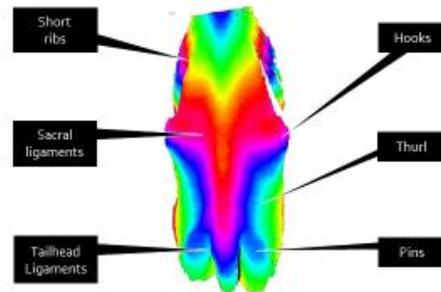




4D4F – Data Driven Dairy Decisions for Farmers

The 4D4F thematic network is a consortium of 15 partners from 9 European countries working together to promote the use on new sensor technologies to facilitate improved decision making on European dairy farms. The project improves productivity, animal welfare and the uptake of digital technologies in the farming community. The sensor technologies that are available to dairy farmers are really exciting. They go on, in and near animals and monitor their wellbeing and behaviour. They use a wide range of technologies including thermal cameras, accelerometers and in-line sensors in the milking parlour. Some issues that have been a ‘holy grails’ for dairy farmers for decades are now a reality including automatic body condition scoring and in-line milk progesterone testing. Their development is dynamic and exciting with new products coming to the market regularly. Our ‘warehouse of technologies’ includes over 100 products!



HOW CAN I DETECT MASTITIS?

CHANGES IN BEHAVIOUR

PARAMETER

- ACTIVITY
- RUMINATION
- LYING TIMES

CHANGES IN MILK

PARAMETER

- ELECTRICAL CONDUCTIVITY
- SOMATIC CELL COUNT
- TEMPERATURE
- LACTATE DEHYDROGENASE
- LACTOSE
- PRODUCTION
- COLOR

AVERAGE COST OF CLINICAL CASE 300€

IDENTIFY THE SOURCE OF INFECTION!

- Staphylococcus aureus
- Streptococcus agalactiae
- Escherichia coli
- & many others

HOW DOES INFECTION OCCUR?

1. BACTERIA ENTER THROUGH THE TEAT OPENING.
2. WHITE BLOOD CELLS TO THE RESCUE!
3. AND CAUSE MASTITIS AN INFLAMMATION OF THE UDDER TISSUE

MASTITIS SUBCLINICAL
(NO CLINICAL SYMPTOMS)

MASTITIS CLINICAL

The 4D4F project has developed a Community of Practice that has brought farmers, vets and advisors together in physical meetings and on line. We have developed ‘Best Practice Guides’ that cover twelve special interest groups from Reproduction through to Grassland Management. Videos and infographics have also been produced that help farmers to understand the opportunities available to them and the benefits that can be delivered.

The project is currently developing and refining a series of Standard Operating Procedures to help farmers develop robust protocols to ensure that they consistently make the best possible decisions.

A report on the research requirements surrounding these technologies has been produced in recent days which highlight differences between the thoughts of farmers and the research community.

The 4D4F team have been delighted by the impact the project has made with farmers investing in these new technologies and farmers delivering greater benefits from their existing technology as well as new research and business start-ups being stimulated by our activities.

We look forward to further success throughout the final year of the project as we engage with our existing Community and welcome new members that join us. For further details please contact – Richard Lloyd on richardl@i4agri.org.uk

