



# DAIRY SCIENCE 2007

*Meeting the challenges for pasture-based dairying*

## **Extending lactations to 670 days in pasture-based dairying systems**

C.V.C. Phyn<sup>1</sup>, J.K. Kay<sup>1</sup>, P.W. Aspin<sup>1</sup>, J.R. Roche<sup>2</sup>, D.A. Clark<sup>1</sup> and E.S. Kolver<sup>3</sup>

<sup>1</sup> Dexcel Ltd., New Zealand

<sup>2</sup> University of Tasmania, Australia

<sup>3</sup> Synlait, New Zealand



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- **Aim:**
  - Determine the effect of cow genetics and nutrition on achieving extended lactations of 670 d on pasture-based diets
- Two-year lactations possible on pasture
- North American (NA) HF more suited than NZ HF
  - Differences greatest at highest nutrition level
- NA HF fed moderate-high levels of concentrate produced as much as in two single-year lactations
- Variation between cows to extended lactations



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- Production EL indicators during 300-d lactation
  - High total MS yield and high daily MS at peak
  - **High daily MS and low BCS at normal dry-off date**
- Physiological EL indicators during 300-d lactation
  - High plasma NEFA post-calving
  - Low plasma glucose, insulin and IGF-1 post-calving
- High-producing cows that partition energy towards milk production rather than BCS gain will undergo successful extended lactations