

FOOD PROCESSING AND ENGINEERING IN THE HEART OF ILLINOIS

Imagine a place where new food processing and engineering technologies are developed, food and nutrition breakthroughs are discovered, and food and agriculture industry leaders of tomorrow are prepared. With a long history of being one of the top food science and nutrition programs in the country, the University of Illinois is providing the food and nutrition fields with accomplished students to serve as the next generation of industry leaders. To best prepare those students, the university must have a multi-purpose facility for teaching, research training, and outreach activities in food, nutrition, pharmaceuticals, personal care products, technology development, and sustainability across varied applications. The Food Science and Human Nutrition (FSHN) Pilot Processing Plant (FSHN-PPP) plays key roles in the systems that are addressing the challenges of providing an abundant and sustainable food supply through continual innovations in raw food material development, waste utilization, biomass transformation, and energy reduction with an eye on technology transfer. Imagine enough food, fiber, and fuel to empower the vibrant futures of individuals, families, and communities being created right here at our university in the heart of Illinois. The FSHN Pilot Processing Plant is central to the realization of this vision. A state-of-the-art pilot processing plant is integral to propelling bright minds to find solutions to the world's key challenges of food, energy, water, and biotechnology.



OPPORTUNITY:

A newly renovated FSHN Pilot Processing Plant offers student learning opportunities in state-of-the-art facilities that more closely resemble future work environments in industry, academia, and government. Being able to solve a real problem in a modernized facility is a transformative learning experience and one that positions University of Illinois graduates ahead of others. This facility is also used to support undergraduate and graduate research training. Students in FSHN, agricultural and biological engineering, microbiology, and chemical engineering, among other fields, are trained in the pilot processing plant.

The facility has undergone a \$3 million transformation, with new HVAC, utility, and electrical systems; improved food safety considerations; and the addition of a product development kitchen, analytical laboratory, conference space, and more.

Over \$1.5 million in modern equipment was donated and another \$2.5 million in new equipment was acquired. The FSHN-PPP now features multiple dryers, HTST/UHT, twin-screw extrusion, retorts, milling line, vast fruit and vegetable processing equipment, and final packaging capabilities.

The product development kitchen offers stone and convection ovens, various fryers; gas, induction, and electric stovetops; electric griddle, and a proofing cabinet. There is also a large assortment of dough-working equipment, blenders, mixers, food processors, grinders, and various pots, pans, skillets, and baking sheets.



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RESOURCES REQUIRED:

The FSHN Pilot Processing Plant includes roughly 10,000 sq. ft. of floor space and specialized utilities used with processing equipment. Construction of the Food Science and Human Nutrition Pilot Processing Plant (FSHN-PPP) was completed in spring 2017. Although primary construction is complete, gifts to defray the cost of the construction are still needed. Moderate investments in the FSHN Pilot Processing Plant will have an enormous long-term impact. Naming opportunities are available.

The renovations have opened endless opportunities for active learning, career preparation, scientific discovery, and technology transfer. This modernized teaching infrastructure will prepare graduates for their futures and foster the advancement of local, national, and global economies.



College of Agricultural, Consumer
and Environmental Sciences