

Croeso nôl

Welcome back

Cynyddu nifer y bobl sy'n gwneud prentisiaethau

Justine Fosh
Bwrdd Diwydiant Bwyd a Diod Cymru

Increasing uptake of apprenticeships

Justine Fosh
Food and Drink Wales Industry Board

Lansio Prentisiaeth Peirianeg Bwyd a Diod Lefel 3 newydd

John Griffiths, Princes Food
Simon Yorke, City & Guilds

Launching the new Level 3 Food & Drink Engineering Apprenticeship

John Griffiths, Princes Food
Simon Yorke, City & Guilds



Food and Drink Wales

Invest in Skills Conference – 8th Feb 2018

Food and Drink Engineering Apprenticeship

John Griffiths, Engineering Director, Princes Ltd

Simon Yorke, Lead Technical Advisor, City & Guilds



Engineering Apprenticeships

- Introduction
- Who we are
- Why are we here – The Problem
- The 5 step approach
- What have we achieved to date
- Where do we go from here

Introduction – John Griffiths

- John Griffiths – Engineering Director Princes Ltd (Chairman of the Food and Drink Engineering Industry Skills Partnership)
- Born Bangor – Sometime last Century!!!
- Dragged up in Dwygyfylchi!!!
- Started career in 1983 – As an Apprentice Toolmaker at Hotpoint Llandudno Junction (GEC at the time, Then Marconi, Then GE, Then Indesit, Then left!!!)
- Progressed through vocational route to Post Graduate level qualifications Transcended Sectors - Brown/White Goods, Automotive and FMCG

Introduction – Simon Yorke

- Simon Yorke – Lead Technical Advisor at City & Guilds. Principally working with the Engineering and Manufacturing sector
- Born St Helens – Family originally from Deeside/Flintshire.
- Started career in 1995 – As an Apprentice Electrician at a local company.
- Progressed onto higher level qualifications in Electrical and Electronic Engineering.
- Became a college lecturer, became head of department and worked as a technical consultant prior to joining City & Guilds full time.

Our Business

- The name behind many brands and own label products
- Manufacture a range of products in sites throughout the UK from Wales to Wisbech as well as internationally
- Source ingredients from across the world
- Committed to manufacturing in Wales
- Cardiff site is a Centre of Excellence for Fruit Juice production



Issues faced – Quantity of Food Engineers

- We have a high demand for Engineers now & it will increase
 - Ageing workforce
 - Increased introduction of automation across our factories
 - Industry 4.0 will only accelerate this demand
- Historically we have not done enough - we train few engineers (circa 250 apprentices) per annum UK wide?
- Attraction
 - Our industry is seen as a poor relation to others and not as an industry of choice for an Engineer.
 - Poor visibility of the career pathways
- Nature of the industry
 - We are a truly unique manufacturing industry due to
 - Compliance requirements, processes , machinery, volumes and speed and the variable nature of food ingredients

Engineering Demographics – Example ABC Ltd 2013

- 96 Engineers looking to retire in 10 years
- 191 in next 20 years
- Current intake 12 Apprentices per year
- It will take 16 years assuming no other natural wastage to plug the gap!!!
- Apprenticeships are a long term sustainable way of maintaining continuity of the required skills to run our businesses efficiently and effectively and ensure we are here to stay!!!

Age Range	No of Engineers 2014	% of Total Population
55+	96	31%
45 - 54	95	30%
35 - 44	50	16%
26 - 34	36	12%
16 - 25	35	11%
Total	312	100%

Engineering Demographics – Example ABC Ltd 2017

Age Range	No of Engineers 2017	% of Total Population	Difference
55+	114	32%	18+
45 - 54	109	30%	14+
35 - 44	54	15%	4+
26 - 34	43	12%	7+
16 - 25	41	11%	6+
Total	361	100%	49+

Apprentices

- 114 Engineers looking to retire in 10 years - 3% attrition per year
- 223 in next 20 years - 65% of workforce
- Apprentice intake 4%
- Attrition - 3% Retiring 6% Leavers
- We have a gap in supply and demand
- Need to understand end game No's & skills

Issues faced – Quality of training

- Previous Apprenticeships for Food and Drink Engineers have not been designed around the industry needs.
- Delivery takes place in providers who often lack understanding of the sector.
- Lack of industry critical mass means that training providers classes are mixed and from industries with very different engineering needs
 - Result is 'Vanilla' delivery of apprenticeships.
- Industry has become accustomed to vanilla to such an extent that it doesn't recognise the shortcomings or consider an alternative

What and who is going to change this ?

- **It has to be us , the industry, that leads change**
- It is a UK wide issue requiring solutions of scale and quality
- Solutions need to be designed for all – but with implementation according to devolved nations approaches.
- Step 1 - Articulate what knowledge, skills and behaviours we need from Food Engineers to set a single standard.
- Step 2 – Design a programme , including a nationally recognised qualification and supporting materials to support providers to deliver.
- Step 3- Find providers who both understand food and can deliver high quality , industry relevant engineering trainers.
- Step 4 – Aggregate demand from food and drink employers to support the providers not just with learners but with equipment, cpd and even delivery support.
- Step 5- Promote and market the apprenticeship to young people.

Step 1 - Setting the standard Why ?

- To clearly articulate what is expected as an output
 - Employer
 - Employee
 - Providers
- To ensure acquired skills and learning are applied in an optimum manner.
- To ensure relevance.
- To provide Focus.
- To set a high bar.
- For the Apprentice to hit the ground running!

Step 1 - Setting the Standard

- Standard is the same across all nations – used in England as the 'Trailblazer' Apprenticeship.
- Over 50 food and drink companies have input into this from around the UK.
- **Articulates the core knowledge and skills** (both engineering and food processing) requirement for all maintenance engineers in the food and drink industry.
 - Identifies the additional ones required to be
 - Mechanically biased.
 - Multiskilled.
- **Behaviours** –Profiles the ideal behaviours of a Maintenance engineer.
- Describes levels of performance – including **excellence**.

Unilever

2 Sisters
Food Group

Britvic

Glanbia

Nestlé

Heineken

Morrison's

Muller

Arla
Foods

Step 2 – Developing the Programme

- Designing a best practice programme to ensure that providers can deliver against the standard.
- In Wales this sits in a new Apprenticeship Framework – **Food and Drink Technical**.
- Components include a brand new Qualification – Level 3 Diploma in Food and Drink Engineering Maintenance.
- Accredited by City and Guilds.

On programme qualification features

- Brand new qualification.
- Designed jointly by the industry.
- Whole thing is contextualised to the food industry.
- It is a graded qualification to support the aspiration for excellence.
- Contents over view
 - Core Technical Skills
 - First line routine maintenance
 - Best Practice techniques
 - Produce replacement parts
 - Electrical, mechanical and fluid power systems
 - Welding

Qualification Units and Pathways

Core Units	<p>All learners complete all of the following units:</p> <p>301 Compliance</p> <p>302 Maintenance Best Practice</p> <p>303 Materials Science</p> <p>304 Mechanical Maintenance Skills I</p> <p>305 Producing Replacement Components I</p> <p>306 Fluid Power Systems</p> <p>307 Welding I</p> <p>308 Electrical Maintenance I</p> <p>309 Services and Utilities</p> <p>310 Thermodynamics</p> <p>311 Maths</p>	
	Learners take all units in one of the following pathways	
Pathways	<p>Mechanical</p> <p>312 Mechanical Maintenance Skills II</p> <p>313 Producing Replacement Components II</p> <p>314 Welding II</p>	<p>Multi-skilled</p> <p>315 Electrical Maintenance II</p> <p>316 Automation</p> <p>317 Understand the requirements of electrical installations BS7671 (2015)</p>

Assessment methods

Assessment method	Description
Assignment	These are set by City & Guilds and marked internally. Centres will be allowed to amend the assignment within certain parameters to ensure it is appropriate to the organisation where the apprentice works.
Short answer question tests	City & Guilds externally set SAQs. These are internally marked by the centre.
Online multiple choice test	City & Guilds externally set and mark online multiple choice tests. These are available on demand.

Assessment methods – Unit 304 Mechanical maintenance in food and drink operations

Unit assessment task

You are required to produce evidence of carrying out **six** planned maintenance activities on mechanical systems in food and drink operations:

- Replace seals on a pump that has an inlet and outlet valve
- Replace seals, oils and at least one bearing in a gear box
- Replace a chain on a chain drive system
- Replace a component on a system with levers and linkages
- Replace a component on a system with cams and followers
- Replace a component on a system with clutches and brakes

You should meet with your employer and assessor to agree an assessment plan.

