

Farmer's attitude, level of application and challenges to implement Selective Dry Cow Therapy on Spanish dairy farms.

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INTRODUCTION

Blanket dry cow therapy (BDCT) has always been one of the points of the 5-point plan for mastitis control (Neave et al., 1969). However, the New European Veterinary Medicines Regulation (EU 2019/6) has restricted the prophylactic use of antimicrobials. Selective dry cow therapy (SDCT) could be the alternative approach (Rowe et al., 2020, Swinkels et al., 2021). Improving dry cow management (DCM) is crucial for success of SDCT (Roodenburg et al., 2020).

OBJECTIVE

Provide insight into (1) farmer's knowledge and attitude towards SDCT on Spanish dairy farms, (2) actual dry cow management (DCM) and challenges to implement SDCT and (3) relationship between SDCT, BDCT and key performance indicators (KPI) for dry cow udder health.

MATERIALS AND METHODS

The study is based on a survey performed to farmers belonging to the Spanish Holstein Confederation (CONAFE) between August and December 2021. It consisted of fourteen questions to collect their knowledge and practice about SDCT, the New Regulation, their dry off strategy and DCM.

A random sample of 450 farms, representative of the different farm sizes and regions that were included in the Dairy Herd Improvement

(DHI) program, were selected. At the end of the survey, we asked them for authorization to use their DHI data to calculate the main KPI related with the dry off period: cows infected at dry-off; new infections rate, cure rate and chronic rate at calving; and percentage of healthy cows at calving.

A total of 401 questionnaires were completed, 390 agreed to respond and 364 authorized to share their DHI data.

Spanish dairy farms will have to switch from blanket to selective dry cow therapy in a short time. This is a challenge for both farmers and veterinarians. Successful early adopters provide hope others can do it as well.



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RESULTS

Surprisingly, 39.7% of farmers had not previously heard about SDCT, shortly before it became mandatory. On the other hand, 21.8% of farmers were already applying SDCT (Figure 1A). Of those 21.8%, more than half (51.8%) was doing this for 2 or more years, and 20% started in the previous year. 5.1% of farmers (around one-fifth of the farmers who started SDCT) returned to BDCT due to udder health problems (Figure 1A), suggesting DCM is critical for a successful implementation of SDCT.

Furthermore, the estimated percentage of cows receiving antibiotic at dry off was low (Figure 1B).

The high milk yield and hygiene of procedures at dry off are both potential challenges to successfully implement SDCT. This was confirmed by DHI data (Figure 2) and answers to the survey question shown in Figure 3.

Remarkably, 85.9% of farms that applied SDCT, used teat sealant to prevent new infections. This confirms teat sealant is used in SDCT programs as an alternative to antibiotics to prevent new infections. Furthermore, 59.3% of farms that applied BDCT combined teat sealant with antibiotic.

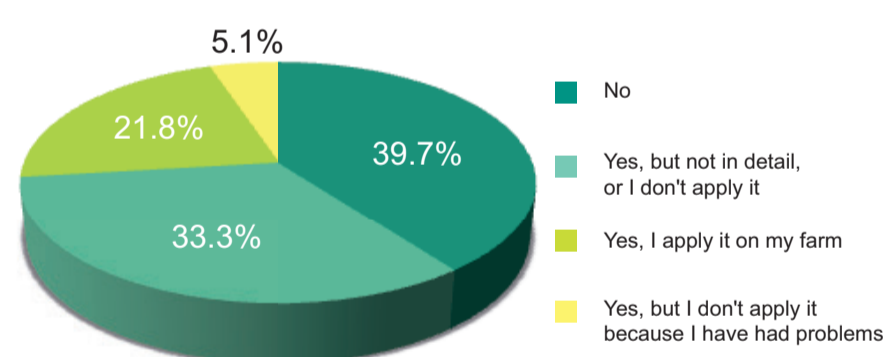
As expected from the literature and previous experience in other countries, no statistical differences were found in the main dry cow udder health related KPIs when SDCT and BDCT farms were compared (Figure 4).

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FIGURE 1. Distribution of the 4 possible answers to the question:

A Do you know what SDCT is?



B What percentage of cows do you estimate receive antibiotic dry cow therapy?

