



## The Applied Research and Engineering (ARE) unit of The Food Processing Center serves as the bridge between fundamental research and the food industry.

ARE utilizes and adapts the findings of original scientific research to meet specific industry needs. ARE helps you improve the efficiency of your processes and sharpen your competitive edge.

### INDUSTRY SERVICES

- Acidified Foods Program
- Customized Training
- Functional Ingredient Development
- Fungi & Mycotoxin Research
- HACCP Consulting
- Ingredient and Product Analysis
- Microbiology & Pathogen Testing
- Microencapsulation
- Process Validation
- Process Consulting
- Post Harvest Processing Consulting
- High Pressure Processing Studies
- Water Redirection Reuse
- Byproduct Utilization

### PUBLICATIONS

- Bianchini, Stratton, et. al. (2012) Validation of Extrusion as a Killing Step for *Enterococcus faecium* in a Balanced Carbohydrate-Protein Meal Using a Response Surface Design. *J. Food Protection*, 75(9): 1646-1653.
- Ratnayake, W.S. and Jackson, D.S. (2008). Thermal Behavior of Resistant Starches RS 2, RS 3, and RS 4. *J. Food Science*, 73(5), C356-C366.

### RESEARCH

ARE team members are continually conducting applied research to address issues related to the food industry. The team also conducts a variety of confidential research for specific food manufacturing clients or related entities.

The ARE team consists of specialists in food microbiology, process engineering, and chemistry. In addition to providing expert consulting services, team members can provide customized training on a variety of topics.

### SHELF LIFE STUDIES

- Customized Testing

### STARCH ANALYSIS

- Gelatinization
- Water Absorption & Solubility
- Retrogradation
- Polymer Molecular Weights
- Percent Relative Crystallinity
- Functional Ingredients From Starch

### FOR MORE INFORMATION, CONTACT:

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### FOOD PROCESSING CENTER SERVICE AREAS

- Pilot Plants
- Sensory Analysis
- Applied Research
- Laboratory Services
- Product & Process Development
- Labeling & Regulatory Compliance
- Small Business Development Services
- Professional Development Opportunities

*An outstanding team of expert food scientists, food engineers and business consultants, combined with state-of-the-art facilities and equipment, allows the Center to provide a broad spectrum of services and support to the food manufacturing industry. Fee-based assistance is customized to the client's needs and provided on a confidential basis.*