Three of the maintenance activities must be completed in your workplace. The remaining maintenance activities can be carried out in your workplace and/or at your training centre. Your assessor will observe you carrying out those activities.

Assessment methods – Unit 301 Food and drink engineering maintenance compliance

1

Describe how the Health and Safety at Work Act applies to food and drink engineering maintenance operations.

.....

.....

.....

.....

(2 marks)

2

a) State **one** role of an Environmental Health Officer.

.....

.....

(1 mark)

Assessment methods – Unit 317 Understand the requirements of electrical installations BS7671 (2015)

1. BS 7671 identifies that the cross-sectional area of a conductor shall be determined by:
 - a) the admissible maximum temperature
 - b) the nominal voltage
 - c) voltage tolerances
 - d) the earthing system

Additional requirements supported by the National Skills Academy for Food and Drink

- Food Processing to meet company requirements.
 - Manufacturing and Packaging Engineering
 - Product – Ingredients and Packaging
- Legislation – Food safety, HSE, HACCP, TACCP, VACCP
- Sustainability – Environmental legislation
- Supply chain – Effects of customer requirements on the food chain
- CIP – Clean in place principles
- Quality management principles
- CI – Lean philosophies/Continuous Improvement
- Materials Science – Materials used in food manufacturing processes

Behavioural framework requirements

- Core Behaviours
 - Safe Working
 - Ownership
 - Pride
 - Self Development
 - Integrity and Respect
 - Problem solving
 - Open to change
 - Industry/Company perspective
 - Effective communicator
- Professional Registration – Eng Tech
- Progression
 - Incorporated
 - Chartered

Feedback from centres

- Meets employer needs well.
- Assessment is straight forward.
- The standard of the apprentices work is very high.
- The flexible nature of the assignment tasks (workshop and workplace) supports delivery.
- Delivery that was often an 'add on' now embedded and accredited in the programme.
- Learners are very involved.
- The workbooks from the NSA work very well alongside the qualification.
- It has created a standard for the requirements to work in the industry

Step 3 – Identify Providers

- Delighted to say there has been much interest already from a number of providers.
- Key questions from industry
 - Have they got the capability?
 - Are they up for the journey?
 - Do they understand food?
 - What help can I give them?
- Key question from Providers
 - Show me the volume !

Step 4 – Aggregate Demand

- We know we need to build demand for providers to want to offer – industry work together
 - Through the Welsh Engineering Industry Partnership.
- Already delighted that the following businesses have committed
 - Princes Foods
 - Volac
 - Allied Bakeries
 - The Cake Crew
 - Totally Welsh
 - Tregroes Waffles
- Aim is to identify the first cohort to start September 2018

Step 5 – Market the programme

- Delighted that greater apprenticeship focus and marketing is on the Skills Plan.
- Apprenticeships need marketing to
 - Businesses to encourage them to take them up
 - Learners to attract them to our industry

tasty CAREERS
What's in it for me?

FOOD & DRINK MAINTENANCE ENGINEER
L3 Apprenticeship

ENGINEERING

YOUR STUDIES
Throughout your Apprenticeship you'll benefit from a mix of classroom and on-the-job teaching - and get paid to learn.
Your 3-4 year programme will include on-the-job, structured training and further provider-based training at regular intervals.
On the way to achieving your Apprenticeship you'll acquire a Level 3 Diploma in Food and Drink Engineering Maintenance along with Essential Skills Wales in Communication and Application of Number.
So as well as having the skills and experience you'll need to fast-track your career, you'll also have extra qualifications on your CV. Plus, you'll be well on your way to being able to register as a member of the industry's professional associations, IET or IMechE, at technician level.

ABOUT YOU
If you have a passion for engineering and a desire to work on the food and drink industry, this Apprenticeship is the perfect start to a long and prosperous career.
You'll typically need a minimum of GCSE level in English, Maths, a science and IT to apply for this Apprenticeship - but employers can see their own chance so this can be flexible.

Maintenance Engineering
Who is this programme aimed at?
This apprenticeship programme is aimed at those working or starting to work in engineering maintenance roles in food and drink.
Who will the programme develop?
This programme will develop the skills and knowledge of technicians and Maintenance Engineers.
What shortages of skills in food and drink engineering and this shortage is at Technician level as well as at Degree level.
This new Apprenticeship framework is to provide the industry with the STEM based apprenticeships for technician level roles to address these shortages. Apprentices will learn about both core mechanical and multi-skilled engineering within a food and drink context.
This includes best practice maintenance approaches and techniques in the food and drink industry, principles of operation of mechanical equipment and utilities. These apprentices following a pure multi-skilled route will also learn the operation of process control systems within an engineered system.
Apprentices will prepare for the maintenance of engineered systems in the food and drink industry and perform mechanical first line routine maintenance including removing, inspecting, fault finding and repairing mechanical and electrical components.
Apprentices will be able to replace components using manual and machine processes and perform maintenance on food production equipment. They also learn to apply engineering problems and to maintain fluid power systems.
Apprentices will demonstrate activity, fault finding and problem solving and are responsive to demands, have strong communication skills and take responsibility for their own and others.
Apprentices will work in their shift, site, company and industry. They learn to operate as part of a team, building good relationships and respect.
Apprentices will be able to monitor mechanical equipment, repair and produce a wider range of components and perform maintenance of programmable control systems.
This is a unique programme integrating both core engineering within a food and drink context to develop the kind of maintenance engineer that has not been available previously. Engineers develop both electrical and mechanical knowledge and skills within a food and drink environment.
Skills focus
Major skills shortage in engineering is forecast to increase due to increased automation and an ageing workforce demographic.

City & Guilds

Success so far

- England delivery commenced and year 2 enrolments over 200 a year now starting.
- 10 colleges/ providers offering.
- Several £000's of equipment donated to providers to support developing their facilities.
- New Degree apprenticeships in development for progression routes.
- Launch today is the opportunity for businesses in Wales to come on board the journey.

Engineering - The Vision

Over the next 5 years we move to the situation whereby...

- Engineering in our industry is no longer a poor relation to others but is self contained, confident .. and even admired!
 - A career as an FMCG Engineer is seen as attractive and a real option for young people
- Clear career path ways in Food and Drink Engineering based on a number of sustainable programmes and providers
- Excellent learning experience in well equipped, modern and relevant training facilities.
- Industry demand & cohesion - More Welsh businesses work together and train more apprentices
- Greater efficiency and productivity- Businesses are more productive and more competitive through their people .

The only sustainable advantage of an organization is the ability of its people to learn and improve faster than the competition



Insanity

“Doing the same thing over and over and expecting different results”

- Albert Einstein



Cyflwyno Prentisiaeth Peirianeg Bwyd a Diod newydd

Justine Fosh
Bwrdd Diwydiant Bwyd a Diod Cymru

Delivering the new Food & Drink Engineering Apprenticeship

Justine Fosh
Food and Drink Wales Industry Board

Cynhyrchiant ac Arloesedd

Justine Fosh
Bwrdd Diwydiant Bwyd a Diod Cymru

Productivity & Innovation

Justine Fosh
Food and Drink Wales Industry Board

Ymchwil a datblygu: gosod yr agenda sgiliau ar gyfer y dyfodol

Chris Price-Jones, BIC Innovation
Martine Spittle, Prifysgol Aberystwyth

R&D: Setting the future skills agenda

Chris Price-Jones, BIC Innovation
Martine Spittle, Aberystwyth University



R&D: Setting the Future Skills Agenda

CHRIS PRICE-JONES

Chairman, R&D Director

Bic Innovation Ltd

R&D / Innovation Drives Skills

Agenda

- ◉ Hand made to Production Line
- ◉ Batch to Continuous
- ◉ Continuous Process to PL Control
- ◉ Reactive Loops & Recipe based control
- ◉ Real time monitoring – full automation

Before....



After....



Before....



After....



R&D/Innovation moved the company from....

- ◉ Hand made to Production Line
- ◉ Batch to Continuous
- ◉ Continuous Process to PL Control
- ◉ Reactive Loops & Recipe based control
- ◉ Real time monitoring – full automation

What are the big challenges facing the industry worldwide?

Macro challenges

- ◉ Feed the world
- ◉ Ageing population vs ageing well?
- ◉ Malnutrition / deficient diets
- ◉ Childhood obesity
- ◉ Haves and have nots / widening gap?
- ◉ Expanding population & less agricultural land
- ◉ Climate change

Micro challenges?

- ◉ Innovative Scientists / Engineers to design modify systems
- ◉ Specialist technicians to install and maintain systems
- ◉ Attention to calibration of in-line measurement - Less Analysis?
- ◉ Recruit and retain?
- ◉ Ability to manage and deal with innovation and the change it brings.