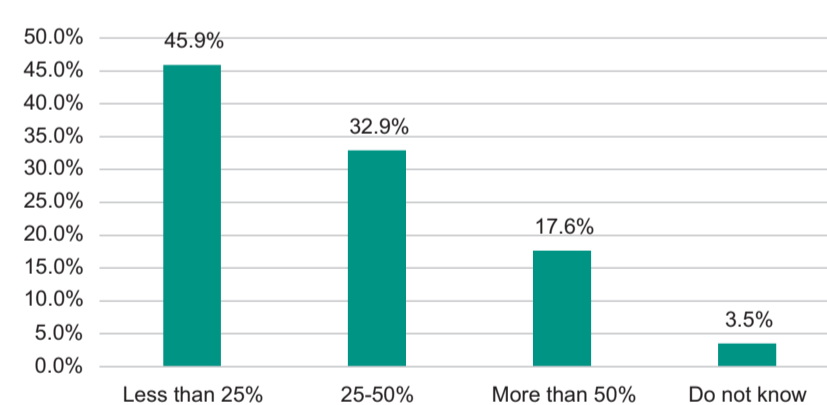


FIGURE 2. Distribution of farms based on the percentage of cows producing more than 25 liters in their last DHI control previous to dry off.

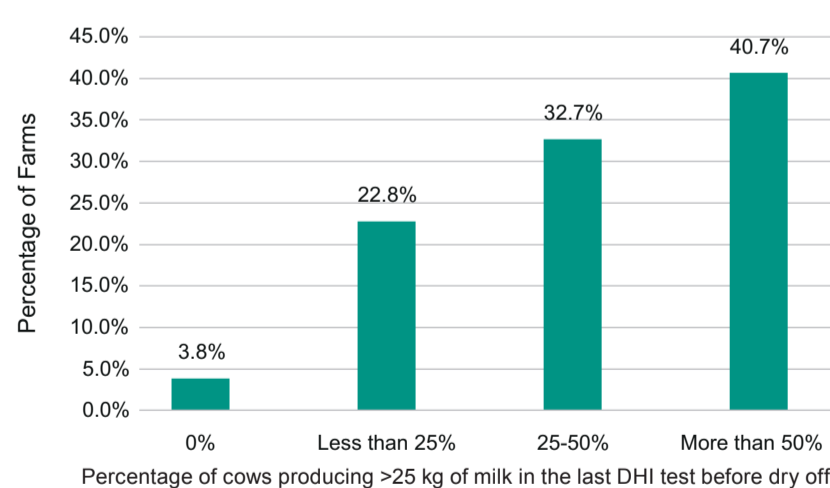


FIGURE 3. Distribution of a yes or no answer to the question: Do you do any teat disinfection before applying dry off therapy?

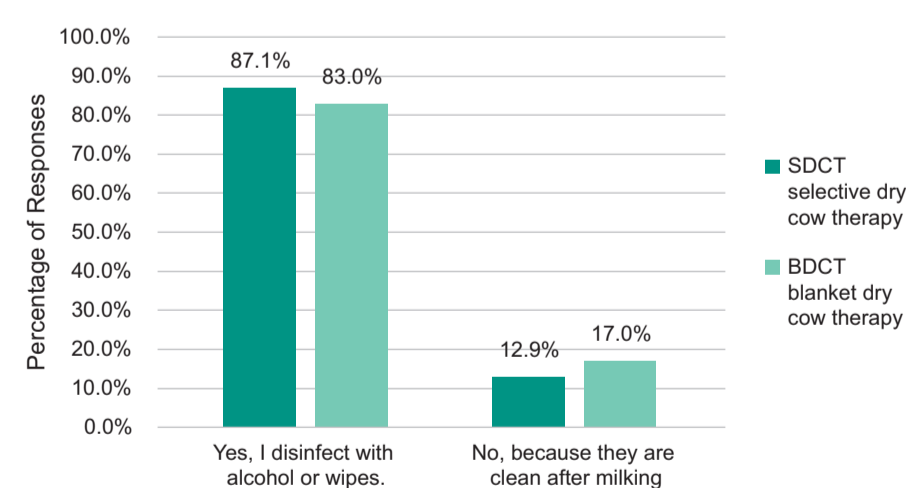


FIGURE 4. Distribution of farms based on their results in the main dry cow udder health key performance indicators (KPI).

