Huenemann, D.Sc.—a woman who grew up on a farm in rural Wisconsin, began her teaching career in a one-room schoolhouse during the Great Depression, and watched as the once-fertile topsoil of her beloved prairie blew away during the Dust Bowl era. From these rough beginnings germinated an extraordinary teacher who built one of the country's premier programs in public health nutrition.

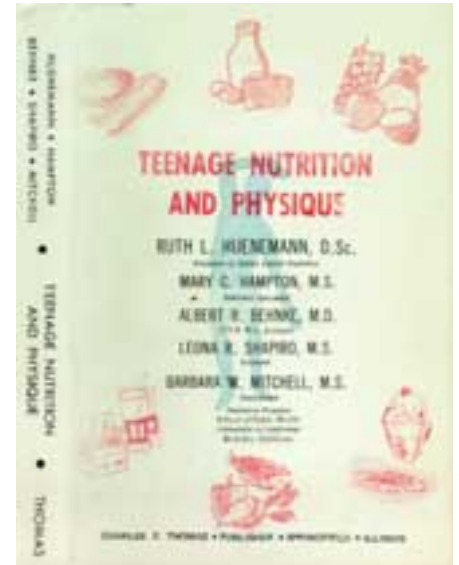
When she was recruited in 1953 to join UC Berkeley's School of Public Health faculty by **Jessie Bierman, M.D., M.P.H.**, professor of maternal and child health, and **Agnes Fay Morgan, Ph.D.**, head of Berkeley's nutrition science program, she had a stellar set of credentials and experience: degrees from University of Wisconsin at Madison, University of Chicago, and the new nutrition program at Harvard University. She had also worked with the World Health Organization in Peru and taught nutrition to mill workers and students at the University of Tennessee. Once at UC Berkeley, Huenemann created the public health nutrition program at the School of Public Health.

Huenemann's research asked the emerging question: Are obesity and lack of physical fitness possible contributing factors toward cardiovascular disease? To this end, she worked with professor emerita of public health nutrition **Leona R. Shapiro, M.S.**, to design the Berkeley Teenage Study of 1961–1965, which followed 984 boys and girls from ninth through twelfth grade, periodically collecting anthropometric measurements and records of food intake and physical activity. They hoped to determine the time of onset, prevalence, attitudes, and contributing factors related to the development of obesity.

Huenemann's team noticed, with some surprise, that socioeconomic status and obesity in teenagers showed an inverse relationship. Previously it had been thought that overweight was a problem of the more well-to-do, indulged children, but the study's results were a first glimpse at a trend that gained momentum in the latter part of this last century. "This was really quite a finding about low-income children and has become increasingly a real issue of health disparities in our public health field," says **Pat Crawford, Dr.P.H. '94, R.D.**, codirector of



Left: Ruth Huenemann. Right: The purpose, methods, and findings of the Berkeley Teenage Study of 1961–1965 were published as a book.



the UC Berkeley Center for Weight and Health and a former student of Huenemann's.

Another surprising view into the future was the low levels of physical activity among Huenemann's subjects. We attribute today's teenagers' reluctance to move to the mesmerizing lure of television, video games, and the Internet, but already in the 1960s, Huenemann's team found that only 5 percent of time for girls and 10 percent of time for boys was spent in moderate to strenuous activity.

Ultimately, the Berkeley Teenage Study determined that by 14 or 15 years of age, the tendency toward overweight was set. "Those who started off heavy, ended up heavy. The correlation from year to year is very strong," explains Crawford. So, for their next effort, the Berkeley Preschool Nutrition Study, Huenemann and Shapiro became interested in following a cohort from birth in order to identify the juncture at which overweight became a lasting issue.

The Berkeley Preschool Nutrition Study initially ran from 1969 to 1973 under Huenemann's guidance and was continued by Shapiro from 1975 to 1984 as the Berkeley Longitudinal Nutrition Study (BLNS). Using nine years of anthropometric measurements and interview records concerning food intake, physical activity, overall health, opinions and beliefs, and socioeconomic status, the data were able to contradict the common belief that

overweight babies become overweight adults. In fact, early activity level, not calorie intake, was more significantly related to subsequent overweight, though there were some indications that weight at two years for girls and three years for boys was predictive of later overweight.

Huenemann's research into the origins of weight gain still informs efforts to understand the current epidemic of obesity-related chronic illnesses. And although she is now retired, her legacy continues to inspire her former students. "She stood proud, she had such high standards, she was so knowledgeable, and she always represented the field in such a professional way," says Crawford. "She was simply a role model." 🍷

— Johanna Van Hise Heart

The Ruth L. Huenemann Fellowship was established in 1995 to honor the founder of the School of Public Health's public health nutrition specialty area. If you would like to contribute to this fellowship, which supports graduate students studying in the field of nutrition, you may make your tax-deductible contribution payable to "Ruth L. Huenemann Fellowship Fund" and send it to the Office of External Relations, School of Public Health, 140 Earl Warren Hall, Berkeley, CA 94720-7360.