Where are we now?

- ◉ Fully interactive process control (1984)
- ◉ Real time in line measurement
- ◉ Robotic systems
- ◉ Machine connectivity
- ◉ Wear and maintenance monitoring

Where are we going?

- ◉ Full AI based systems
- ◉ First CRISPR/cas9 crop by 2020
- ◉ Driverless cars /Driverless Food?
- ◉ Social problems – no manual work
- ◉ Competing for a well educated workforce in a low margin sector

What can we do?

- ◉ Know that we don't know?
- ◉ Do better than we've done in the past?
- ◉ Consider radically different approaches.
- ◉ Become more innovative in our thinking!

What can we do – practical steps?

- ◉ Don't just up-skill our workforce, educate them
- ◉ Help your workforce become agile and adaptable
- ◉ Don't just look at the hard skills you need now
- ◉ Look at softer skills/good management
- ◉ Equip your team to manage constant change and ***enjoy*** innovation
- ◉ Build a culture where all can contribute to success and benefit from it.



Personal milestones

- ◉ First job in Food Industry 1971
- ◉ In 1975 graduated from a “thick sandwich course”
- ◉ Late 1984 taught OND, HND Food Technology – whatever happened to them?
- ◉ Early 1984 installed a plant that could telephone me at home and ask what we wanted to make!
- ◉ 1990 defended to government committee the retention of “Home economics in school curriculum”
- ◉ 2000’s Became involved in wholesale off-shoring of British manufacturing



What else was happening around me!

- ◉ First job in Food Industry 1971
- ◉ In 1975 graduated from a “thick sandwich course”
- ◉ Late 1984 taught OND, HND Food Technology – whatever happened to them?
- ◉ Early 1984 installed a plant that could telephone me at home and ask what we wanted to make!
- ◉ 1990 defended to government committee the retention of “Home economics in school curriculum”.
- ◉ 2000's Became involved in wholesale off-shoring of British manufacturing.
- ◉ First mobile phone in fiction 1906 – a bit early!
- ◉ Isaac Asimov began “Foundation Trilogy” 1966
- ◉ Arpanet 1983
- ◉ Digital cellular 1990
- ◉ www 1991
- ◉ Wi-fi 1991
- ◉ First social media site 1997
- ◉ Human genome sequenced 2003



3 innovation thoughts

- ◉ There's a lot of R&D and innovation happening around you, that you need to be aware of
- ◉ You need a team about you that is skilled, experienced and well educated to evaluate likely impacts on your business.
- ◉ You need to be proactive not only reactive



Diolch yn fawr / Thank you

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Food Science at IBERS

Marty Spittle

IBERS' Distance Learning Manager

Overview

- Food Science Capabilities
- Collaborative Research Opportunities
- High Level Skills Training

IBERS is:

- world-leading institute for advanced research in agri-food systems
- currently engaged with over 250 companies
- £18M+ annual research funding

Food Science Capabilities –

- New and emerging technologies
- Finer more detailed analysis
 - Genomics
 - Phenomics
 - Metabolomics
 - Microbiology

Genomics:

Next Generation Sequencing: Testing purity and provenance, distinctiveness credibility of branded food stuffs

Marker and chip capability: assess and select crops and livestock for value-added traits.



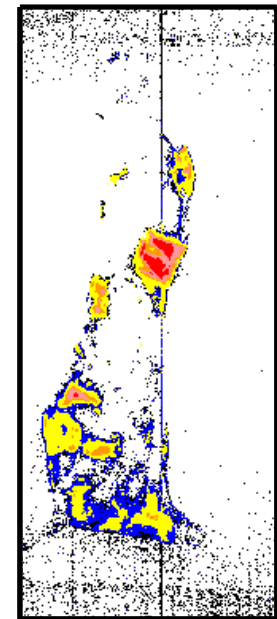
Phenomics and image analysis

- **Phenomics** - Physical and chemical expression of genes in response to environment
- **High-throughput classification** (size, shape and colour)
- **Environmental control**
- **Imaging Technologies:**
 - **Hyperspectral imaging** (quality traits and chemical composition)
 - **Bio-imaging** (Texture and structure)
 - **CT scanning** for 3d shape analysis



Image analysis e.g. Faecal contamination detection

- Meat contamination detection – online in meat processing plants – florescent detection of chlorophyll markers



Metabolomics:

- Systematic study of the unique chemical fingerprints that specific cellular processes leave behind - Plant, animal, human
- High-end, high through-put mass-spectrometers, computing resources and advanced analytical capability
- Applications:
 - Bio-active food discovery and development of novel added value crops
 - Content analysis - fibre, fatty-acid, lipid, protein, carbohydrate composition, mineral assessment, secondary metabolite content.
 - Identification of dietary exposure biomarkers - objective human-diet analysis for clinical diet and health trials



Microbiology

- Food safety – e.g. campylobacter detection
- Brewing – yeast viability and vitality
- Effects on gut micro flora, with implications for the development of pre- and probiotics.
- Bio-fermentation and bio-refining - production and extraction of bioactives and novel food additives



Collaborative opportunities

Collaborative opportunities

Well-being and Health Assessment Research Unit (WARU)

Access to cohorts of people

- Food intervention trials/health monitoring /pre-chronic disease phases
- Validating health claims for food products
- Human responses e.g. effect of ingredients on glucose control, fat deposition, muscle mass
- Consumer behaviours associated with satiety, cognition and stress.



Collaborative opportunities

Future Foods

- Free initial discussions and project planning
- Collaborative research e.g.
 - Potential health benefits
 - Composition
 - Pilot product/extraction methods

Aberystwyth Innovation and Enterprise Campus (AIEC)

IBERS capabilities available at pilot scale

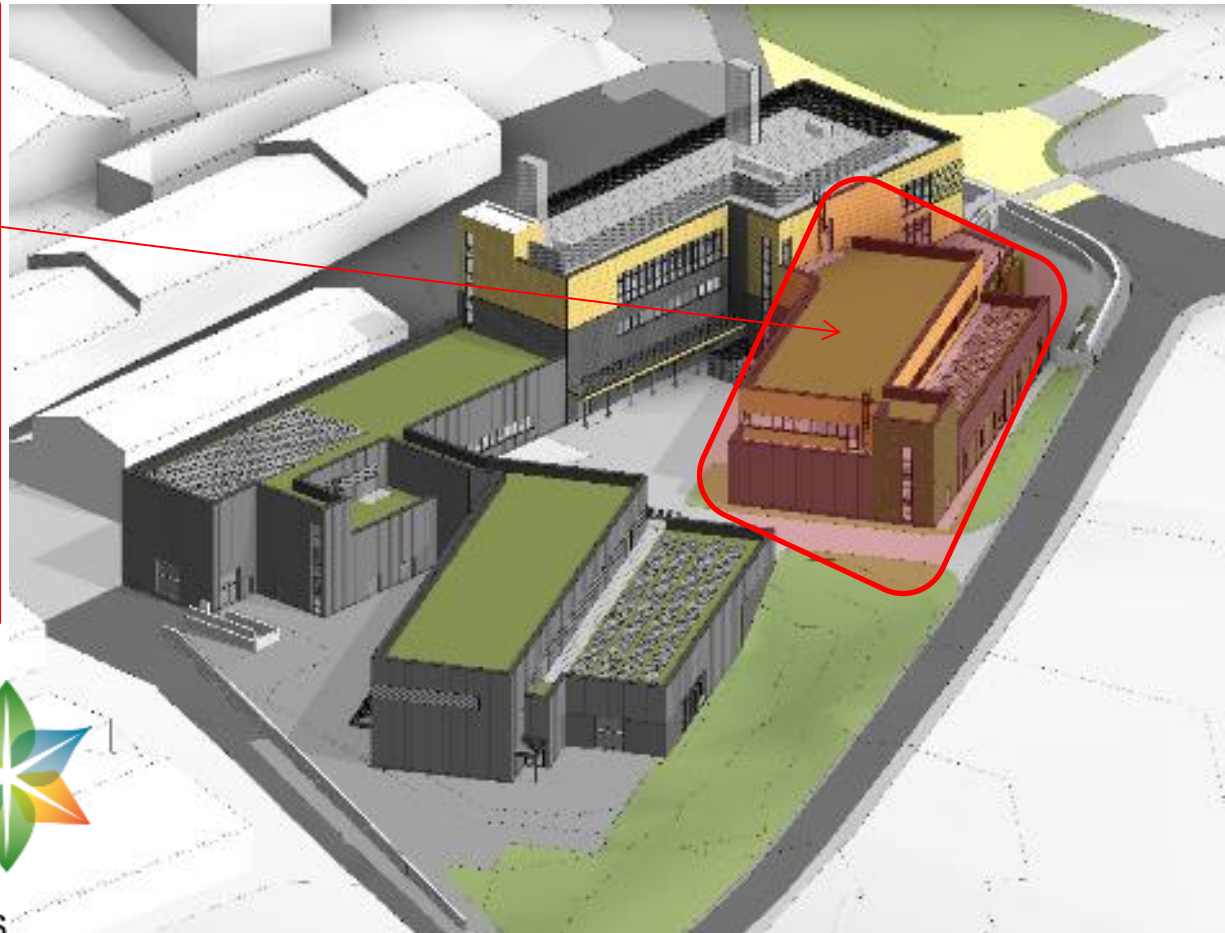
- Office space
- Use of Facilities





Future Food Centre

Meat, dairy and liquids pilot scale processing – food grade
Packaging and storage facilities
Food quality testing laboratories
Sensory Testing Suite
Demonstration Kitchen
Bakery
Microbrewery
Microbiology laboratories



