World Academy of Science, Engineering and Technology International Journal of Agricultural and Biosystems Engineering Vol:9, No:07, 2015

Heart Rate Variability as a Measure of Dairy Calf Welfare

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Abstract : Chronic pain or stress in farm animals impacts both on their welfare and productivity. Measuring chronic pain or stress can be problematic using hormonal or behavioural changes because hormones are modulated by homeostatic mechanisms and observed behaviour can be highly subjective. We propose that heart rate variability (HRV) can quantify chronic pain or stress in farmed animal and represents a more robust and objective measure of their welfare.

Keywords: dairy calf, welfare, heart rate variability, non-invasive, biomonitor

Conference Title: ICAFAS 2015: International Conference on Agricultural, Food and Animal Sciences

Conference Location: Zurich, Switzerland Conference Dates: July 29-30, 2015