

An ARS Science Hall of Fame member since the year 2000, Virginia passed away on September 4. Like all 76 Hall of Famers inducted to date, she was one of ARS' most accomplished, high-impact scientists. In particular, she contributed to the health, nutrition, and well-being of many people throughout the world through her technological development of improved dairy food and drink products.

A full account of Dr. Holsinger's science career and contributions follows:

Dr. Virginia H. Holsinger, former Research Leader of the Dairy Products Research Unit, Agricultural Research Service, Eastern Regional Research Center (ERRC), USDA, Wyndmoor, Pennsylvania, died on Friday, September 4th. Dr. Holsinger, a resident of Arlington, Virginia, received her B.S. degree in Chemistry from the College of William and Mary in 1958 and her Ph.D. in Food Science and Nutrition in 1980 from the Ohio State University. She began her research career as an analytical chemist with the USDA/ARS Dairy Products Laboratory in Washington, D.C., and transferred to ERRC in 1974 where she led a program on fundamental and applied aspects of the chemistry and technology of milk and dairy foods until her retirement in October 1999. Dr. Holsinger was well known for several accomplishments. She developed a whey-soy drink mix with the nutritional quality and storage stability characteristics necessary to serve as a milk replacer in international food donation programs. She was part of the team that demonstrated that enzyme treatment of milk could make it more digestible by a new consumer market, the lactose-intolerant population. Technology transfer of this research led to the commercialization of enzyme-treated milk (LactAid) and other products. She also developed a low-lactose milk based beverage by enzyme fortification of milk powder for military field rations. She pioneered methods for the quantitative assessment of the rheological properties of cheeses. Her research also led to the development of a natural mozzarella cheese with a 50 percent reduced fat content resulting in its incorporation into the National School Lunch Program. She also led a team for the development of an encapsulated spray dried milk fat for use as a shortening in baked goods. Her work with the Farm Service Agency and the US Agency for International Development led to the development and implementation of an extruded nutrient-based grain blend formulation for use in emergency feeding situations which reconstituted with water to provide a nutritious porridge. In the course of her career, Dr. Holsinger authored or co-authored more than 100 scientific papers. She received several prestigious awards for her research work, including the Col. Rohland A. Isker Award, R&D Associates for Military Food and Packaging Systems, 1983; the Distinguished Service Award of the Division of Agricultural and Food Chemistry, American Chemical Society, 1986; the Agricultural Research Service Distinguished Scientist of the Year Award in 1992, the Lifetime Achievement Award, Women in Science and Engineering, presented by the National Science Foundation in 1995; and the International Dairy Foods Association Dairy Foods Processing Award. In 1987, Dr. Holsinger and her team also received the Industrial Achievement Award from the Institute of Food Technologists and the USDA Distinguished Service Award for research.

Dr. Holsinger was inducted into the ARS Hall of Fame in 2000. She is survived by her brother, Gordon Holsinger, of Arlington, Virginia. A memorial service will be held in October.

At the 2009 ARS Science Hall of Fame ceremony conducted just last week in Washington, D.C. in which three ARS scientists were newly inducted and at which Gordon attended, I extended the

sincere condolences on behalf of the entire ARS family to him and expressed our continuing pride and admiration of Virginia's many outstanding scientific contributions and service to ARS and the Nation.

Edward B. Knipling