Campws Arloesi a
Menter Aberystwyth



Aberystwyth Innovation
and Enterprise Campus

Meat science:

- Composition testing e.g. fatty acids
- Lipid biofractionation – via metabolomics
- Shear force testing
- Sensory analysis – taste, texture, hedonistic qualities





Bioprocessing Centre

Field laboratory
Primary processing room
Downstream processing unit
Fermentation unit
Industrial Biotechnology Unit
Bioprospecting Area
Clean Lab. ISO7
Synthetic Biology incl. Robotics

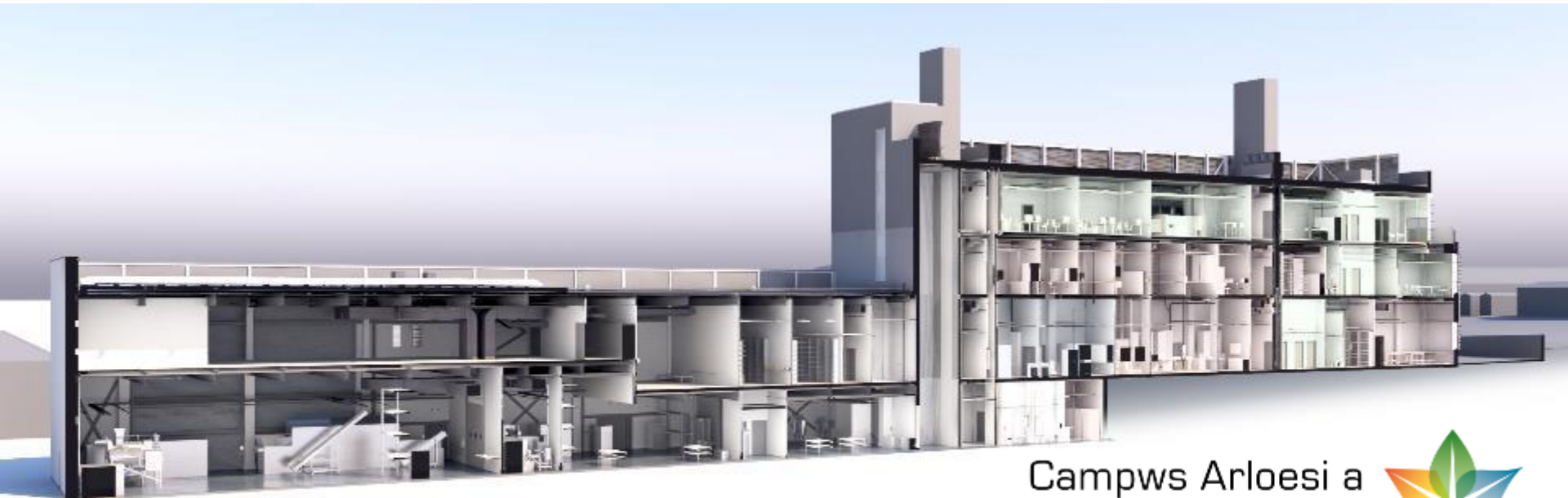


Campws Arloesi a
Menter Aberystwyth



Aberystwyth Innovation
and Enterprise Campus

Biorefining Pilot Facility



Campws Arloesi a
Menter Aberystwyth

Aberystwyth Innovation
and Enterprise Campus





Analytical Science Centre

Bioprospecting Area

Extraction facilities

*Analysis of – mineral and trace
elements, fibre analysis, total fatty
acids, vitamins, lipids and polar
compounds.*

LC-MS and HPLC Laboratories

Gas Chromatography Room

Microbiology Laboratories

Clinical trials capabilities

Data Processing Suites

Analytical Chemistry Service Unit



Campws Arloesi a
Menter Aberystwyth



Aberystwyth Innovation
and Enterprise Campus

High Level Training:

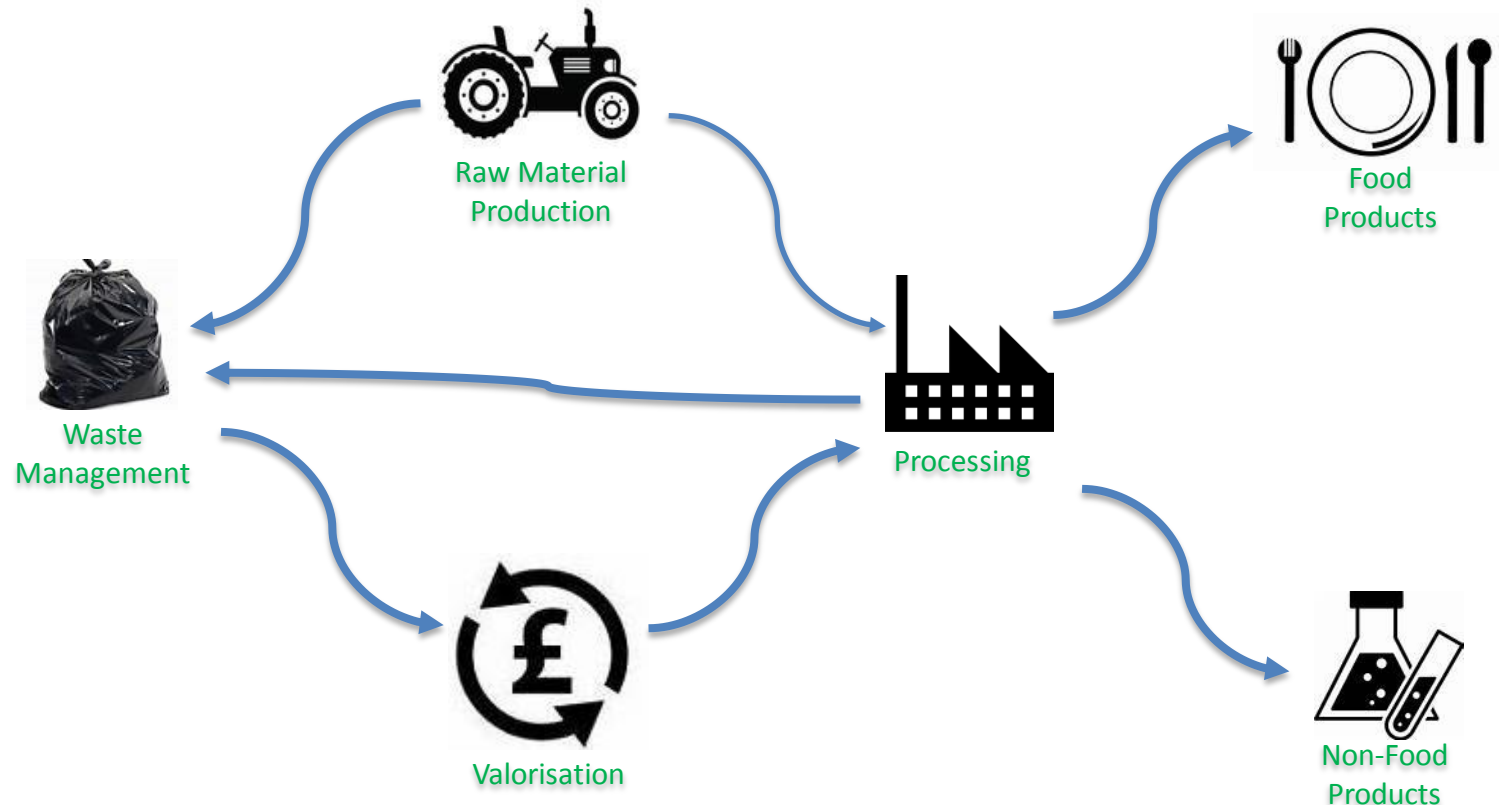
High Level Training:

