



Harper Adams
University

Food activities @ THE FOOD ACADEMY

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The West Midlands Regional Food Academy

- £3.2M project funded by Advantage West Midlands to:
 - Support regional food and drink businesses
 - Raise regional profile of food and drink
 - Increase economic development and prosperity
- Formally opened December 2009
- Employed seven FTEs (manager, technologists & technicians)
- 300 business interventions
- 8 incubated businesses





The Regional Food Academy (2012 onwards)

- UG/TPG/APP learning
- UG & PG research
- Industry outreach
 - The AGRI project
- Short courses
- External engagement
 - Schools & teachers
 - Conferences
- A base for our food staff





The Regional Food Academy (2012 onwards)



A special thanks to our 2023 partners:

- UG/TPG/APP learning
- UG & PG research
- Industry outreach
 - The AGRI project
- Short courses
- External engagement
 - Schools & teachers
 - Conferences
- A base for our food staff



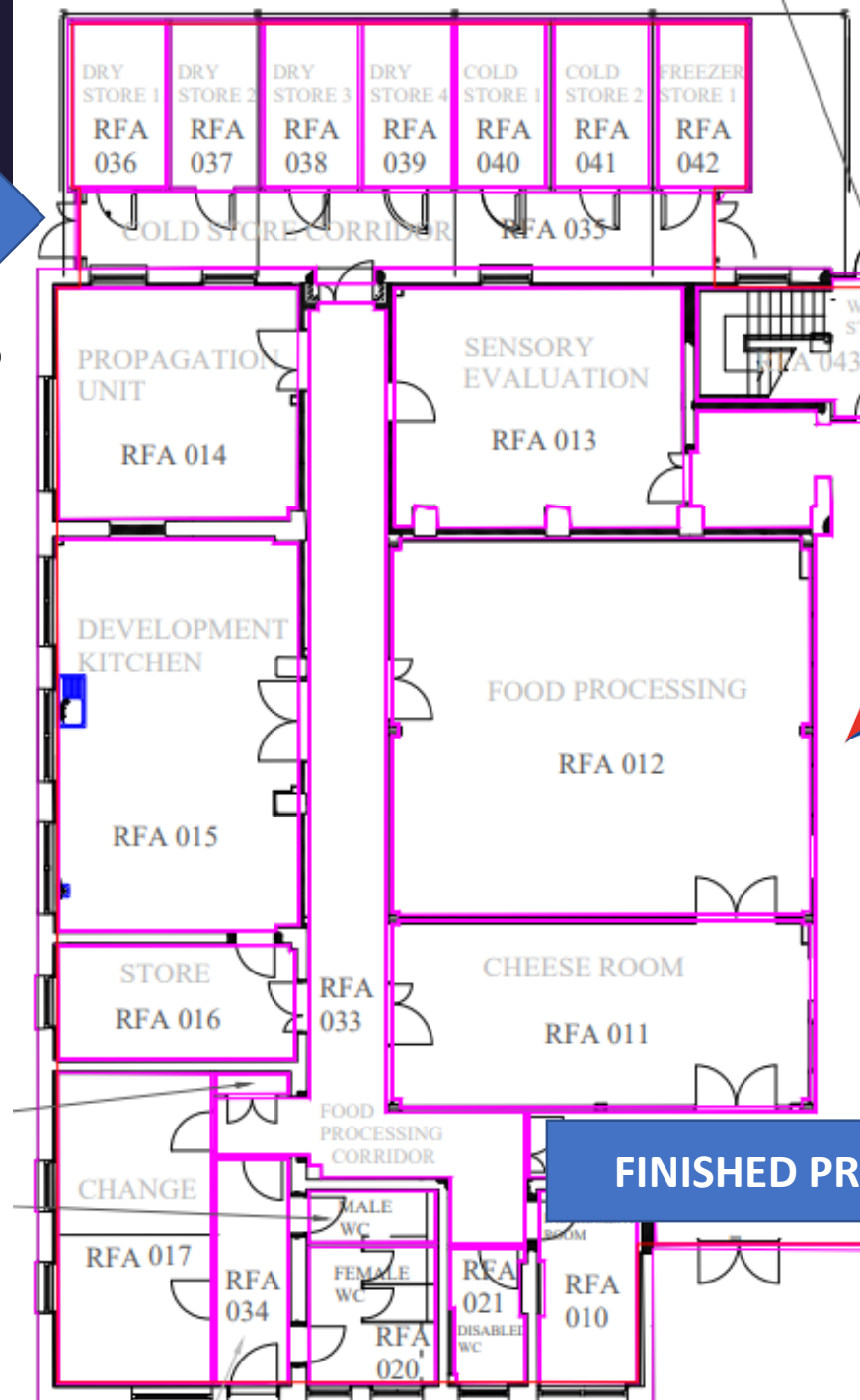
Everest People Solutions





Food Academy Resources

- New Product Development Kitchen
- Food Processing Hall
 - Bakery
 - Brewery (+ vineyard)
 - Cheese and dairy products
 - Modified atmosphere packaging
- Butchery Room (formerly Propagation Unit)
- Instrumental Analysis Room
- Sensory Evaluation Room
- Focus Group/Food Creativity Studio
- Food Grade Lecture Theatre
- Exhibition/Conference Space





