

Bertha (Betty) Ann Lewis

October 21, 1927 – April 17, 2008

Bertha (Betty) Ann Lewis, M.S., Ph.D., died at the Truman Senior Living Center in Truman, Minnesota on Thursday, April 17, 2008 at the age of 80.

Betty was a native of Minnesota; born in Watonwan County and raised in rural Lewisville. Following graduation from Truman High School, she matriculated at the University of Minnesota where she earned a Bachelor's degree in Chemistry in 1949, a Master's of Science degree in Chemistry in 1954 and a Doctorate of Philosophy degree in Chemistry in 1957. Following the conferral of her Ph.D. degree, she continued to develop her academic career at the University of Minnesota as a teacher and research scientist, and developed what became a life-long interest in food carbohydrates. During this time, she also instructed a course in mortuary science at the College of St. Catherine's.

Betty was recruited to Cornell University, Ithaca, New York in 1967 as an Associate Professor in the Department of Textiles and Clothing/Design & Environmental Analysis. On February 01, 1970, she was jointly appointed as Associate Professor of Human Nutrition and Food. She was granted tenure in 1973 and the following year appointed Associate Dean for Research and Graduate Education in the College of Human Ecology and as Assistant Director of the Cornell University Agriculture Experiment Station. Her official appointment was transferred to the Division of Nutritional Sciences on July 11, 1980 until her retirement on July 16, 2006.

Betty was a highly active faculty member and distinguished scholar who contributed to the teaching, research and extension missions of the University. The undergraduate students best knew Betty for her instruction of NS345, Nutritional and Physiochemical Aspects of Food, which is a required course for all nutritional sciences majors. She also co-instructed FS/NS 620, Food Carbohydrates, a graduate level course with Professor John Brady in the Food Science Department. Among her contributions to Cornell Cooperative Extension, she authored a chapter on complex carbohydrates and fiber to the Cornell Extension Handbook, Take Charge of Your Health, in 1989. Betty enthusiastically served the graduate field of nutrition as Director of Graduate Studies for the Graduate Field of Nutrition and was awarded a National Needs Graduate Fellowship Program from the United States Department of Agriculture.

Betty's research and teaching activities focused on food biochemistry and the chemistry of food components, with applications to health, nutrition and food preparation and processing. In 2002, she was named to ISI's list of *Highly Cited* scientists in the Agricultural Sciences, an honor accorded to less than 0.5% of publishing researchers. She was among the first scientists to do research on dietary fiber and one of the few women scientists nationally working in the field of polymer chemistry. Betty was an inventive and innovative scientist with interests in both original research and advancing the development of new methodologies. Her research program generated over 50 peer-reviewed publications. Her 1991 publication entitled "Methods for dietary fiber, neutral fiber and nonstarch polysaccharides in relation to animal nutrition" has received over 3,300 citations since its publication, with 483 citations in 2008. Her research findings led to a better understanding of the role of complex carbohydrates to the quality of food as well as their physiological roles in health and disease. Later in her career, she developed an interest in food photochemicals including antioxidants and the relationship between their biological and health-promoting function and their chemical structure. Throughout her career, she served on several committees of the American Chemical Society, was national president of Sigma Delta

Epsilon-graduate Women in Science and was an active member of the Institute of Food Science and Technology.

Betty loved the outdoors and traveled to national parks, was an avid bird watcher, and established and hiked the trails of the Finger Lakes region.

She moved back to Minnesota in 2006 following her retirement from Cornell University to be with her extended family. Her modest manner, well-developed sense of humor, and wise counsel are missed by her many friends in Ithaca.

Patrick Stover, Chairperson; Patsy Brannon, Thomas Brenna