1. AgriFood Training Partnership – Reading, Aberystwyth, Bangor, Harper Adams, Nottingham, Cranfield (www.aftp.co.uk/) – upcoming courses:

- The Science of Wheat & Milling
- Sustainable Supply Systems: Production to Processing
- Diet Quality and Health
- International Food Law - The Basics
- Food Flavour
- Getting your Food Product to Market

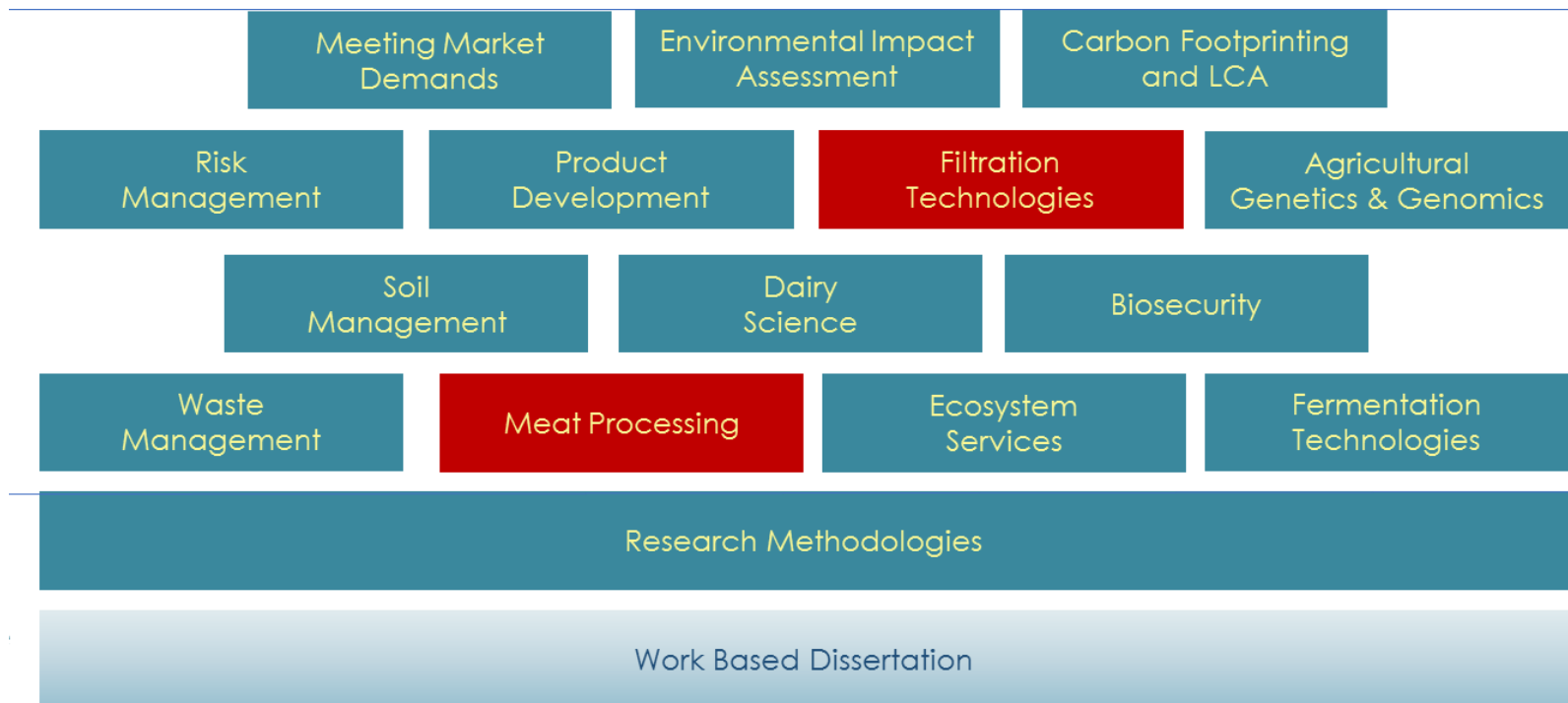
2. Welsh BioInnovation – Aberystwyth, Swansea, AIEC

- Subsidised training for WW&V
- High level and technical skills in bio-based businesses



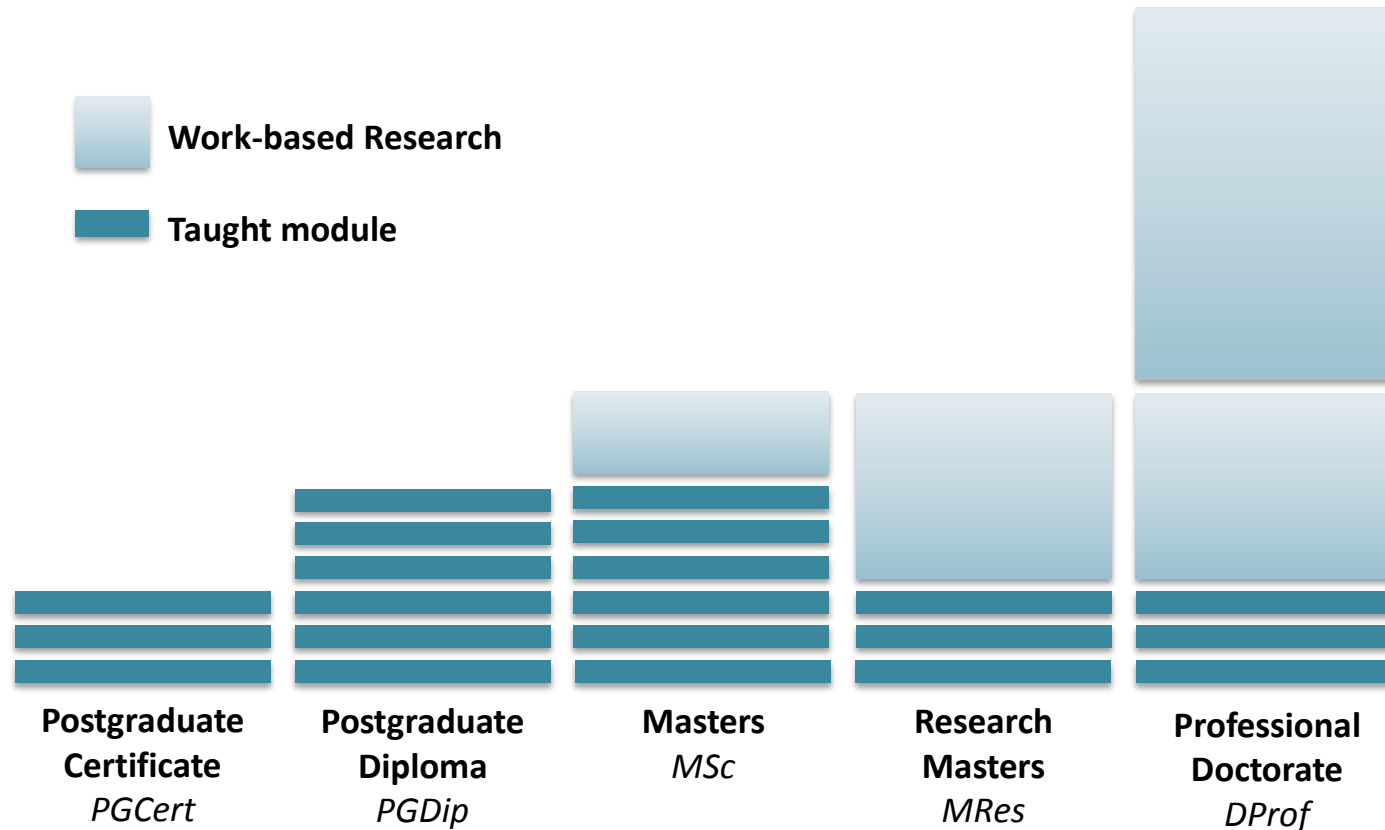
2. Welsh BioInnovation – Aberystwyth, Swansea, AIEC

- Flexible Modular Training



2. Welsh BioInnovation – Aberystwyth, Swansea, AIEC

- Build Postgraduate Qualifications



Diolch yn fawr

Sgiliau a heriau wrth wella cynhyrchiant

Kees Huysmans, Tregroes Waffles
Iwan Thomas, Bwrdd Uchelgais Economaidd Gogledd
Cymru
David Lea-Wilson, Halen Môn,
Philip Tomlinson, Tomlinson's Dairies
Ainsley Baker, Kite Consulting

Skills Challenges around improving productivity

Kees Huysmans, Tregroes Waffles
Iwan Thomas, North Wales Economic Ambition Board
David Lea-Wilson, Halen Môn,
Philip Tomlinson, Tomlinson's Dairies
Ainsley Baker, Kite Consulting



