

**Dunbia Research Presentation** 

#### **Industry Priorities**



- Meeting customer demand
  - Quality
  - Integrity
  - Price
- Improving overall efficiency
  - In-factory
  - On-farm
- Ensuring ongoing livestock supply





#### Understanding the production environment



- The production environment is very different to the research laboratory
- Both have very different forms of pressure
- By its nature, much science is planned, programmed and delivered to a timeline
- The production floor often has to react within one hour, and is heavily focused on immediate problems – there is very limited long term planning
- Complicated solutions will not work so don't provide them

# Talking a different language



- People are different
  - Personality analysis in our company reveals that nearly all the managers are 'doers'
  - They are not creative, they do not 'get' concepts
  - They simply want no fuss, get the job done solutions
- The view of researchers is often 'head in the clouds', 'no reality or common sense' & they view research and researchers as a nuisance – part of the problem, not the solution.
- Demonstrating practical solutions is essential
- Communicating simply, clearly and concisely is essential
- Listening carefully and not pre-judging is essential

# What type of research



Variability causes problems

•The inability to measure and guarantee quality makes selling more difficult

•The inability to quickly test and verify causes problems

Mistakes cause problems

# What type of research?



- We are interested in certainty
  - If we can measure something and guarantee it, we can sell it.
- We are interested in quality
  - If we can improve something and communicate this improvement to the customer, we can sell it.
- We are interested in reducing the opportunity for mistakes
  - Simplification & error checking is important
- We are interested in solutions
  - Can we implement it?
  - Does it have payback?

## Why is Industry Led Research Important?

# dunbia

#### • Variability Increases Risk

- Differing products have to be sold to different markets, increasing wastage and distribution costs
- Variation in any process results from a lack of understanding of the cause of that variation



# What type of research?

# dunbia

- Cost of feeding
- Makes farming sustainable
  - - Feeding for flavour
      - Must be able to verify
- Life extension
  - Opens new export markets ۲
  - **Reduces complaints** •

- Label verification
  - Stop wrong labels going out
  - Packaging technology
    - Faster, easier
    - Thinner, cheaper
    - **Functional** •
    - More attractive •

- Measurement
  - Quality
  - Provenance
  - Safety
  - Integrity

- Processing technology
  - Faster, easier
  - More control
  - Quality checking Quality improvement

# **Practical Research Examples**



- Problem solving
  - Colour stability
  - Micro issues
  - Optimised chill processes

- Process optimisation
  - Significant savings through reduction in drip loss with improved quality
  - Better control of electrical stimulation

# **Practical Research Examples**



- More fundamental research
  - Better flavour lamb
    - Understanding of how maturation/stimulation/diet interact
    - Reduction in time in storage for some products, faster turn round
  - Better tenderness beef
    - Alteration of factory process to improve consistency
    - Control of stimulation
    - Control of chilling

## Recommendations



- Research should not be commissioned unless
  - There is a very clear reason for the work
  - It increases knowledge as part of a pathway to a solution
  - It is working towards the solution of an existing or future problem or challenge
  - It has an achievable implementation plan

- The ability to implement is key
- Much more industry-science liaison is necessary



