



# Resources for innovation

## Food Lab (Marshall, MN)

The Institute's food lab is available to those seeking to introduce new foods to the marketplace. It is especially focused on smaller companies and entrepreneurs who are developing and commercializing new food products.

### Capabilities include:

- Food formulation and product development guidance
- Nutrition facts labeling and nutritional analysis
- Regulatory assistance
- Sourcing ingredients and packaging
- Analytical food product testing
- Guidance on shelf-life
- Thermal process and food safety review
- Product stability and scale-up
- Troubleshooting
- Co-packer or commercial kitchen recommendations

## Meat Lab (Marshall, MN)

The meat laboratory in Marshall is used for formulation and analytical assessment of meat products. This facility includes equipment for developing and testing new products. **Capabilities include:**

- Meat product formulation and development
- Scale-up
- Process development and scale-up assistance
- Shelf life guidance
- Smoking/cooking process development
- Packaging guidance
- Co-packer identification
- Troubleshooting

## Analytical Chemistry Lab (Marshall, MN)

The focus of the analytical laboratory is to provide quality analytical and compositional data to promote value-added products from Minnesota agriculture commodities and coproducts. The analytical laboratory evaluates many sample types including foods, meats, coproducts and renewable fuels.

### Capabilities include:

- Chromatography
- Spectroscopy
- Wet chemical analysis
- Physical characterization



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# Food

Today's consumers are health-conscious and busy, demanding convenient and wholesome foods, and food safety is more important to consumers than ever.

This critical, ever-evolving industry presents a significant opportunity for many businesses, and the Agricultural Utilization Research Institute is here to partner with them and help take new products or processes from idea to reality.



# Idea to reality:

Success stories

## Smude's Sunflower Oil

### Idea:

After the hot, dry summer of 2007 took a toll on Tom Smude's corn and soybean crops, he learned that hardy sunflower plants could thrive in such adverse conditions and he began to explore the idea of producing cold pressed, high oleic sunflower oil.

### AURI's role:

AURI provided nutritional analysis, product development, troubleshooting and innovation networking.

### Outcomes:

Today, Smude's is on shelves in major grocery chains, has a loyal customer base, is expanding its offerings to include flavor-infused sunflower oils and employs four part-time staff.



## Kay's Naturals

### Idea:

Create healthy snack foods that meet the nutrition needs of diabetics, those trying to lose weight and a general population that needs healthier snack foods.

### AURI's role:

AURI's scientists helped the Kazemzadehs with product formulation and the nutritional analyses necessary for food labels for the products.

### Outcomes:

Today, Kay's Naturals and Kay's Processing do annual sales in the seven-figure range and employ 25 people in the Clara City, Minnesota, area.



# Services that nurture growth



## Applied Research

Through practical, applied research AURI identifies emerging opportunities to add value to agriculture products. This information is publicly available in order to help entrepreneurs and businesses generate ideas for new products and processes. More information is available at: [auri.org/focus-areas/food](http://auri.org/focus-areas/food)

### Tools

- Natural & organic meat processing guide
- Nutritional labeling guidelines
- Shelf-stable meats
- Small-scale meat processing
- Trans fat labeling
- General labeling

### Research

- Local foods market report
- Oilseed executive summary
- Bypass protein soybean meal
- Utilizing ash as a nutrient source for corn



## Development

Scientists are available to provide consulting and technical services in the areas of:

- Product and process development
- Product evaluation and testing
- Sourcing materials, equipment and services

Labs are available to clients for hands-on testing and development. See more information about lab and capabilities on the back of this brochure.



## Innovation Networks

When deciding the feasibility of a new product or process, it is critical to have access to industry experts and a science-based network of people. With a broad range of networks, AURI can assemble the right people at the right time to help bring new products and processes to market.

## What is the Agricultural Utilization Research Institute?

AURI was created by the Minnesota legislature to foster long-term economic benefit for the state through value-added agricultural products. Its work encompasses the research and development of Minnesota agricultural commodities and products. AURI also supports product innovations or enhancements, helping entrepreneurs identify and expand new and existing markets.