Improving productivity



Everyone agrees with improving productivity

BUT

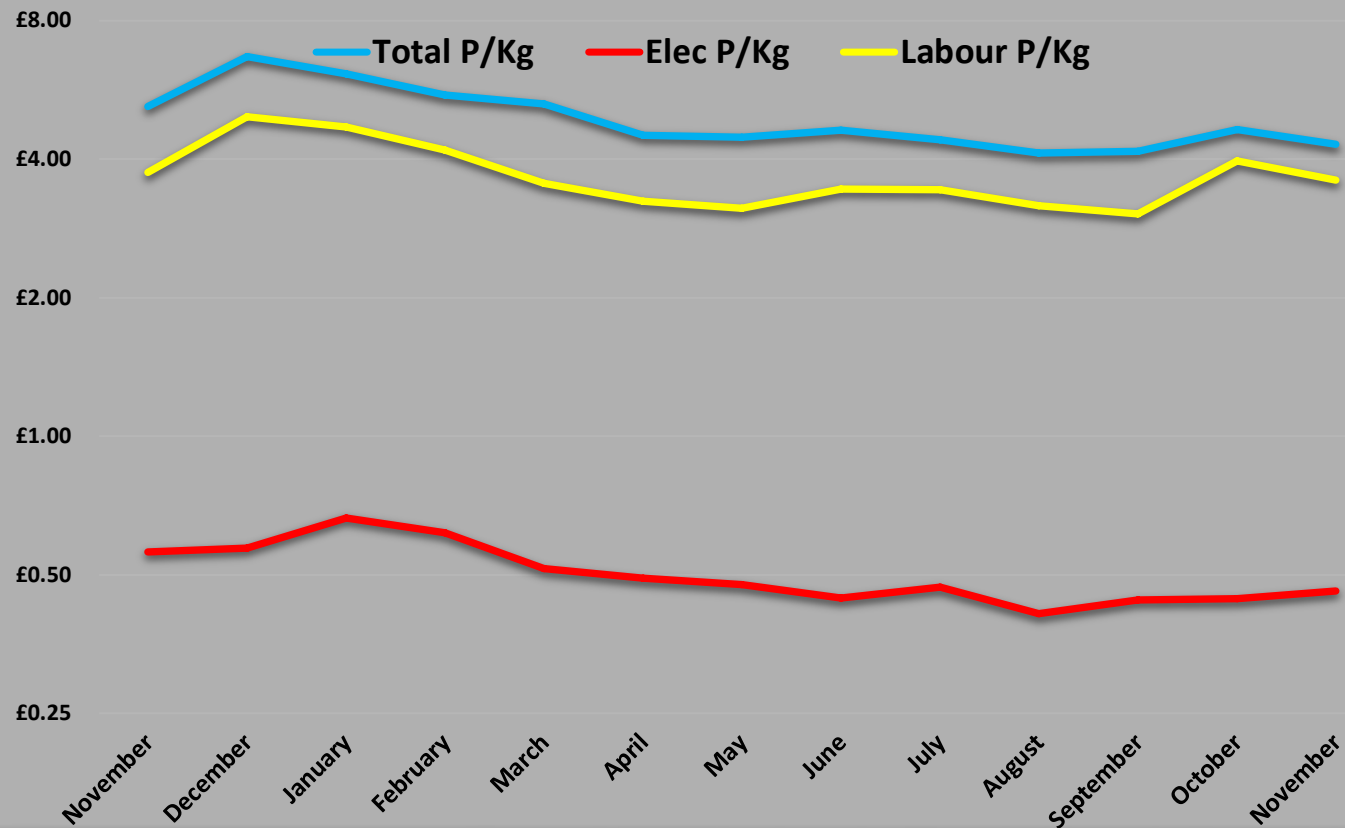
- If you can't measure it, you can't monitor it
- If you can't monitor it, you can't improve it
- Or prove it



But before that agree
Quality standards – one
example below



Costs P/Kg Dec'16 - Dec'17



What to measure

Key Performance indicators (KPI)

For us

- Labour per kilo
- Energy per kilo
- Overheads
- Complaints
- Customer retention rate
- New customer recruitment
- New products



Shared Productivity wall - staff only room



Shared quarterly

- Data by itself is useless
- Everyone needs to know how we are doing!
- We used to call it Sustainability
- Now call it efficiency or profitability



Egwyl Break

Buddsoddi mewn sgiliau masnachol: safbwynt y prynwr

Jon Williams & Dean Lindsay, CH&Co

Investing in commercial skills: A buyer's perspective

Jon Williams & Dean Lindsay, CH&Co

The Perfect Supplier!

Invest in Skills, Invest in Growth.

8th February 2018

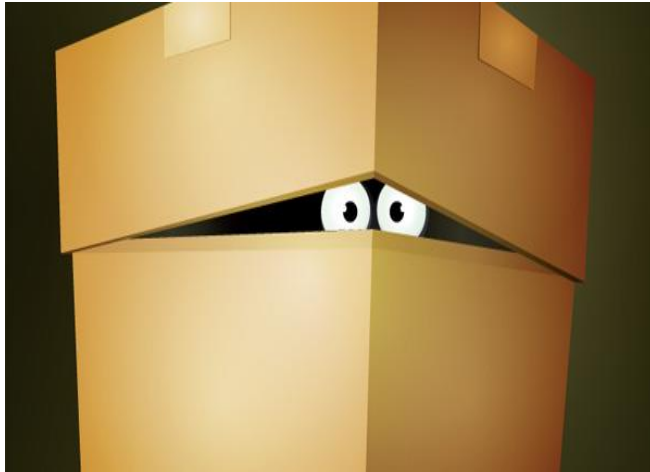
The logo for Amper&and, with 'Amper' in a serif font and '&and' in a stylized, lowercase font.The logo for Brookwood, with 'Brookwood' in a green, cursive script font and 'INDEPENDENT SCHOOL CATERER' in a small, sans-serif font below it.The logo for Catermasters*, with the word 'Catermasters*' in a cursive script font.The logo for Charlton House, with 'CHARLTON HOUSE' in white, uppercase, sans-serif font on a red background, and 'EST 1991' in a small, white, sans-serif font on a black background to the right.The logo for Chester Boyd London, with 'CHESTER BOYD' in a serif font and 'LONDON' in a small, sans-serif font below it.The logo for Host, with 'host' in a lowercase, cursive script font, a crown icon above the 'o', and 'a different taste' in a small, sans-serif font below it.The logo for LSSO, with the letters 'LSSO' in a blue, stylized, sans-serif font.

CH&Co. GROUP

Dean & Jon



Some Of The Best Suppliers.....



..... Are Hidden In Plain Sight

Amper&and

Brookwood
INDEPENDENT SCHOOL CATERER

Catermasters*

CHARLTON
HOUSE
EST 1991

CHESTER BOYD
LONDON

host
a different taste

LUSSO

And Some



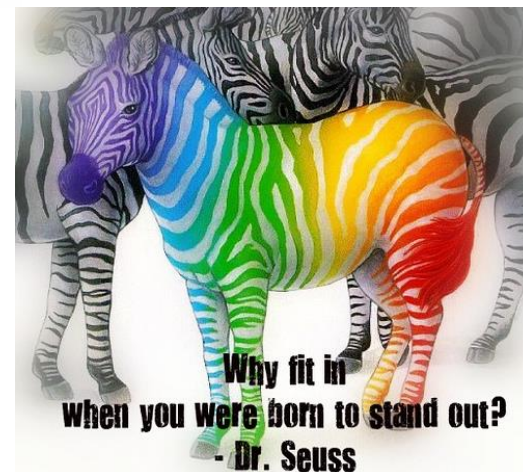
STAND OUT FROM THE CROWD

(for the right reasons!)