Meat and Poultry

- **Key equipment**

- Butchery
- Bowl chopper
- Mincer
- Sausage stuffer
- Smoker
- Packaging (VP & MAP)
- Blast chillers/freezers/ovens
- Stagionello cabinet (meat aging & curing)
- Binder alternating climate chamber (-40°C to +180°C)





Dairy

- **Key equipment**

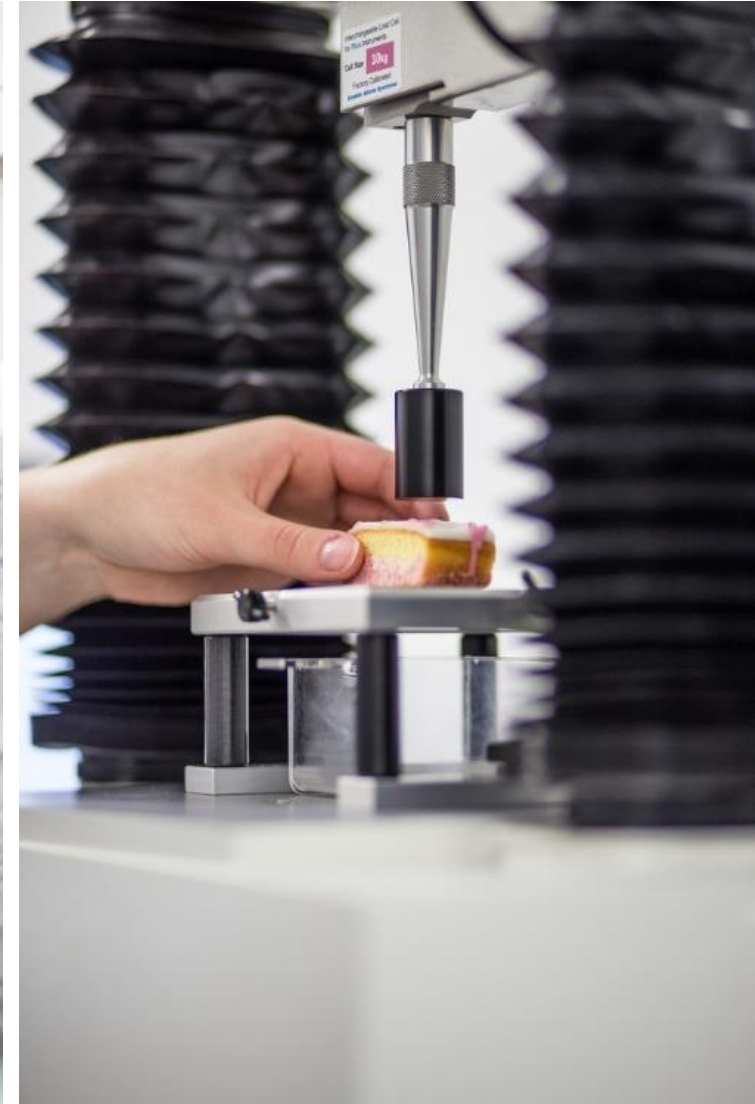
- Pasteuriser
- Homogeniser
- Cheese vats
- Manual and automated cheese presses
- Ice cream maker
- Six x 5 L yoghurt culturing unit
- Freeze dryer





Evaluation Tools

- **Instrumental**
 - Water activity
 - Moisture content
 - pH, colour
 - Texture, viscosity
 - MAP gas composition
- **Microbiology**
- **Chemical analysis**
- **Nutritional analysis**





Sensory Evaluation





Consultancy & Research

- **Meat & poultry**

- Extending the shelf life of red meat
- Evaluating the use of offal in NPD ready meal applications
- Meat eating quality assessment (texture, bone strength, drip loss, sensory)
- Odour absorption of poultry packs
- Societal research: People, gender, immigration, employment



Consultancy & Research




- **Dairy**

- Improving the safety of raw milk cheeses
- Improving the sensory characteristics of low fat, low salt cheddar cheese



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Influence of rate of inclusion of microalgae on the sensory characteristics and fatty acid composition of cheese and performance of dairy cows

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Where to next?

Food Academy and Innovation Centre

- Consultancy, research, training, services, community
 - NPD, Food & Drink Processing, Food Quality & Safety, Nutrition, Sensory, Food Waste
 - Sustainable Supply Chains and Life Cycle Measurement for new-to-market food products
- Innovation support/incubator space
- Business support
 - Agrifood and Agribusiness start ups
- More short courses
- Home of the Harper Street Market
- **Go-to-collaborator with industry**

