

**EFFECT ON PRODUCTION FROM REDUCING MORTALITY, MORBIDITY,
AND DAYS OPEN IN THE DAIRY HERD
SØRENSEN, J.T. AND ENEVOLDSEN, C.**

Dairy herd inputs like disease treatments and prevention (i.e., "disease control") can easily be measured. The benefits from disease control in terms of increased production must, however, also be assessed before the most profitable herd health management strategy can be selected. An experiment was conducted by means of a dynamic, stochastic simulation model of a dairy herd with the objective to provide estimates of the overall effect on production from improving herd health. The overall effect on production was defined as gross margin, i.e.: gross return minus costs of food, bedding, breeding, a basic level of treatments, and capital invested in the herd. The increases in gross margin obtained by avoiding calf and cow mortality, milk yield depression (due to disease), and performing inseminations earlier in the lactation are shown in Table 1. Simulations were performed in herds with and without milk quotas imposed and with a high (meat:milk = 4.4:1) or a low meat price (meat:milk = 2.2:1). The figures in Table 1 represent the break even prices, i.e. the maximum amount of money which can be spent to prevent the events studied.

REFERENCES

Sørensen, J.T., Thyssen, I., and Kristensen, E.S., 1991. A stochastic model simulating the dairy herd on PC: Model description. Submitted for publication.

Table 1. Increased gross margin caused by reducing mortality, morbidity, and days open in the dairy herd. Dkr. per event.

	A dead calf	A dead cow	Yield depressed 2.5 kg 4% FCM	One extra day open
No milk quota imposed				
high meat price	5800	13000	920	21
low meat price	2800	10300	1010	17
Milk quota imposed				
high meat price	2900	8000	210	7
low meat price	500	6100	430	5

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