The Innovation Den



★★★★★
Excellence



Amper&and

Brookwood
INDEPENDENT SCHOOL CATERER

Catermasters*

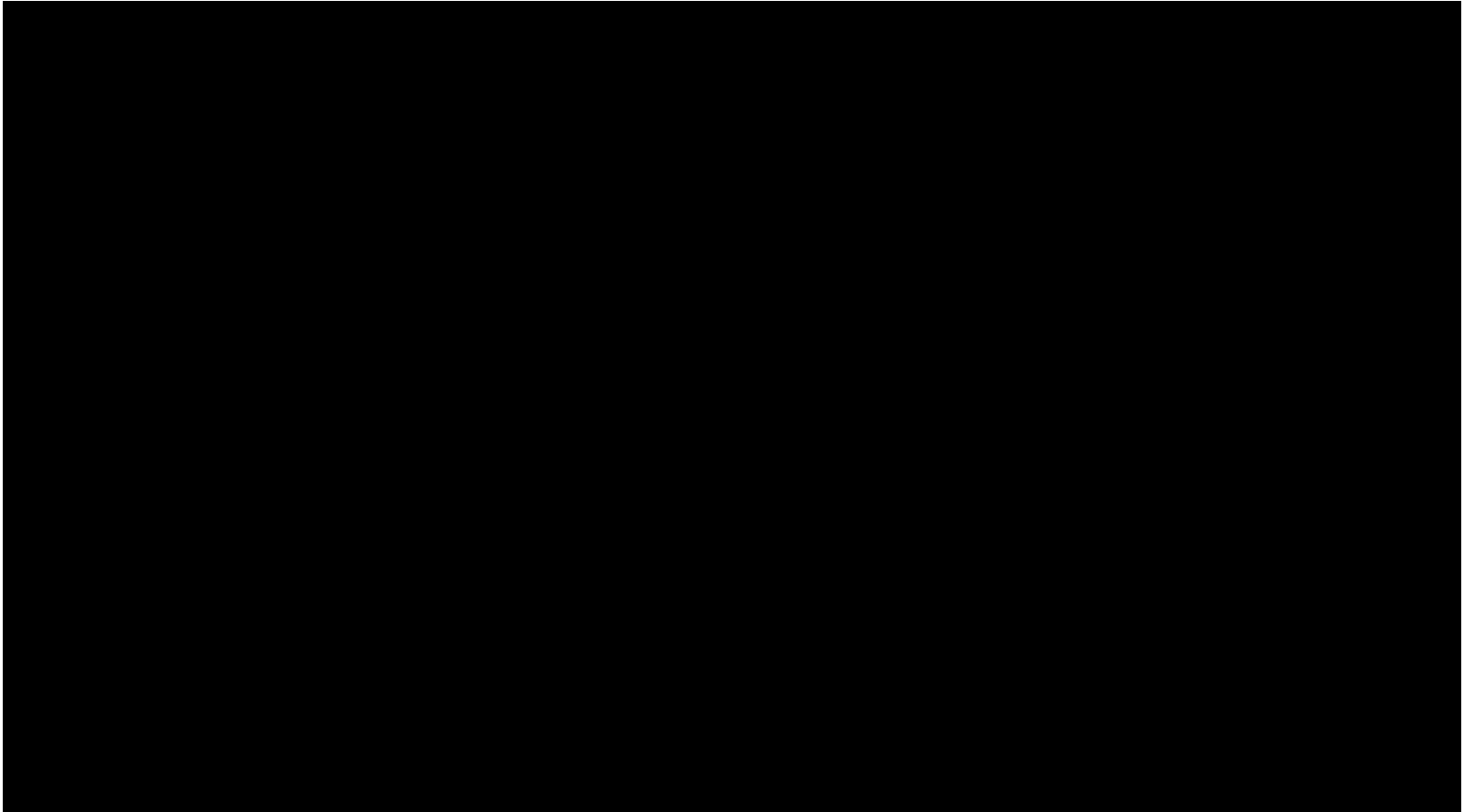
CHARLTON
HOUSE
EST 1991

CHESTER BOYD
LONDON

host
a different taste

USSO

The Innovation Den - Video



What Makes A Great Supplier?



- Supply Chain Solutions



- Operational Innovation & Excellence

What Makes A Great Supplier?



1. Product innovation (go-forward programme)
2. Leading the market
3. Understanding our business
4. Business approach & can do attitude
5. Passionate about the product & company

Supply Chain

Amper&and

Brookwood
INDEPENDENT SCHOOL CATERER

Catermasters*

CHARLTON
HOUSE
EST 1991

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LONDON

host
a different taste

USSO

What Makes A Great Supplier?



1. Packaging – fit for purpose & fit for the environment
2. CSR credentials
3. Well thought through & reasonable commercial expectations
4. Willingness to engage & to educate

Supply Chain

Amper&and

Brookwood
INDEPENDENT SCHOOL CATERER

Catermasters*

CHARLTON
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CHESTER BOYD
LONDON

host
a different taste

USSO

What Makes A Great Supplier?

1. Engagement with customers & clients
2. Education & knowledge sharing
3. Product development conveyor belt
4. Promotions & marketing
5. Growing sales & enhancing margin

Operational

What Makes A Great Supplier?



1. Meeting our clients aspirations

1. Sustainability
2. Provenance
3. Health & Nutrition

2. Supporting new business wins

3. Invoice accuracy

4. Product availability

Operational

Amper&and

Brookwood
INDEPENDENT SCHOOL CATERER

Catermasters*

CHARLTON
HOUSE
EST 1991

CHESTER BOYD
LONDON

host
a different taste

USSO

Debunk The Myths



**Every Business
is the same**



Thank You

Amper&and

Brookwood
INDEPENDENT SCHOOL CATERER

Catermasters*

**CHARLTON
HOUSE**
EST 1991

CHESTER BOYD
LONDON

host
a different taste

LUSSO

Atebion i rai o'r problemau â sgiliau

Justine Fosh
Bwrdd Diwydiant Bwyd a Diod Cymru

Solutions to some of the skills issues

Justine Fosh
Food and Drink Wales Industry Board

Ffyrdd arloesol o ganfod talentau

David Evans, Dylan's
David Lloyd, Prifysgol Metropolitan Caerdydd

Innovative ways of sourcing talent

David Evans, Dylan's
David Lloyd, Cardiff Metropolitan University

Sgiliau Bwyd Cymru – Cyllid ar gyfer sgiliau

Kevin Thomas, Lantra

Food Skills Cymru – Funding for Skills

Kevin Thomas, Lantra

Food Skills Cymru

Kevin Thomas

National Director Lantra



SGILIAU BWYD CYMRU
FOOD SKILLS CYMRU

Food Skills Cymru

“A skilled and capable workforce is a prerequisite in any industry to increase productivity and efficiency, and to fuel innovation and growth”.

- **Towards Sustainable Growth: An action plan for the food & drink industry 2014-20**



SGILIAU BWYD CYMRU
FOOD SKILLS CYMRU

Project Outline

The project aims to address the needs identified in the Wales Food & Drink Strategy:

- Support will be provided to Wales based food & drink businesses (excluding retail) through technical and workforce development.
- A skills diagnostic process will be offered to assist in identifying the relevant technical & skills related gaps
- Support through suitable accredited or non-accredited solutions
- Delivered through a network of quality assured training providers
- Be-spoke solutions developed with the client



SGILIAU BWYD CYMRU
FOOD SKILLS CYMRU

Project outline

- Food Skills Cymru will run alongside and complement other Government funded initiatives such as;
 - Apprenticeships
 - Helix
 - Cywain
- The project will be launched on April 1, 2018 and will run for 3 years initially
- Training solutions will be driven by the demands of industry
- An industry led project steering group established to ensure relevant and up to date issues are identified & addressed.



SGILIAU BWYD CYMRU
FOOD SKILLS CYMRU

Support

- Food & drink businesses will be supported through the process in a number of ways including;
 - Face to face discussion with an experienced account manager
 - Telephone
 - on-line support
- Funding will be available, intervention rates to be confirmed
- Training can be delivered in 'bite-sized' chunks of learning tailored to the job role needs.
- Training delivered 'on-site' wherever possible to limit inconvenience



Outputs – 3 years

- 1000 unique learners
- 1500 training interventions
- 650 businesses supported (including hospitality)

Next Steps

- Appoint project steering group and Chairperson
- Skills diagnostic in development
- Project already open to employer enquiries
- Contact details are;

Email: Wales@Lantra.co.uk

Telephone: 01982 552646

Website www.foodskills.cymru



SGILIAU BWYD CYMRU
FOOD SKILLS CYMRU

Diolch
Thank you



SGILIAU BWYD CYMRU
FOOD SKILLS CYMRU

Prosiect Helix a buddsoddi mewn sgiliau

Martin Jardine, Grŵp Llandrillo Menai
Arloesi Bwyd Cymru

Project Helix & skills investment

Martin Jardine, Grŵp Llandrillo Menai
Food Innovation Wales

Arloesi Bwyd
Cymru
Food Innovation
Wales



HELIX

‘Knowledge transfer to develop a World Class
Food and Drink sector’

Cyflwyniad / Introduction:



