



All QR codes are clickable links



# Food Science

UNIVERSITY OF WISCONSIN-MADISON

## What is Food Science?

The study and application of science to the analysis, processing, and manufacturing of foods.



## Facts & Figures



**Small class sizes**  
Core food science classes range from 25-40 students



More than **\$50K** in **scholarships** distributed per year



Nearly **100%** job placement



**55-70K** average starting salary upon graduating with a food science degree from UW-Madison

# What jobs do food scientists have?

- Quality Control/Assurance
- Product Development
- Technical Sales
- Production/Operations
- Sensory Science
- Research & Development
- And so much more!



See videos of where our alumni are now!



# Where do they work?



# How to study food science at UW-Madison

## Major in Food Science



- Hands-on, practical learning
- Laboratory courses included at every level
- Real food examples used to teach principles
- Capstone course → apply knowledge conduct a lab-based research project
- Elective courses focused on dairy, candy, and meat
- Flexibility to complete a variety of certificates



## Certificate in Fermented Foods & Beverages



### Certificate Requirements

Core	5
Experiential Learning	1-2
Electives	6
<b>Total Credits</b>	<b>12-13</b>



## Take Classes

Multiple courses accept students from other majors. Reach out the instructor for enrollment access and questions.

Common electives:

- FS 120 – Science of Food
- FS 150 – Fermented Food & Beverage
- FS 201 – Discovering Food Science
- FS 410 – Food Chemistry
- FS 440 – Principles of Food Engineering



# Tools to help YOU integrate food-based investigations into your curricula



Welcome Members Publications News Photos Education Resources  
Home / Education Resources

## Education Resources

**Lesson Plans**

Resources

Demos

Courses

Sustainability

Social Media

These are lesson plans designed to share food science principles for use in high school classes. They were developed by Audrey Girard (unless otherwise noted) and are free to use. One request: if you use them, please provide your feedback to [algirard@wisc.edu](mailto:algirard@wisc.edu)!

[Investigating the pH sensitivity of natural food colors](#). Full lesson plan with instructor notes, student lab worksheet, and post lab reading & reflection.

- [Introduction to fermented foods and beverages](#). Full lesson plan with instructor notes and evaluation questions. (Lesson developed by [Dr. Victor Ujor](#).)
- [Protein denaturation using egg proteins](#). Full lesson plan with instructor notes, student lab worksheet.
- [Building up the flavor of cola](#). This is a demo rather than a full lesson plan, but it could be further developed to connect chemistry of volatile components with perceived odors.

**Lesson Plan:** Investigating the pH Sensitivity of Natural Food Colors



High pigment beet, rich in betalains

pH effects on betalain color



Cranberries, rich in anthocyanins

pH effects on anthocyanin color

Full lesson plan with instructor notes, student lab worksheet, and post lab reading & reflection.

Available here:



# Research Highlights from UW-Madison Food Science

LIVING SCIENCE

## How Waste Becomes a Resource

Using fermentation and genomics, Victor Ujor helps microorganisms turn what's useless into something useful.

By Nik Hawkins

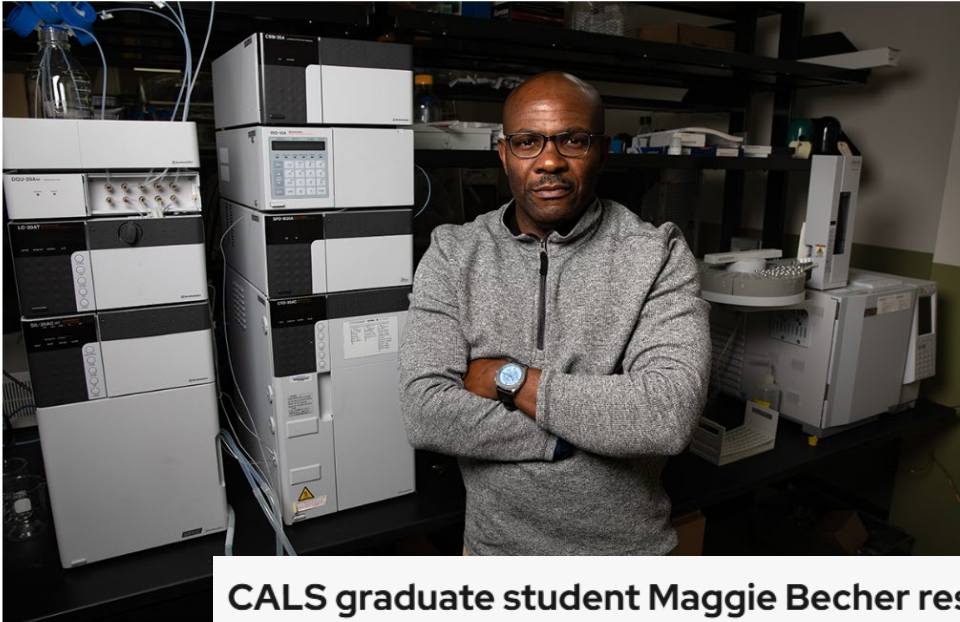


Photo by Michael P. King

## CALS graduate student Maggie Becher researches the squeakiness of cheese

April 17, 2024



Juustoleipä-inspired cheese curds: no bake (left), low bake temperature (middle), high bake temperature (right). Photo courtesy of Maggie Becher.

## In pursuit of the best protein bar

Wisconsin food scientists studied chemical changes in protein bars to prevent hardening over time

BY ANNA MARIE YANNY • FEBRUARY 20, 2025 • UPDATED FEBRUARY 20, 2025 at 8:23 AM



Working on a new protein bar. Paul Escalante / UW-Madison Department of Food Science

HUMAN HEALTH ...

## Yogurt may dampen chronic inflammation linked

Bolling: ongoing consumption of yogurt may be having a general anti-inflammatory effect

PUBLISHED ON MAY 14, 2018



Researchers found in a study consuming yogurt may help reduce chronic inflammation, which is a factor in bowel and cardiovascular disease, arthritis, asthma and obesity.

Photo by [kamila/pixabay](#)



# Food Science

UNIVERSITY OF WISCONSIN-MADISON

**Mission → empowered by science,  
driven by health, we make the future of  
food sustainable, inclusive and fun!**

**Vision → globally impactful, sustainable  
food production systems through a  
supportive and innovative community.**

Reach out to me with any questions:

Audrey L Girard, PhD

[algirard@wisc.edu](mailto:algirard@wisc.edu)



**CONTACT US!**



University of Wisconsin-Madison  
Food Science



@uwmadisonfoodscience



@uw\_foodsci



UW-Madison Department of  
Food Science



Website for UW-Madison  
Department of Food Science