

ICAR/IDF Sensor Initiative: Guidelines and reference standards for using rumination sensor data in animal health and welfare assessment

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The increasing availability of data from on-farm sensor systems provides new opportunities for genetic evaluation and assessment of animal health and welfare across the dairy value chain, thereby enhancing transparency and sustainability in the dairy sector. The joint ICAR/IDF Sensor Initiative aims to develop harmonized guidelines that facilitate the effective use of sensor-derived data for improving animal health and welfare.

- The initiative brings together experts from the ICAR Functional Traits Working Group and the IDF Standing Committee on Animal Health and Welfare, representing key stakeholders from academia, breeding organizations, and the dairy industry. Its objectives are to develop and reach consensus on:
 - Standardized definitions and terminology for health conditions and behavioral traits derived from sensor-based indicators;
 - Data exchange standards that support interoperability along the dairy value chain, aligned with recognized ICAR and IDF principles;
 - Guidelines for best practices in data collection, processing, and analysis to support genetic evaluations and health and welfare assessments;
 - Recommendations and protocols for evaluating and validating sensor performance. To ensure relevance and facilitate implementation, the core group has established a dedicated forum with sensor technology providers.

This platform enables discussion of results, refinement of proposals, and alignment with stakeholder needs. Init