

Tech can take the strain

Panellists forecast that high-tech devices and artificial intelligence will help overcome staffing shortages and increase productivity – if designed with farm needs in mind

Technological advances can offer a real support to UK dairy producers – but farmers need to be sure that the systems they are investing in are the right ones for their businesses.

This was a running theme throughout the presentations on the Innovation Hub at Dairy-Tech 2026, and a primary focus in the morning Technology to Support Herd Health presentation.

Sarah Bolt, of Kingshay, used Tried and Tested reports to reveal the technologies being used in the dairy sector and what farmers wanted from them.

Neck collars were the most popular wearable monitors, followed by ear tags, leg monitors, bolus systems and tail sensors.

Effectiveness and reliability were the most important factors, she reported, along with customer support and aftersales service. “Farmers really prioritise trustworthy suppliers and dependable products and support, rather than simply opting for the cheapest option,” she explained.

Sensors offer an early warning

Promoting the use of smart sensors, Robert Morrison, of the UK Agri-Tech Centre, said the gold standard for any technology was the farmer themselves, and that sensors could not adapt, reason or do anything better than a farmer.

However, sensors can offer an early warning system before symptoms appear, and as the number of farms decline – and herds increase in size – technology will increasingly play a key role.

Learning from how others are tackling the big issues was the central talking point of the ‘Global dairy innovation’ panel, which invited academics and innovators from Canada to share insights from across the Atlantic.

Improved feed efficiency, disease prevention and supply chain communication are just a handful of benefits of implementing a ‘smart farm’ model, Dr Patience Palmer argued. She said smart cameras and weighing



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equipment are helping Canadian farmers to personalise diets and diagnose illness in animals, before symptoms show. Ensuring the entire supply chain, from farmer to retailer, is connected

via a management tool or app could also help reduce time from farm to fork.

The overcomplication of tech by developers was a key concern of Professor Suresh Raja Neethirajan, who specialises in ‘digital livestock farming’ at Dalhousie University in Nova Scotia. Simplifying software and “closing the gap between the data and the farmer” would help streamline the on-farm decision-making process for farmers, he insisted.

To tackle the challenges around labour management and retention, farmers will need to look to AI for solutions, added Ester DeGroot, director of operations at CATTLEytics, which offers a farm management system that provides support with animal health reporting and workflow management, and has an AI feature that helps farmers to digest their data.

“Cows are going to be able to produce significantly more milk, it’s almost inevitable,” vet Will Tulley told a session scanning the future of nutrition.

He said that “huge” genetic advances would boost milk productivity in the next 25 years – at least in theory – but that

cows’ ability to take on dry matter may not keep pace with that potential.

While there was still some headroom in conventional feeding strategies, particularly around feed and forage quality, he pointed to next-generation diet supplementation as key to cashing in on the dairy cows of the future.

“We are going to have to do something different,” he said. “We are going to have to use some more targeted amino acids, specific fatty acids and some things that enhance the digestion of feeds to get more nutrients into each mouthful.”

The problem is that these products are likely to come at a cost, said Will, so a demonstrable return on investment for the extra nutritional outlay would be crucial. That meant cutting through the increasing cloud of data to return actionable insights.

Fortunately, dairy data was “about to be revolutionised”. Will said: “I know people talk about AI all the time, but if we can get good data going into farm systems it’s going to become really powerful. For example, in big herds we can move from looking at group solutions based on averages, to optimum solutions for all individual animals, based on their individual performance versus where they should be.”

Will said this opened up the prospect of “precision nutrition” to provide those higher value, high-cost nutrients to the animals that need it the most.