HELIX

FTC

FIW

HELIX



34,000
students



Approx.
7,500
FT students

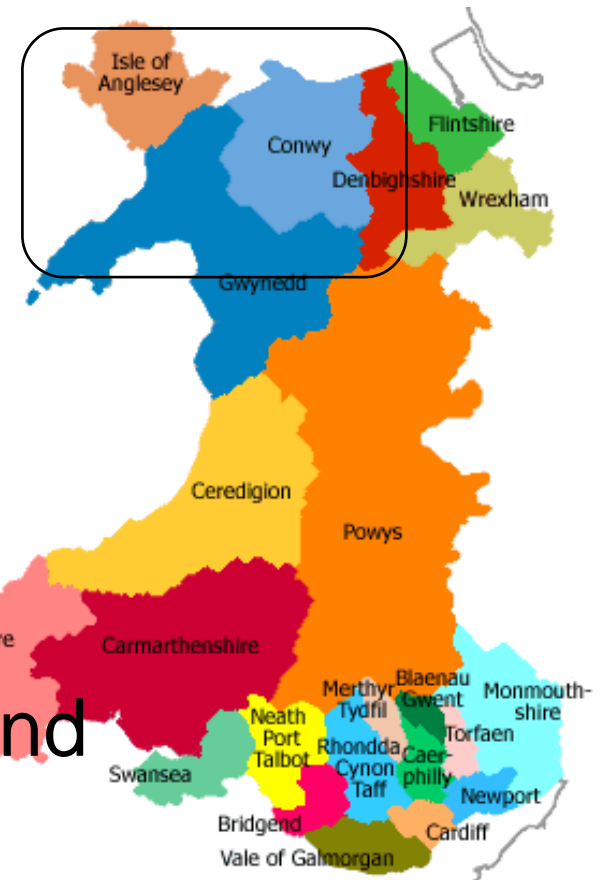


2,000
staff



14+
Sites

Prif Gampwsiaid / Main Campuses



14 sites across four counties –
Môn (Anglesey) Gwynedd, Conwy and
Denbighshire

FTC Facilities & Services:

- Processing Halls
 - Technical support
 - New Product Development Kitchen
 - Modern laboratory for food testing
 - Conference facilities
 - GLLM training & initiatives
- (e.g. @Busnes, SEE project and NWBA)





Arloesi Bwyd Cymru
Food Innovation Wales



North Wales



Mid Wales



South Wales



Arloesi Bwyd Cymru
Food Innovation Wales



Technegol / Technical
Ymarfeol / Practical
Arloesi / Innovative

Rationale

Welsh Food
Industry



Food
Innovation
Centres
(Academia)



Government
(Food
Division)



Arloesi Bwyd
Cymru
Food Innovation
Wales



HELIX



Cronfa Amaethyddol Ewrop ar
gyfer Datblygu Gwledig:
Ewrop yn Buddsoddi mewn Ardaloedd Gwledig
European Agricultural Fund for
Rural Development:
Europe Investing in Rural Areas



Llywodraeth Cymru
Welsh Government

European Agricultural Fund for Rural Development

Project HELIX:

**Delivery up to: December
2022**

Project end: September 2023

Intervention Rates:

Micro Business (up to 100%)

SME Business: (Up to 80%)

Large: N/E



**Cronfa Amaethyddol Ewrop ar
gyfer Datblygu Gwledig:**
Ewrop yn Buddsoddi mewn Ardaloedd Gwledig
**European Agricultural Fund for
Rural Development:**
Europe Investing in Rural Areas



**Llywodraeth Cymru
Welsh Government**

Arloesi Bwyd
Cymru

Food Innovation
Wales



HELIX

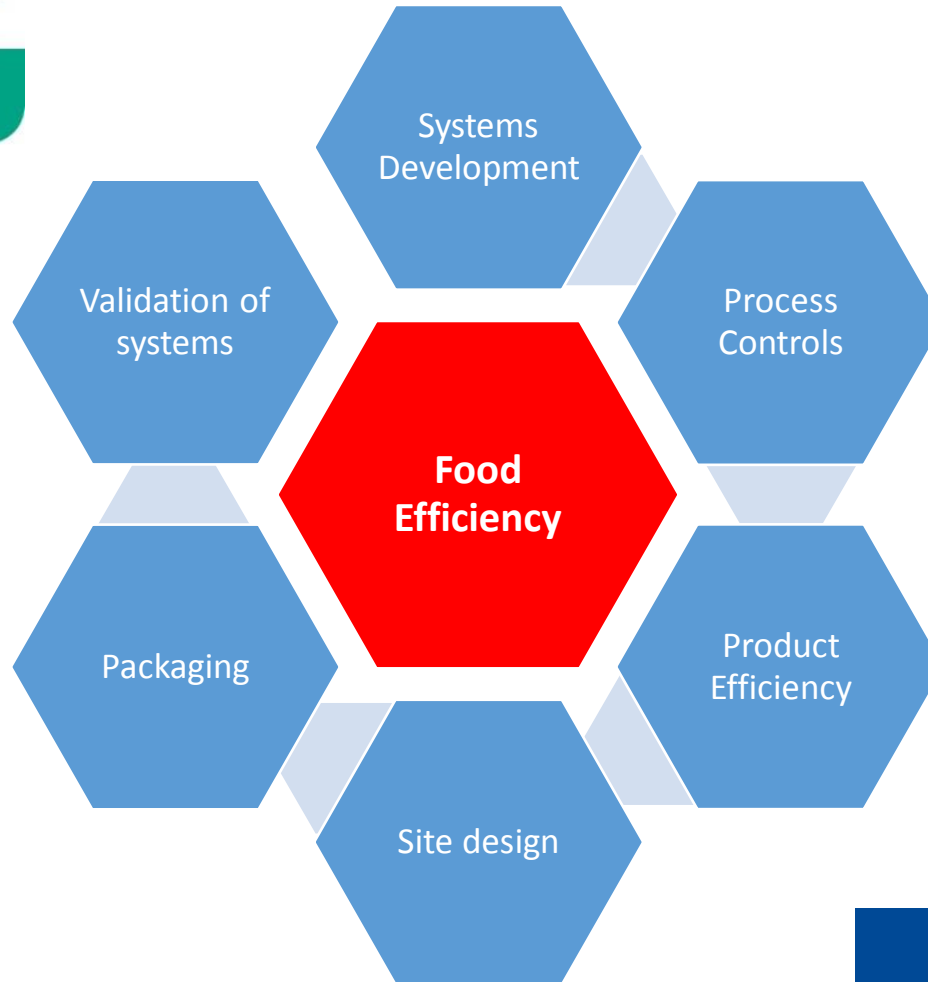


Cronfa Amaethyddol Ewrop ar
gyfer Datblygu Gwledig:
Ewrop yn Buddsoddi mewn Ardaloedd Gwledig
European Agricultural Fund for
Rural Development:
Europe Investing in Rural Areas



Llywodraeth Cymru
Welsh Government







CANLYNIADAU / OUTPUTS:

300+ Companies signed up

118 Unique participants

197 Training days given

155 New products supported

16 New markets accessed

Arloesi Bwyd
Cymru
Food Innovation
Wales



HELIX

CANLYNIADAU / OUTPUTS:

- 50+ Start up companies
- 33.5 New Jobs created
- 160 Jobs safeguarded
- £23+ Million Impact

(Data Verified by Managing Directors)

Arloesi Bwyd
Cymru
Food Innovation
Wales



HELIX

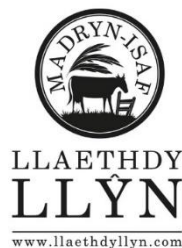
Partneriaid y Diwydiant / Industry Partners:



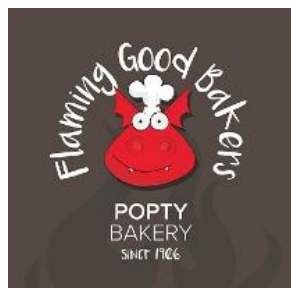
Partneriaid y Diwydiant / Industry Partners:



Patchwork
Pâté AND OTHER
YUMMY STUFF



DYLAN'S





CANOLFAN TECHNOLEG BWYD
FOOD TECHNOLOGY CENTRE
Coleg Menai, Llangefni

Diolch / Thank you

Martin Jardine
Food Technology Centre Manager



www.foodtech-llangefni.co.uk



@foodtechcentre1



Cronfa Amaethyddol Ewrop ar
gyfer Datblygu Gwledig
Ewrop yn Buddsoddi mewn Ardaloedd Gwledig
European Agricultural Fund for
Rural Development
Europe Investing in Rural Areas



Llywodraeth Cymru
Welsh Government

Addewidion Gyrfaoedd 'Tasty'

Andy Richardson
Cadeirydd, Bwrdd Diwydiant Bwyd a Diod Cymru

Tasty Careers Pledges

Andy Richardson
Chair, Food and Drink Wales Industry Board

Diwedd Close